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Bibliography of Infrared Spectroscopy through 1960 Part 3

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INTRODUCTION

This infrared bibliography is based on a systematic search of the literature on infrared spectroscopy up to the end of 1960. The literature search has been made by going through journals as well as through Chemical Abstracts. The extent of coverage of various journals is shown in lists A, B and C at the end of the Introduction.

As a general rule, any paper of interest in the field of infrared spectroscopy is included. Examples of fringe areas include microwave spectra where rotational constants are given, papers on preparation of chemical compounds where infrared spectra are used for identification, papers on Beer's law, references to mathematical treatments such as group theory and statistical mechanics and so on. Papers on Raman spectroscopy have, however, not been included.

The bibliography has been divided into four sections: I, Organic Compounds; II, Inorganic Compounds (a, of non-metals; b, of metals); III, Polymeric Compounds; and IV, Minerals and Ores. The coverage in each section is as follows.

Section I : This section includes organic compounds containing C, H, D, T, halogens, N, O, P, S, As, B, Se and Si. Molecular complexes like $C_6H_6 \cdot I_2$, $C_4H_6 \cdot C_4H_2O_3$ and $CH_3NH_2 \cdot BF_3$ have also been included in this section; the inorganic components in the molecular complexes are also made up of the elements mentioned earlier.

Section II(a) : In this section, inorganic compounds containing C, H, D, T, halogens, N, O, P, S, As, B, Se, Si and noble gases have been included. Molecular complexes with inorganic components like $\text{BF}_3 \cdot \text{NH}_3$ and $\text{H}_2\text{SO}_4 \cdot \text{HNO}_3$ are also included in this section; the complexes also contain the elements mentioned earlier.

Section II(b) : In this section, simple and complex compounds of elements not covered in II(a) are included, the elements being arranged alphabetically.

Molecular complexes like $\text{SnCl}_4 \cdot \text{C}_4\text{H}_8\text{O}_2$ are included in the appropriate sub-section dealing with the metallic element (Sn in this case). Complexes like $\text{NaUO}_2(\text{C}_2\text{H}_3\text{O}_2)_3$, $\text{K}_4\text{Fe}(\text{CN})_6$, $\text{K}_3\text{Co}(\text{CN})_5\text{NO}$, and $\text{K PtCl}_3(\text{NH}_3)$ are included under uranium, iron, cobalt and platinum, respectively, and not under sodium or potassium. A complex like $[\text{Co}(\text{NH}_3)_6]^{+3} [\text{Cr}(\text{CN})_6]^{3-}$ (written as $\text{CoC}_6\text{H}_{18}\text{N}_{12}\text{Cr}$) would come under the element which comes first in alphabetical order (Co in this case). After the first IIb element, the elements of sections I and IIa are written followed by the other IIb element.

Section III : Molecules like polystyrene $(\text{C}_6\text{H}_8)_n$, polyethylene $(\text{C}_2\text{H}_4)_n$, paraldehyde, $(\text{CH}_2\text{O})_n$, as well as other polymeric molecules where n is not exactly known are included in this section.

Section IV : Most of the minerals and ores are included in this section.

The bibliography is arranged in the order of empirical formulae of compounds in each of the above categories. The information on each compound is given under the following headings: Empirical formula; Name; Range; State; Remark and Reference.

Empirical Formula : In sections I and II(a), the following order of elements is followed in writing the empirical formulae; C, H, D, T, Br, Cl, F, I, N, O, P, S, As, B, Se and Si (followed by noble gases in section IIa). The following examples would serve to illustrate the order of arrangement.

$C_{13}H_2Cl_{10}N_2O$, $C_{13}H_3F_5N_2O_6$, $C_{13}H_4Cl_2F_6N_2O$, $C_{13}H_4Cl_8N_2O$, $C_{13}H_4F_{20}O_4$, $C_{13}H_5Cl_7N_2O$
.....; CHN, CO_2 , H_2O , D_2O ...

Compounds with the same empirical formulae are arranged according to the alphabetic order of the names. In section I, compounds are arranged in the order of increasing number of C atoms. In section II(a), C-compounds are followed by hydrogen compounds which are followed by deuterium compounds and so on. In section II(b), compounds are listed according to the alphabetic order of the element symbols (e.g., Ca comes before Cu). The following examples illustrate the manner in which empirical formulae are given in this section: (i) oxalate complex of Cobalt(III) CoC_6O_{12} ; (ii) acetylacetonate complex of cobalt(III): $CoC_{15}H_{21}O_6$. In section III, the arrangement is similar to sections I and II in the monomer part of the system. The arrangement in section IV can be made clear by taking the example of spodumene $Li_2O \cdot Al_2O_3 \cdot 4SiO_2$. The empirical formula of spodumene is shown as $Al_2O_{12}Si_4Li_2$. The first element in the formula is the one that comes first alphabetically among the metallic elements (of section IIb); this is followed by other elements belonging to sections I, IIa and IIb.

Name of the Compound : In naming compounds, the IUPAC rules have been generally followed, although for some compounds trivial names have also been used when these are well known. The names of transition metal complexes have been simplified in the following manner:

$Pd_2C_{36}H_{30}Cl_4P_2$	Chlorotriphenylphosphinepalladium(II)- μ -dichlorochlorotriphenylphosphinepalladium(II)	Palladium(II)-chloride, triphenylphosphine complex
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Ligands are written in the alphabetical order of their names.

Range : This gives the range of the wavelength over which the measurements are carried out. Whenever the range is not mentioned in the paper or abstract, we have omitted this information. When units are not mentioned, they are in cm^{-1} .

State : This defines the physical state of the compound in which the measurements are carried out. The code used is as follows: S = solid, mull, crystal, pellet or film; L = liquid; G = gas or vapor; Sol = solution.

Remark : This column indicates what the paper is about in a couple of words. The abbreviations used in this column are as follows:

Absorp, Abs	-	Absorption
Act	-	Activation
Amp	-	Amplitude
Anal	-	Analysis
Assign	-	Assignments
Assoc	-	Association
Calc	-	Calculation
Char	-	Characteristic
Compar	-	Comparison
Compd	-	Compound
Config	-	Configuration
Const	-	Constants
Corr	-	Correlation
Decomp	-	Decomposition
Depol	-	Depolarization

Dispers	-	Dispersion
Disso	-	Dissociation
Dist	-	Distance
Distinct	-	Distinction
Elect	-	Electron
Excit	-	Excitation
Ext coeff	-	Extinction coefficient
Fact	-	Factor
FC	-	Force constants
Freq	-	Frequencies
Gr	-	Group
H bond	-	Hydrogen bond
I	-	Intensity
Ident	-	Identification
Int	-	Internal
Intermol	-	Intermolecular
IR	-	Infrared
Iso	-	Isomerism
Mag	-	Magnetic
Micro	-	Microwave
Mol	-	Molecular
Mom inert	-	Moment of Inertia
NCA	-	Normal coordinate analysis
OD	-	Optical Density
Pert	-	Perturbation

Pot func	-	Potential function
Prep	-	Preparation
Prop	-	Properties
Press	-	Pressure
Qual	-	Qualitative
Quant	-	Quantitative
Quant mech	-	Quantum mechanics
Ref	-	Reference
Refl	-	Reflectance
Rot vib	-	Rotation vibration
Sens	-	Sensitive
Sp	-	Specific
Spec	-	Spectrum
Struc, Struct	-	Structure
Substi	-	Substitution
Taut	-	Tautomerism
Temp	-	Temperature
Theo	-	Theoretical
Thermo	-	Thermodynamics
Trans	-	Transmission
Vib	-	Vibrations

Reference : This column gives the literature reference. The reference is complete except that only the name of the first author is given. The reference is arranged in the order: Author, Journal, Volume, Year and Page. The codes used for the journals are given in the accompanying lists A, B and C. A typical reference is as follows: Herzberg, JCP 17 (1949) 1099. For any given compound,

references are generally arranged in chronological order. In cases where there are more than one reference in the same year, the references are arranged according to the alphabetical order of the authors.

LIST OF JOURNALS COVERED

List 'A'

(Journals covered till the end of 1960)

<u>Code</u>	<u>Journal</u>
AC	Anal. Chem.
ACS	Acta Chem. Scandinavica
AJC	Australian J. Chem.
AJP	Australian J. Phys.
AJSR	Australian J. Sc. Res.
AMS	Am. Sci.
APS	Appl. Spectroscopy
ECSJ	Bull. Chem.Soc. Japan
CJC	Can. J. Chem.
CJP	Can. J. Physics
CJR	Can. J. Research (A series)
CR	Chem. Rev.
CS	Current Science
IJP	Ind. J. Phys.
JACS	J. Am. Chem. Soc.

<u>Code</u>	<u>Journal</u>
JAP	J. Appl. Phys.
JCP	J. Chem. Phys.
JCS	J. Chem. Soc.
JINC	J. Inorg. & Nucl. Chem.
JMP	J. Mol. Phys.
JMS	J. Mol. Spect.
JOC	J. Org. Chem.
JOSA	J. Opt. Soc. Am.
JPC	J. Phys. Chem.
JPS	J. Polymer Sci.
JRNB	J. Res. NBS
JSI	J. Sci. Instr.
MC	Makromol Chem.
MP	Mol. Phys.
N	Nature
OS	Opt. Spectroscopiya
PIAS	Proc. Ind. Acad. Sci.
POL	Polymer
PR	Phys. Rev.
PRS	Proc. Roy. Soc. (London)
RMP	Rev. Mod. Phys.
RSI	Rev. Sci. Instr.
SA	Spect. Acta
TE	Tetrahedron
TFS	Trans. Faraday Soc.

List 'B'

(Journals covered through a search in Chemical Abstracts
for the years 1958-1961)

A	Ann
AAN	Atti Accad Nazl Lincei, Rend. Classe, Sci. Fis; mat. e. nat.
ABB	Arch. Biochem. Biophys.
ACR	Acta Cryst
AF	Arikiv Fysik
AM	Am. Minerologist
ANA	Analyst
ANC	Angew. Chem.
ANCR	Ann. Chim. (Rome)
ARK	Arkiv. Kemi
ARS	Anales real soc espan fis y quim (Madrid) Ser.
BAPS	Bull. Am. Phys. Soc.
BASU	Bull. Acad. Sci. U.S.S.R., Phys. Ser.
BSCF	Bull. Soc. Chim. France
CCA	Creat Chem. Acta
CCCC	Collection Czechoslov. Chem. Sommuns.
CIL	Chem. Ind (London)
CPBT	Chem. Pharm. Bull. (Tokyo)
CPR	Compt. Rend.
DA	Dissertation Abstr.
DANS	Doklady Akad Nauk. SSSR

FTT	Fiz Tverdogo Tela
GCI	Gazz Chim. ital.
HCA	Helv. Chim. Acta
IAN5	Izvest. Akad. Nauk. SSSR Ser. Fiz.
JAFc	J. Agr. Food Chem.
JAOC	J. Am. Oil Chemists Soc.
JAPCL	J. Appl. Chem. (London)
JAPS	J. Appl. Polymer Sci.
JBC	J. Biological Chem.
JCE	Journal of Chemical Education
JCSJ	J. Chem. Soc. Japan
JIIS	J. Indian Inst. Sci.
JPR	J. Phys. radium
JPRC	J. Pract. Chem.
JPSJ	J. Phys. Soc. Japan
JSIR	J. Sci. Ind. Res.
KKZ	Kogyo Kagaku Zasshi
NC	Nuovo Cimento
NKZ	Nippon Kagaku Zasshi
NWS	Naturwissenschaften
P	Physica
PCS	Phys. and Chem. of Solids
PPSL	Proc. Phys. Soc. (London)
PrCS	Proc. Chem. Soc.
QRL	Quarterly Revs. (London)
RTC	Rec. Trav. Chim.

SK	Soumen Kemistilehti
TEL	Tetrahedron Letters
UFZ	Ukrain Fiz. Zhur
ZAC	Z. anal. Chem.
ZAUA	Z. anorg. U. allgem. Chem.
ZE	Z. Electrochem.
ZN	Z. Naturforsch
ZOK	Zhur. Obshchei. Khim.
ZP	Z. Physik.

List 'C'

(Journals covered by the NBS Group in their data collection up to (approx) 1956, but not included in Lists A and B)

AMAF	Akriv Mat. Astron. Fysik
ASS	Ann. Soc. Sci. Bruxells
BBA	Biochim et. Biophy. Acta
EBS	Bull B S
CIC	Chem. in Canada
DFS	Disc. Far. Soc.
IE	Ind. Eng. Chem.
IEC	Ind. Eng. Chem. (Anal. Ed.)
JA	Jap. Analyst
JP	J. Physique
JPCC	J. Phys. & Coll. Chem.
JPJ	J. Pharm. Japan

PNAS

Proc. NAS

RPCJ

Rev. Phys. Chem. Jap.

ZPC

Z. Physik. Chem. Frankfurt

$C_{22}H_{34}O_8$	-	-	Band freq	Hogsd	JACS	75 (1953)	4846
3-n-Propyl-4,5,6-tri-carbethoxy-6-carbethoxymethylcyclohexene	1075-1125	Sol	Anal	Jaffe	AC	23 (1951)	1164
$C_{22}H_{34}O_{13}$							
Dipentaerithritol hexaacetate							
$C_{22}H_{35}ClO_4$	-	Sol	Ident, Production	Herzig	JOC	17 (1952)	724
Ethyl 5 α -chloro-5,19-dihydroxyetiocolanate							
$C_{22}H_{35}N_2O_5$	-	-	Group freq	Chamberlin	JACS	77 (1955)	1221
5 α -Pregnane-3 β ,17 α ,21-triol-11,20-dione-20-semicarbazone							
$C_{22}H_{36}OS$	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3704
Androstan-17-one trimethylene-hemithioetal							
$C_{22}H_{36}O_4$	-	-	Spec, Ident	Belleau	JACS	74 (1952)	2816
Ethyl 3 α ,1 β -dihydroxy-etianate							
$C_{22}H_{36}O_8$	2-12 μ	S	Spec	Sheehan	JACS	72 (1950)	4614
Dimethyl hexahydro-homophthalate bimolecular							
$C_{22}H_{37}NO_2$	-	-	Ident	Djerassi	JACS	76 (1954)	5889
Tetrahydropiveatchine							
$C_{22}H_{37}N_2O_5$	-	-	Group freq	Chamberlin	JACS	77 (1955)	1221
5 α -Pregnane-3 β ,11 β ,17 α ,21-tetrol-20-one-20-semicarbazone							
$C_{22}H_{38}$	2-15.5 μ	L	Spec, Struct	Lenneman	JOC	19 (1954)	463
2-Phenylhexadecane							
$C_{22}H_{38}O_3$	-	S	Freq	Klass	JACS	77 (1955)	3829
Bisnorallocholan-3 β ,16 β ,22-triol							
$C_{22}H_{38}O_3$	5.7-6.2 μ	Sol	Group study	Bickel	JCS	- (1953)	3211
4-Tert-butylperoxy-2,4,6-tri-tert-butyl-cyclohexa-2,5-dienone							
$C_{22}H_{38}O_4$	1050-1800	-	Spec	Barnes	IEU	15 (1943)	659
Octadecanediol maleate							

$C_{22}^{H_{38}O_5}$	Bisnorallocholane-2 α , 3 β , 15 β , 16 β , 22-pentaol	-	S	Band freq	Klass	JACS	77 (1955)	3829
$C_{22}^{H_{39}O_4P}$	Diisobutyl p-(2-ethyl- phenyl) phenyl phosphate	-	-	Group freq	Bellamy	JCS	- (1952)	1701
$C_{22}^{H_{40}O_4P}$	Di-t-butyl(2-ethyl- hexyl) phenyl phosphate	-	-	Group freq	Bell	JACS	76 (1954)	5185
$C_{22}^{H_{40}O_2}$	Behenic acid	0.9-3 μ	Sol	Spec	Holman	AC	28 (1956)	1533
$C_{22}^{H_{40}O_2}$	3, 3, 18, 18-tetramethyl- 1,2-cyclooctadecane- dione	-	L, S	Band freq	Leonard	JACS	72 (1950)	5388
$C_{22}^{H_{40}O_4}$	12-Acetoxyethylidyl acetate	2-12 μ	Sol	Substitution effect	McCutchon	JAOC	36 (1959)	450
$C_{22}^{H_{40}O_4}$	Nonyl fumarate	2-16 μ	L, Sol	Spec, Ident	Walton	AC	28 (1956)	1388
$C_{22}^{H_{40}O_4}$	Nonyl maleate	2-16 μ	L, Sol	Spec, Ident	Walton	AC	28 (1956)	1388
$C_{22}^{H_{40}Si}$	Phenyl-n-hexadecylsilane	2-16 μ	Sol	Group freq	Kniseley	SA	15 (1959)	651
$C_{22}^{H_{41}NO_3}$	4-Ricinelaidoyl- morpholine	2-16 μ	Sol	Spec, Freq	Dupuy	JAOC	35 (1958)	99
$C_{22}^{H_{41}NO_3}$	4-Ricineleoyl- morpholine	2-16 μ	Sol	Spec, Freq	Dupuy	JAOC	35 (1958)	99
$C_{22}^{H_{41}N_2PS}$	N,N-Di-n-butylbenzene- thiophosphonicdiamide	2-21 μ	S	Spec, Anal	Daasch	AC	23 (1951)	853
$C_{22}^{H_{42}}$	1-(4-Methylcyclohexyl)- 1-(2-methyl-5-isobutyl- cyclohexyl)-2-methyl- propane	7-15 μ	L	Spec	Pines	JACS	72 (1950)	1563
$C_{22}^{H_{42}O_2}$	Stearyl methacrylate	2-15 μ	L	Spec, Assign	Walton	JACS	79 (1957)	3985
$C_{22}^{H_{42}O_3}$	Butyl ricinoleate	2.4-3.4 μ	S	Spec, Band freq	Allison	AC	24 (1952)	630

$C_{22}H_{42}O_4$	Di-2-ethylhexyl adipate	2-15 μ	L	Spec		Kendall	APS	7 (1953)	179
$C_{22}H_{42}O_4$	Di-n-hexyl sebacate	2-16 μ	Sol	Spec		Stahl	JACS	74 (1952)	5487
$C_{22}H_{42}O_5$	Diethylene glycol mono-ricinoleate	2-15 μ	L	Spec		Kendall	APS	7 (1953)	179
$C_{22}H_{42}O_6$	Triethylene glycol di-2-ethyl hexoate	2-15 μ	L	Spec		Kendall	APS	7 (1953)	179
$C_{22}H_{43}NO_2$	4-Stearoylmorpholine	2-16 μ	Sol	Spec, Freq		Dupuy	JAOC	35 (1958)	99
$C_{22}H_{43}NO_3$	4-(12-Hydroxystearoyl)morpholine	2-16 μ	Sol	Spec, Freq		Dupuy	JAOC	35 (1958)	99
$C_{22}H_{44}O_2$	n-Butyl stearate	2-15 μ 5-7 μ	L Sol	Spec Quant Anal		Kendall Kiley	APS AC	7 (1953) 29 (1957)	179 1895
$C_{22}H_{44}O_2$	19,19-Dimethylleicosanoic acid	-	-	Spec		Sobotka	JACS	72 (1950)	5139
$C_{22}H_{44}O_2$	n-Docosanoic acid	2-15 μ	S	Spec, Qual anal		Meiklejohn	AC	29 (1957)	329
$C_{22}H_{44}Si$	Diallyl-n-hexadecylsilane	2-16 μ	Sol	Group freq		Kniseley	SA	15 (1959)	651
$C_{22}H_{45}O_3$	Di-(2-Octyl)-monocyclohexyl borate	700-1700	L	Spec, Freq		Werner	AJC	9 (1956)	137
$C_{22}H_{46}$	n-Docosane	750-1200 650-800 700-1500	S S,L S	Struct Freq Freq, Assign		Snyder Martin Snyder	JCP SA JMS	27 (1957) 12 (1958) 4 (1960)	969 12 411
$C_{22}H_{46}ClN$	(2-Cyclohexylethyl)-dodecyl dimethylammonium chloride	-	-	Freq, Purity		Cella	JACS	77 (1955)	4264
$C_{22}H_{48}N_6$	N,N'-Di-n-butyl-N,N'-bis-(2-n-butylaminoethyl)oxamide	3-6.5 μ	Sol	Spec, Group freq		Woodburn	JOC	17 (1952)	1235
$C_{22}H_{48}O_6B_2$	Tetrapentylethylene diborate	6-14 μ	L,S	Group freq, Struct		Blau	JCS	- (1960)	380

$C_{22}H_{58}O_3Si_6$	Dodecane thy 1-3,10,17-trioxa-2,4,9,11,16,18-hexasilanonadecane	-	-	Group freq	Sommer	JACS 77 (1955)	2482
<u>C_{23} COMPOUNDS</u>							
$C_{23}H_{14}O_2$	4-Hydroxy-1-phenyl-2,3-benzofluorenone	2-16 μ	S	Spec	Bader	JACS 75 (1953)	730
$C_{23}H_{14}O_2$	4-Hydroxy-9-phenyl-2,3-benzo-1-isofluorenone	2-16 μ	S	Spec	Bader	JACS 75 (1953)	730
$C_{23}H_{16}$	3'-Methyl-1:2,5:6-dibenzanthracene	670-3150 650-2000	S S	Spec, Freq Struct	Orr Cannon	JCS SA 4 (1951)	218 373
$C_{23}H_{16}$	4-Methylpicene	-	S	Spec	Phillips	JACS 77 (1955)	3856
$C_{23}H_{16}N_2O_3$	2-Benzoyl-1-cyano-1-(4-nitrophenyl)-3-phenylcyclopropane	2-16 μ	S	Spec, Struct	Allen	JOC 22 (1957)	1291
$C_{23}H_{16}N_2O_3$	1,4-Diphenyl-3-phthalimido-2-azetidinone	2-16 μ	Sol	Spec	Sheehan	JACS 73 (1951)	1204
$C_{23}H_{16}O$	2-Diphenylmethylene-1-naphthone	-	Sol	Group freq	Ettlinger	JACS 76 (1954)	2769
$C_{23}H_{17}N$	9-Amino-9- α -naphthylfluorene	6300-6800	Sol	Spec, Anal	Wulf	JACS 57 (1935)	1464
$C_{23}H_{17}NO$	2-Benzoyl-1-cyano-1,3-diphenylcyclopropane	2-16 μ	S	Spec, Struct	Allen	JOC 22 (1957)	1291
$C_{23}H_{17}NO_3$	1-Benzyl-4,4-diphenyl-2,3,5-pyrrolidine trione	-	-	Spec	Skinner	JACS 72 (1950)	5569
$C_{23}H_{18}$	1,2,3-Triphenylcyclopentadiene (1,2,4-isomer also)	3-15 μ	Sol	Spec, Band freq	Panson	JACS 76 (1954)	2187

$C_{23}H_{18}N_2O$	-	-	Struct	Bockelheide	JACS	75 (1953)	3679
α -(2'-Pyridyl)- β -(1-isoquinolyl)-propiofenone	-	S	Group freq	Baker	JOC	20 (1955)	118
$C_{23}H_{18}N_2O_3$	-	-	Freq	Moersch	JACS	76 (1954)	1703
α -(1-Benzyl-1,2-dihydro-2-pyridylidene)- γ -phthalimidoacetone	-	-	Spec, Struct	Allen	JOC	22 (1957)	1291
$C_{23}H_{18}N_2O_5$	-	S	Spec, Struct	Allen	JOC	22 (1957)	1291
L-erythro-2-Phenyl-4-benzoyloxymethyl-5-p-nitrophenyl- Δ^2 -oxazoline	-	Sol	Band freq, Struct	Berson	JACS	74 (1952)	358
$C_{23}H_{18}O_2$	3-11 μ	-	Group freq	Yates	JACS	76 (1954)	5110
1,2-Dibenzoyl-1-phenylcyclopropane	-	Sol	Spec, Ident	Haszeldaine	JCS	- (1952)	3483
1,2-Dibenzoyl-3-phenylcyclopropane	2-16 μ	-	Spec, Struct	Allen	JOC	22 (1957)	1291
1,5-Diketo-1,3,5-triphenyl-2-pentene	-	Sol	Spec, Struct	Sheehan	JACS	74 (1952)	4555
4-Hydroxy-4-methoxy-2,3,4-triphenylcrotonic acid lactone	-	S	Group freq	Baker	JOC	20 (1955)	118
$C_{23}H_{19}N_3O_4$	2-15.5 μ	-	Spec, Ident	Allen	JOC	22 (1957)	1291
β , β , β -Trifluoropropionic acid, nitron salt	2-16 μ	S	Spec, Struct	Sheehan	JACS	74 (1952)	4555
2-Benzoyl-1-carboxamido-1,3-diphenylcyclopropane	-	S	Group freq	Baker	JOC	20 (1955)	118
$C_{23}H_{19}NO_4$	2-8 μ	Sol	Spec, Group freq	Allen	JOC	22 (1957)	1291
N,N-Dibenzoylglycine benzyl ester	-	S	Group freq	Allen	JOC	22 (1957)	1291
$C_{23}H_{19}N_3O_2$	-	-	Ident	Allen	JOC	22 (1957)	1291
3- β -Keto- γ -(1-benzyl-1,2-dihydro-2-pyridylidene)propyl-4-quinazolone	3-11 μ	S	Ident	Allen	JOC	22 (1957)	1291
1,2-Dibenzoyl-1-phenylcyclopropanedioxime	-	-	-	-	-	-	-

$C_{25}H_{20}N_2O_2$	1,2-Dibenzoyl-3-phenyl- cyclopropanedioxime	S	3-11 μ	Ident	Allen	JOC	22 (1957)	1291
$C_{25}H_{20}N_2O_2$	1,4-Diphenyl-3-phenyl- acetylamino-2- azetidione	Sol	2-16 μ	Spec	Sheehan	JACS	73 (1951)	1204
$C_{25}H_{20}N_2O_2$	2-Phenyl-3-(1-phenyl- 2-nitropropyl)indole	S	-	Freq	Noland	JACS	81 (1959)	1203
$C_{25}H_{20}N_2O_4S_2$	5,8-Dihydro-6-methyl-1,4- naphthoquinonedibenzene- sulfonimide	-	-	Group study	Adams	JACS	74 (1952)	2603
$C_{25}H_{20}N_2O_5S$	4-Carbomethoxy-5,5- dimethyl-2-phenyl- α - phthalimido-2-thia- zolidine acetic acid β -lactam	Sol	2-11 μ	Spec, Band freq, Struct	Sheehan	JACS	73 (1951)	4373
$C_{25}H_{20}N_2O_6$	β,ξ -Diaminoproic acid di(N-phthalyl)methyl ester	S	-	Ident, Band freq	VanTamelan	JACS	75 (1953)	2031
$C_{25}H_{20}N_2O_6S_2$	3-Acetyl-5-benzene- sulfonamido-1-benzene- sulfonyl-X-methylloxinole	-	-	Freq	Adams	JACS	75 (1953)	3403
$C_{25}H_{20}N_2O_7S$	4-Carbomethoxy-5,5- dimethyl-2-phenyl- α - phthalimido-2-thia- zolidine acetic acid- β - lactam sulfone	Sol	2-11 μ	Spec, Band freq,	Sheehan	JACS	73 (1951)	4373
$C_{25}H_{20}O_2$	Benzhydryl p-methoxy- styryl ketone	-	-	Band freq	Marvel	JOC	16 (1951)	741
$C_{25}H_{20}O_2S$	9-(9-Allylfluorenyl) p- tolyl sulfone	Sol	1100-1400	Spec, Freq	Bavin	SA	16 (1960)	1312
$C_{25}H_{20}O_{10}$	3',4',5,7-Tetraacetoxy- flavanone	S	1550-4000	Group freq	Hergert	JACS	75 (1953)	1622

$C_{23}H_{21}NO$	700-4000	Sol	Spec, Freq	Adelfang	JACS	82 (1960)	4241
$C_{23}H_{21}NO$	650-3800 2-16 μ	S	Table Spec, Freq	Cromwell Cromwell	JACS	71 (1949) 73 (1951)	3337 1044
$C_{23}H_{21}NO$	650-3800 2-16 μ	S	Table Spec, Freq	Cromwell Cromwell	JACS	71 (1949) 73 (1951)	3337 1044
$C_{23}H_{21}NO$	650-3800	S	Table	Cromwell	JACS	71 (1949)	3337
$C_{25}H_{22}NO_2$	-	-	Group study	Adams	JACS	74 (1952)	2603
$C_{25}H_{22}NO_2$	2-11 μ	Sol	Spec, Band freq, Struct	Sheehan	JACS	73 (1951)	4373
$C_{25}H_{22}O_2$	-	S	Group freq	Leonard	JACS	75 (1953)	2714
$C_{25}H_{22}O_2$	-	S	Group freq	Leonard	JACS	75 (1953)	4989
$C_{25}H_{22}O_2$	-	Sol Sol	Group freq Freq	Leonard Panson	JACS CR	75 (1953) 55 (1955)	4989 9
$C_{25}H_{22}O_2S$	1100-1400	Sol	Spec, Freq	Bavin	SA	16 (1960)	1312
$C_{25}H_{22}O_2S_2$	-	-	Group freq, Struct	Campaigne	JACS	76 (1954)	1272
$C_{25}H_{22}O_3$	2-15 μ	S	Spec	Allen	JOC	20 (1955)	306

$C_{25}H_{22}O_3$	Ethyl mandelate benzhydril ether	600-4000	Sol	Spec	Curtin	JACS	76 (1954)	494
$C_{25}H_{22}O_3$	Ethyl α, β, β -phenyl- diphenylhydroxypro- pionate	2.7-3.1 μ	S, Sol	Spec, H bond	Davies	JCP	8 (1940)	577
$C_{25}H_{22}O_3$	Ethyl α, β, β -triphenyl- lactate	600-4000	Sol	Spec, Struct	Curtin	JACS	76 (1954)	494
$C_{25}H_{22}O_4$	3,7-Di-(p-methoxy- benzylidene)-1,2-cyclo- heptanedione	-	S	Group freq	Leonard	JACS	75 (1953)	4989
$C_{25}H_{22}O_4$	3,7-Di-(p-methoxybenzyl) tropolone	-	Sol	Group freq	Leonard	JACS	75 (1953)	4980
$C_{25}H_{22}O_6$	Rotenone	2-15 μ	Sol Sol	Band freq, Struct Anal	Cupples Cupples	JACS AC	73 (1951) 24 (1952)	4023 1657
$C_{25}H_{23}NO$	N-Benzyl-5,6-diphenyl -3-hydroxymorpholine	-	-	Struct	Iutz	JACS	76 (1954)	4965
$C_{25}H_{24}N_2O_4S$	Benzyl benzyl- penicillinate	1100-3400	S	Spec	Cavallito	JOC	15 (1950)	815
$C_{25}H_{24}N_2O_5S$	Benzyl benzylpenicilli- -nate monoxide	1000-3400	S	Spec	Cavallito	JOC	15 (1950)	815
$C_{25}H_{24}N_2O_7$	3-Carboxy-4-carbomethoxy- hydroxymethyl-1-phenyl- hydrazyl-5,6,7-trimethoxy 1,2,3,4-tetrahydronaph- thalene lactone	-	S	Band freq	Haworth	JCS	- (1954)	3611
$C_{25}H_{24}O_3$	Methyl 15-p-methoxyphenyl all trans-2,4,6,8,10,12, 14-pentadecaheptaenoate	-	S	Group freq, I	Allan	JCS	- (1955)	1874
$C_{25}H_{24}O_4$	Pimeloxydiacetophenone	1500-3500	S, Sol	Freq, Assign, Struct	Martin	JACS	80 (1958)	4891
$C_{25}H_{24}O_6$	Dihydrorotenone	2-15 μ	Sol Sol	Band freq, Struct Anal	Cupples Cupples	JACS AC	73 (1951) 24 (1952)	4023 1657

$C_{23}H_{24}O_8$	2-12 μ	Sol	Spec	Schrecker	JACS	74 (1952)	5672
Methyl 6,7-methylene-dioxy-3,1-endo-methyleneoxy-1-(3,4,5-trimethoxyphenyl)-1,2,3,4-tetrahydronaphthalene-2-carboxylate							
β -Peltatin-B methyl ether	2-12.5 μ	Sol	Spec Struct, Config.	Hartwell Schrecker	JACS JACS	74 (1952) 75 (1953)	6285 5924
N-Cyclohexyl-2-benzoyl-3-p-acetylphenylazacyclopropane	700-4000	Sol	Spec, Freq	Adelfang	JACS	82 (1960)	4241
Brucine	650-4000	S	Spec	Moeller	JACS	77 (1955)	3182
$C_{23}H_{26}N_2O_5S_2$ N,N'-Dimethyl-N,N'-dibenzenesulfonyl-diaminomesitylene	1500-4000	S	Spec	Adams	JACS	71 (1949)	1620
$C_{23}H_{26}O$ Bis-(1-phenylcyclopentyl) ketone	-	-	Struct	VanHeninger	JACS	74 (1952)	4861
$C_{23}H_{26}OSi$ Triphenylsilylbutyl methyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{23}H_{26}OSi$ Triphenylsilylmethyl butyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{23}H_{26}OSi$ Triphenylsilylpropyl ethyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{23}H_{26}O_2$ 1,5-Dimesityl-1,3-pentadien-1-ol-5-one	-	S	Band freq	Fuson	JACS	75 (1953)	5402
$C_{23}H_{26}O_2$ 1,5-Dimesityl-2,4-pentadien-2-ol-1-one	-	S	Ident, Band freq Band freq, I	Fuson Fuson	JACS JACS	75 (1953) 75 (1953)	5950 5952
$C_{23}H_{26}O_5$ $\Delta^{5,13,15,17}$ -Etiojervatetraene-3 β -17-diol-11-one-3,17-diacetate	-	S	Group freq	Fried	JACS	75 (1953)	4929

$C_{23}H_{26}O_6$	Dihydrorotenol	-	Sol	H bond	Hilbert	JACS	58 (1936)	548
$C_{23}H_{26}O_7$	trans-3-Carboethoxy-4-(3',4'-dime thoxyphenyl)-6,7-dime thoxy-1-tetralone	-	Sol	Band freq	Walker	JACS	75 (1953)	3387
$C_{23}H_{27}O_3$	Δ^5 -Pregnenol- β one-20-d,4-17,21-acetate-d ₃	1300-1500	Sol	Spec	Jones	JACS	74 (1952)	5662
$C_{23}H_{27}NO_2$	Picrotoxadiene maleic anhydride N-phenylimide	2-13 μ	Sol	Spec, Band freq	Conroy	JACS	74 (1952)	3046
$C_{23}H_{27}NO_3$	Isoamyl p-(p-e thoxy-benzalamino) cinnamate	2-12 μ	L	Spec	Taschek	JCP	6 (1938)	542
$C_{23}H_{27}NO_6$	Colchicine ethyl ether	6.75-7.25 μ	Sol	Spec	Horowitz	JACS	74 (1952)	587
$C_{23}H_{27}NO_6$	Isocolchicine ethyl ether	6.75-7.25 μ	Sol	Spec	Horowitz	JACS	74 (1952)	587
$C_{23}H_{28}N_5$	5-(5'-Isopropylamino-amylamino)-pyrido 3,2a phenazine	2.5-15 μ	S	Spec	Drake	JACS	73 (1951)	544
$C_{23}H_{28}N_2O_4$	O-Acetylyohibine	-	S	Freq	Huebner	JACS	77 (1955)	469
$C_{23}H_{28}N_2O_4$	Methyl anhydroreserpate	-	-	Band study	Huebner	JACS	77 (1955)	472
$C_{23}H_{28}N_2O_5$	Cimicidine	800-3500	Sol	Spec, Band freq	Rogers	JACS	74 (1952)	1987
$C_{23}H_{28}N_2O_5$	Cimicidine hydrochloride	-	-	Group freq, Struct	Snyder	JACS	76 (1954)	4601
$C_{23}H_{28}N_2O_5 \cdot HCl$		-	-	Band freq	Snyder	JACS	76 (1954)	4601
$C_{23}H_{28}N_2O_5$	N,N-Dimethylamino-colchicidide	2-14 μ	S	Spec, Struct	Rappaport	JACS	76 (1954)	3693
$C_{23}H_{28}O$	1,3-Diduryl-2-propen-1-	-	-	Ident	Fuson	JACS	75 (1953)	5952

$C_{23}H_{28}O_2$	-	S	Band freq, I	Fuson	JACS	75 (1953)	5952
1,3-Diduryl-1,2-propanedione	-	-	Comparison	Fuson	JACS	75 (1953)	5952
$C_{23}H_{28}O_2$	-	-	Band freq	Sarett	JACS	75 (1953)	2112
1-2,4b-Dimethyl-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-7 β -ol-1-one benzoate	-	S	Band freq				
Duryl 2-hydroxy-4-t-butylphenyl ketone acetate	-	-	Group freq	Fuson	JACS	77 (1955)	3781
Methyl-1-methyl-3-acetoxy- $\Delta^{1,3,5(10),6}$ -estra-tetraene-17 β -carboxylate	-	Sol	Band freq	Sandoval	JACS	77 (1955)	148
$\Delta^{4,9(11),16}$ -Pregnatrien-21-ol-3,20-dione-21-acetate	-	S	Band freq	Allen	JACS	77 (1955)	1028
$\Delta^{4,16}$ -Pregnadiene-2-ol-3,11,20-trione-21-acetate	-	S	Band freq	Allen	JACS	77 (1955)	1028
17 α -21-Dihydroxy-1,4-pregnadiene-3,11,20-trione-21-acetate	2.5-3.5 μ	Sol	Group study	Kabasakalian	AC	31 (1959)	375
1-(3',4'-Dimethoxyphenyl)-2-carbomethoxy-6,7-dimethoxytetralin	-	Sol	Band study	Walker	JACS	75 (1953)	3387
d1-16 α ,17 α -Oxido-3,11,20-triketone-21-hydroxy- Δ^4 -pregnene 21-acetate	-	-	Ident	Barkley	JACS	76 (1954)	5017

$C_{23}H_{28}O_7$	Methyl α -retrodendrate dimethyl ether	-	Sol	Ident	Schrecker	JACS 77 (1955)	432
$C_{23}H_{28}O_7$	Δ^4 -Pregnene-3,6,11,20-tetrone-17 α ,21-diol-21 acetate	-	Sol	Band freq	Sondheimer	JACS 76 (1954)	5020
$C_{23}H_{29}ClO_6$	4-Chlorocortisone acetate	1550-1800	S	Spec, Freq	Meda	SA 13 (1958)	75
$C_{23}H_{29}FO_6$	1-Dehydro-9 α -Fluoro-hydrocortisone acetate	-	S	Band freq	Fried	JACS 77 (1955)	4181
$C_{23}H_{29}FO_6$	6-Dehydro-9 α -fluoro-hydrocortisone acetate	-	S	Group freq	Hirschmann	JACS 77 (1955)	3166
$C_{23}H_{29}FO_6$	4-Fluorocortisone acetate	-	S	Group freq	Fried	JACS 77 (1955)	4181
$C_{23}H_{29}FO_6$	9 α -Fluorocortisone acetate	-	S	Group freq	Hirschmann	JACS 77 (1955)	3166
$C_{23}H_{29}N_3O_6$	cis-Bis(α , α -dimethyl-glutarimido)-nitro-mesitylene	1550-1800	S	Spec, Freq	Meda	SA 13 (1958)	75
$C_{23}H_{29}FO_6$	9 α -Fluorocortisone acetate	-	S	Group freq	Fried	JACS 76 (1954)	1455
$C_{23}H_{29}N_3O_6$	trans-Bis-(α , α -dimethyl-glutarimido)-nitro-mesitylene	-	Sol	Band freq, I	Adams	JACS 75 (1953)	2375
$C_{23}H_{29}N_3O_6$	trans-Bis-(α , α -dimethyl-glutarimido)-nitro-mesitylene	-	Sol	Band freq	Adams	JACS 75 (1953)	2375
$C_{23}H_{29-31}N_3O_7$	Xanthomyacin-A	2-16 μ	Sol	Spec, Freq, Struct	Rao	JACS 76 (1954)	1335
$C_{23}H_{29-31}N_3O_7 \cdot HCl$	Xanthomyacin-A-hydrochloride	2-16 μ	S	Spec, Freq, Struct	Rao	JACS 76 (1954)	1335
$C_{23}H_{30}$	P,P'-Hexamethylene-1,5-diphenylpentane	3-12 μ	Sol	Spec	Steinberg	JACS 74 (1952)	5388
$C_{23}H_{30}D_4O_3$	Δ^5 -Pregnenol-3 β -one-20-d,17,21-acetate	-	Sol	Freq	Jones	JACS 74 (1952)	5662

C ₂₃ H ₃₀ BrR ₆	-	S	Band freq	Fried	JACS	77 (1955)	4181
2-Bromo-9 α -fluoro- Δ^4 -pregnene-11 β ,17 α ,21-triol-3,20-dione 21-acetate	-	-	Band freq	Fried	JACS	77 (1955)	4181
C ₂₃ H ₃₀ BrR ₆	-	Sol	Band freq	Fried	JACS	77 (1955)	4181
2-Bromo-9 α -fluoro- Δ^4 -pregnene-11 β ,17 α ,21-triol-3,20-dione-21-acetate	-	-	Band freq	Fried	JACS	77 (1955)	4181
C ₂₃ H ₃₀ N ₂ O ₂	700-1700	S	Spec	Stafford	AC	21 (1949)	1454
Bis-(N-benzyl)-azela- amide	-	-	Spec	Stafford	AC	21 (1949)	1454
C ₂₃ H ₃₀ N ₂ O ₃	-	-	Group freq	Witkop	JACS	76 (1954)	5603
N-Carbethoxydeacetyl- aspidospermine	-	-	Group freq, I, Struct	Witkop	JACS	76 (1954)	5603
C ₂₃ H ₃₀ N ₂ O ₃	6.01-11.87 μ	Sol	Group freq	Witkop	JACS	76 (1954)	5603
N,O-Diacetylaspidosine	-	-	Group freq, I, Struct	Witkop	JACS	76 (1954)	5603
C ₂₃ H ₃₀ N ₂ O ₄	-	Sol	Band freq	Adams	JACS	75 (1953)	2375
cis-Bis-(α , α -dimethyl- glutarimido)-mesitylene	-	-	Band freq	Adams	JACS	75 (1953)	2375
C ₂₃ H ₃₀ N ₂ O ₄	-	Sol	Band freq	Adams	JACS	75 (1953)	2375
trans-Bis-(α , α -dimethyl- glutarimido) mesitylene	-	-	Band freq	Adams	JACS	75 (1953)	2375
C ₂₃ H ₃₀ N ₂ O ₅	-	-	Ident	Klohs	JACS	77 (1955)	2241
Methyl reserpate	-	-	Ident	Klohs	JACS	77 (1955)	2241
C ₂₃ H ₃₀ N ₂ O ₅ HCl	-	-	Band freq	Snyder	JACS	76 (1954)	4601
Dihydrocimidine hydrochloride	-	-	Band freq	Snyder	JACS	76 (1954)	4601
C ₂₃ H ₃₀ N ₂ O ₁₅	-	-	Freq	Wolfrom	JACS	77 (1955)	3096
1-Deoxy-1-diazoketo- D-erythro-L-glucosonulose heptaacetate	-	-	Freq	Wolfrom	JACS	77 (1955)	3096
C ₂₃ H ₃₀ N ₂ O ₁₅	-	-	Freq	Wolfrom	JACS	77 (1955)	3096
1-Deoxy-1-diazoketo- D-erythro-L-mannonulose heptaacetate	-	-	Freq	Wolfrom	JACS	77 (1955)	3096
C ₂₃ H ₃₀ O	-	-	Freq	Fuson	JACS	75 (1953)	5952
Sym-Didurylacetone	-	-	Freq	Fuson	JACS	75 (1953)	5952
C ₂₃ H ₃₀ O	-	-	Freq	Fuson	JACS	76 (1954)	911
4,5-Dihydro-p-cyclohexyl- phenyl éuryl ketone	-	-	Freq	Fuson	JACS	76 (1954)	911

$C_{23}H_{30}O$	1,5-Dimesityl-2-pentanone	-	-	Band freq	Fuson	JACS	75 (1953)	5950
$C_{23}H_{30}O$	$\Delta^{4,16}$ -20-Ethynylpregnadienone- β	-	S, Sol	Freq	Tarpley	APS	9 (1955)	69
$C_{23}H_{30}O_3$	$\Delta^{5,13(17a),17(20)}$ -17-Ethyletiojervatriene- β -ol-11-one acetate	-	S	Freq	Fried	JACS	75 (1953)	4929
$C_{23}H_{30}O_4$	α -(β -Acetoxy-5,7,9-estratrien-17-yl)-propionic acid	-	Sol Sol	Group freq Band freq	Moseting Scheer	JOC JACS	17 (1952) 77 (1955)	764 3300
$C_{23}H_{30}O_4$	21-Acetoxypregna-4,9(11)-diene- β ,20-dione	-	Sol	Group freq, Ident	Casanova	JCS	- (1953)	2983
$C_{23}H_{30}O_4$	$\Delta^{3,5,16}$ -Androstatriene- β ,17-diol diacetate	1700-1400	Sol	Ident	Jones	JACS	78 (1956)	1152
$C_{23}H_{30}O_4$	dl- $\Delta^{5,16}$ -Ethylenedioxy-pregnadiene-11,20-dione	-	S	Band freq	Poos	JACS	77 (1955)	1026
$C_{23}H_{30}O_4$	$\Delta^{1,3,5:10}$ - β -Methoxy-17-(2-acetoxyacetyl)estratriene	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{23}H_{30}O_4$	$\Delta^{1,3,5:10}$ -1-Methyl-17-carbomethoxyestra-1,7-dien- β -acetate	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{23}H_{30}O_4$	$\Delta^{1,3,5(10)}$ -1-Methylestra-1,7-dienediol- β ,17-diacetate	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{23}H_{30}O_4$	Methyl-1-methyl- β -acetoxy- $\Delta^{1,3,5(10)}$ -estratriene-17 β -carboxylate	-	Sol	Band freq	Sandoval	JACS	77 (1955)	148

$C_{23}H_{30}O_4$	$\Delta^{4,7}$ -Pregnadien-21-ol-3,20-dione acetate	-	Sol S	Group freq	Clarke Nobile	JACS 77 (1955) JACS 77 (1955)	661 4184
$C_{23}H_{30}O_4$	$\Delta^{4,16}$ -Pregnadien-21-ol-3,20-dione-21-acetate	-	- S	Struct Group freq	Cole Allen	JOC 19 (1954) JACS 77 (1955)	131 1028
$C_{23}H_{30}O_5$	11 α -Acetoxy-16 α ,17 α -Oxido-progesterone	-	-	Ident	Peterson	JACS 77 (1955)	4428
$C_{23}H_{30}O_5$	dl-3-Ethylenedioxy-5-pregnene-11,16,20-trione	-	S	Band freq	Arth	JACS 77 (1955)	3634
$C_{23}H_{30}O_5$	dl-3-Ethylenedioxy-13 α -pregn-5-ene-11,16,20-trione	-	S	Freq	Arth	JACS 77 (1955)	3834
$C_{23}H_{30}O_5$	6-Oxodeoxycorticosterone 21-acetate	-	Sol	Group freq	Amendolla	JCS - (1954)	1226
$C_{23}H_{30}O_5$	$\Delta^{4,7}$ -Pregnadien-17 α ,21-diol-3,20-dione-21-acetate	-	S	Band freq	Antonucci	JACS 76 (1954)	2956
$C_{23}H_{30}O_5$	$\Delta^{4,9(11)}$ -Pregnadien-17 α ,21-diol-3,20-dione-21-acetate	-	S	Group freq	Bernstein	JACS 75 (1953)	4830
$C_{23}H_{30}O_5$	$\Delta^{4,16}$ -Pregnadien-11 β ,21-diol-3,20-dione-21-acetate	-	S	Band freq	Allen	JACS 77 (1955)	1028
$C_{23}H_{30}O_5$	Δ^4 -Pregnenol-21-trione -3,11,20-acetate	1600-1800 1700-1800	Sol - Sol	Freq, Struct Spec Band freq	Jones Jones Jones	JACS 71 (1949) CIC 2 (1950) JACS 74 (1952)	241 94 2820
$C_{23}H_{30}O_5$	Δ^4 -Pregnenol-21-trione -3,12,20-acetate	1700	Sol	Freq, Struct	Jones	JACS 71 (1949)	241

$C_{23}H_{30}O_5S$	Δ^4 -Pregnene-3, 11, 20-trione-17 α -ol-21-thiol-21-acetate	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3700
$C_{23}H_{30}O_6$	17 $\alpha\beta$ -Acetoxymethyl-D-homo- Δ^4 -androstene-17 α -ol-3, 11, 17-trione	-	Sol	Band freq	Batres	JACS	76 (1954)	5171
$C_{23}H_{30}O_6$	Aldosterone-21-acetate	2-12 μ	Sol S	Spec Band freq	Simpson Ham	HCA JACS	37 (1954) 77 (1955)	1163 1637
$C_{23}H_{30}O_6$	dl-Cortisone acetate	-	-	Ident Ident Band freq, Ident Band freq Ident	Barkley Barkley Bladon Poos Hogg	JACS JACS JCS JACS JACS	75 (1953) 76 (1954) - (1954) 76 (1954) 77 (1955)	4110 5017 125 5031 4436
$C_{23}H_{30}O_6$	17 α , 21-Dihydroxy-4-pregnene-3, 11, 20-trione-21-acetate	2.5-3.5 μ	-	Group study	Kabasakalian	AC	31 (1959)	375
$C_{23}H_{30}O_6$	Δ^4 -Pregnenediol-17 α , 21-trione-3, 11, 20-acetate-21	1550-1800	Sol S - -	Freq, Struct, Spec Spec, Freq Band study Ident	Jones Meda Fomo Olive to	JACS SA JACS JACS	74 (1952) 13 (1958) 75 (1953) 76 (1954)	2820 75 1277 6113
$C_{23}H_{30}O_6$	Δ^4 -Pregnene-3, 6, 20-trione-17 α , 21-diol (6-Keto-substances) 21-acetate	-	Sol	Band freq	Sondheimer	JACS	76 (1954)	5020
$C_{23}H_{30}O_7$	α -Kosin	3.13-12.3 μ	S	Freq, I	Birch	JCS	- (1952)	3102
$C_{23}H_{30}O_7$	β -Kosin	3.10-12.1 μ	S	Freq, I	Birch	JCS	- (1952)	3102
$C_{23}H_{30}O_7$	Δ^4 -Pregnene-3, 11, 20-trione-6 β , 17 α , 21-triol-21 acetate	-	S	Band freq	Sondheimer	JACS	76 (1954)	5020
$C_{23}H_{31}D_3O_3$	Δ^5 -Pregnenol-3 β -one-20 acetate-d	1300-1500	Sol	Spec	Jones	JACS	74 (1952)	5662

$C_{23}H_{31}O_3$	Δ^5 -Pregnenol- 3β -one-20 diol-21-acetate	1300-1500	Sol	Spec	Jones	JACS	74 (1952)	5662
$C_{23}H_{31}BrO_4$	4-Bromodeoxycorticosterone acetate	1550-1800	S	Spec, Freq	Meda	SA	13 (1958)	75
$C_{23}H_{31}BrO_6$	4-Bromo-17 α -hydroxy-21-acetoxypregnane-3,11,20-trione	-	-	Comparison	Holysz	JACS	75 (1953)	4432
$C_{23}H_{31}BrO_6$	4-Bromopregnane-17 α ,21-diol-3,11,20-trione 21-acetate	-	-	Ident Ident	Hanze Oliveto	JACS JACS	76 (1954) 76 (1954)	3179 6113
$C_{23}H_{31}FO_4$	4-Fluorodeoxycorticosterone acetate	1550-1800	S	Freq	Meda	SA	13 (1958)	75
$C_{23}H_{31}FO_6$	Δ^1 -5 α -Dihydro-9 α -fluorohydrocortisone acetate	-	S	Group freq	Hirschmann	JACS	77 (1955)	3166
$C_{23}H_{31}FO_6$	9 α -Fluorohydrocortisone acetate	-	S	Group freq	Fried	JACS	76 (1954)	1455
$C_{23}H_{31}IO_3$	21-Iodo- Δ^5 ,16-pregnadien- 3β -ol-20-one acetate	-	Sol	Band freq	Djerassi	JACS	76 (1954)	1722
$C_{23}H_{31}NO_3$	3-(N-Morpholinyl)-3,5-androstadiene-11,17-dione	-	S	Group freq	Heyl	JACS	77 (1955)	488
$C_{23}H_{32}$	1,5-Dimesitylpentane	-	-	Ident	Fuson	JACS	75 (1953)	5950
$C_{23}H_{32}IN$	Duryl-p-tert-butylphenyl-N-methyl ketimine methiodide	-	-	Freq	Fuson	JACS	75 (1953)	5321
$C_{23}H_{32}O_4$	16,17- β ,1-(3-carboxy-2-pyrazolino)-5-pregnen- 3β -ol-20-one	-	-	Group study	Mueller	JACS	76 (1954)	3686

$C_{23}H_{32}O_2$	2-t-Amyl-4-methoxy-2,3-dihydrophenyl duryl ketone	-	Group freq	Fuson	JACS	76 (1954)	5466
$C_{23}H_{32}O_2$	Bis-(2-hydroxy-3-t-butyl-5-methylphenyl) methane	2.75-3.1 μ	Spec, H bond	Coggeshall	JACS	72 (1950)	2836
$C_{23}H_{32}O_2$	Di-(4-hydroxy-2 or 3-methyl-5-t-butylphenyl) methane	2.5-3.4 μ	Freq	Amelang	JACS	75 (1953)	947
$C_{23}H_{32}O_2$	1,5-Dimesitylpentane-1,2-diol	-	Band freq	Fuson	JACS	75 (1953)	5950
$C_{23}H_{32}O_3$	Δ^5 -3-Acetoxytiocholenol-17-ethynyl-17	2800-3700	Spec	Jones	CIC	2 (1950)	94
$C_{23}H_{32}O_3$	3-Ethylendioxy- $\Delta^{5,16}$ -pregnadien-20-one	-	Band freq	Sondheim	JACS	77 (1955)	192
$C_{23}H_{32}O_3$	17-Ethynyl- Δ^5 -androstane-3 β ,17 β -diol acetate-3	700-1400	Ident	Jones	JACS	78 (1956)	1152
$C_{23}H_{32}O_3$	Δ^5 -17-Ethynyl androstane diol-3 β , 17-acetate-3	1684-1784	Group freq Band study Spec, Freq	Jones Jones Jones	JACS JACS JACS	72 (1950) 74 (1952) 74 (1952)	956 80 2820
$C_{23}H_{32}O_3$	20-Ketoall- $\Delta^{8,14,16}$ -pregnadienol-3 β acetate	-	Group freq, Ident	Mancera	JCS	- (1952)	1021
$C_{23}H_{32}O_3$	d1-3-Keto-16,17-dihydroxy- $\Delta^{4,9(11)}$ -10-epi-D-homoandrostadiene acetonide	2-12 μ	Spec	Woodward	JACS	74 (1952)	4223
$C_{23}H_{32}O_3$	d1-3-Keto-16,17-dihydroxy- $\Delta^{4,9(11)}$ -D-homoandrostadiene acetonide	2-12 μ	Spec	Woodward	JACS	74 (1952)	4223
$C_{23}H_{32}O_3$	$\Delta^{3,5}$ -Pregnadien-7-one-20 β -ol acetate	-	Band freq	Homo	JOC	17 (1952)	1413

$C_{25}H_{32}O_3$	$\Delta^{4,17(20)}$ -Pregnadien-3,20-dione-20-ethylene ketal	-	S	Band freq	Bernstein	JACS	76 (1954)	5674
$C_{25}H_{32}O_3$	$\Delta^{4,17(20)}$ -Pregnadien-20-ol-3-one 20-acetate	-	Sol	Freq	Djerassi	JACS	77 (1955)	3826
$C_{25}H_{32}O_3$	$\Delta^{4,17(20)}$ -Pregnadienol-21-one-3 acetate	-	Sol	Freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{25}H_{32}O_3$	$\Delta^{5,16}$ -Pregnadienol-3 β -one-20 acetate	1580-3100	-	Assign Group study	Jones	JACS	70 (1948)	2024
$C_{25}H_{32}O_3$	$\Delta^{5,17(20)}$ -Pregnadien-3 β -ol-21-al acetate	700-1400	S, Sol	Group freq	Jones	JACS	72 (1950)	86
$C_{25}H_{32}O_3$	$\Delta^{7,16}$ -Pregnadien-3 α -ol-20-one acetate	-	S	Ident	Tarpley	APS	9 (1955)	69
$C_{25}H_{32}O_3$	$\Delta^{4,17}$ -Vinylandrostenol-17 β -one-3 acetate	-	Sol	Band freq	Jones	JACS	78 (1956)	1152
$C_{25}H_{32}O_3$	Δ^4 -Pregnene-3,20-dione-21-thiol acetate	-	Sol	Group freq	Sondheimer	JACS	75 (1953)	5930
$C_{25}H_{32}O_3$	3 β -Acetoxvallopregn-8(9)-ene-11,20-dione	-	S, Sol	Group freq	Velasco	JOC	18 (1953)	92
$C_{25}H_{32}O_4$	3 β -Acetoxy- Δ^{16} -allo-pregnene-12,20-dione	-	Sol	Band freq	Tarpley	APS	9 (1955)	69
$C_{25}H_{32}O_4$	17 α -Acetoxy-17 α -methyl- Δ^4 -D-homoandrosterone-3,17-dione	-	Sol	Group freq	Djerassi	JACS	75 (1953)	3700
$C_{25}H_{32}O_4$	16 α -Acetoxy- Δ^4 -pregnene-3,20-dione	-	-	Group freq	Barton	JCS	- (1954)	747
$C_{25}H_{32}O_4$		-	Sol	Group freq	Mueller	JACS	75 (1953)	4888
$C_{25}H_{32}O_4$		-	Sol	Group freq	Turner	JACS	75 (1953)	3484
$C_{25}H_{32}O_4$		-	S	Band freq	Bernstein	JACS	76 (1954)	5674
$C_{25}H_{32}O_4$		-	-	Group freq	Hirschmann	JOC	20 (1955)	572

$C_{23}H_{32}O_4$	20 α -Acetoxyprogesterone	-	Sol	Band freq	Sondheimer	JACS	75 (1953)	4712
$C_{23}H_{32}O_4$	6 β -Acetoxyprogesterone	-	Sol	Group freq	Amendolla	JCS	- (1954)	1226
$C_{23}H_{32}O_4$	19-Acetoxyprogesterone	-	Sol	Group freq	Barber	JOC	19 (1954)	1758
$C_{23}H_{32}O_4$	Δ^1 -Allopregnenol-21-dione-3,20 acetate	745-1269 700-1400	Sol Sol Sol	Freq, Spec, Struct Table Band study	Jones Jones Jones	JACS JACS JACS	74 (1952) 77 (1955) 78 (1956)	2820 651 1152
$C_{23}H_{32}O_4$	$\Delta^{5,9(11)}$ -Androstadiene-3,17-dione bisethylene ketal	-	S	Group freq	Bernstein	JOC	19 (1954)	44
$C_{23}H_{32}O_4$	$\Delta^{2,16}$ -Androstadiene-3,17-diol diacetate	700-1400	Sol	Spec, Ident	Jones	JACS	78 (1956)	1152
$C_{23}H_{32}O_4$	Δ^5 -Androstenol-3 β -one-17 acetate	-	Sol	Freq	Jones	JACS	74 (1952)	5648
$C_{23}H_{32}O_4$	16 $\alpha\beta$ -Carboxy-16,17-cyclopropano-3-hydroxy-5-pregnen-20-one	-	-	Freq	Mueller	JACS	76 (1954)	3686
$C_{23}H_{32}O_4$	Deoxycorticosterone acetate	1550-1800	S	Spec, Freq	Meda	SA	13 (1958)	75
$C_{23}H_{32}O_4$	3 β ,17-Diacetoxy-5,16-androstadiene	-	-	Band study	Moffett	JACS	74 (1952)	2183
$C_{23}H_{32}O_4$	3 β ,14-Dihydroxy- $\Delta^{16(17),20(22)}$ -cardadienolide	1000-1900	Sol	Spec, Freq	Jones	JACS	81 (1959)	5242
$C_{23}H_{32}O_4$	Δ^5 -16 α ,17 α -Epoxypregnenol 3 β -one-20 acetate	-	Sol	Band freq, Spec	Jones	JACS	74 (1952)	2820
$C_{23}H_{32}O_4$	Δ^5 -3-Ethyleneedioxy-pregnene-11,20-dione	-	-	Band freq Band freq	Constantin John	JACS JACS	75 (1953) 76 (1954)	1716 5026

$C_{23}H_{32}O_4$	S	Freq	Arth	JACS	77 (1955)	3834
d1-3-Ethylenedioxy-13 α -pregn-5-ene-11,20-dione	-		Arth	JACS	77 (1955)	3834
$C_{23}H_{32}O_4$	S, Sol	Freq	Arth	JACS	77 (1955)	3834
d1-3-Ethylenedioxy-14 β -pregn-5-ene-11,20-dione	-	Band freq	Johns	JACS	76 (1954)	5026
$C_{23}H_{32}O_4$	-		Arth	JACS	77 (1955)	3834
d1- Δ^5 3-Ethylenedioxy-17 α -pregnene-11,20-dione	S	Freq	Bladon Meister	JCS JACS	- (1953) 76 (1954)	2921 5679
d1-3-Ethylenedioxy-5,16-pregnadiene-11 β -ol-20-one	-	Group freq Struct	Taub	JACS	76 (1954)	4094
$C_{23}H_{32}O_4$	S	Group freq	Paterson	JACS	74 (1952)	5933
Methyl 3,11-diketobis-norchol-4-enate	-	Ident	Jones	JACS	74 (1952)	2820
$\Delta^{4,9(11)}$ -Pregnadiene-3,20-dione-21-al dimethyl acetal	Sol	Band freq, Struct	Jones	JACS	74 (1952)	2820
Δ^4 -Pregnenol-11 α -dione-3,20-acetate	-		Jones	JACS	70 (1948)	2024
Δ^4 -Pregnenol-17 β -dione-3,20-acetate	-	Assign Group study	Jones	JACS	72 (1950)	86
Δ^4 -Pregnenol-21-dione-3,20-acetate	1580-3100 1700-1800	Spec Freq	Jones	CIC	2 (1950)	94
	3500-3700	Spec, Band freq, Struct	Jones	JACS	74 (1952)	5648
	-	Group freq	Jones	JACS	74 (1952)	2820
	-	Group freq	Djerassi Tarpley	JACS APS	75 (1953) 9 (1955)	3700 69
$C_{23}H_{32}O_4$	S, Sol	Group freq	Rosenkrantz	JACS	75 (1953)	4430
Δ^{16} -Pregner-3 α -ol-11,20-dione acetate	Sol	Band freq	Bernstein	JACS	76 (1954)	5674
Δ^4 -Pregner-3,20-dione-16 α ,17 α -oxide-20-ethylene ketal	S	Band freq				

$C_{23}H_{32}O_4$	16,17-Oxido- Δ^4 -pregnen-20 α -ol-3-one acetate	1600-1800	Sol	Band freq	Fuson	JACS	76 (1954)	2526
$C_{23}H_{32}O_4$	16 α ,17 α -Oxido- Δ^5 -pregnene-3 β ,21-diol-20-one-3-monoacetate	-	Sol	Band freq	Djerassi	JACS	76 (1954)	1722
$C_{23}H_{32}O_4S$	Δ^4 -Pregnene-3,20-dione-17 α -ol-21-thiol-21-acetate	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3700
$C_{23}H_{32}O_5$	3 β -Acetoxy-5 α -hydroxy-allo-9 β -pregn-7-ene-11,20-dione	-	S	Group freq	Bladon	JCS	- (1953)	2921
$C_{23}H_{32}O_5$	17 β -Acetoxyandrost-5-ene-3,16-dione-3-ethylene ketal	-	Sol	Band study	Bellemy	JCS	- (1957)	861
$C_{23}H_{32}O_5$	11 α -Acetoxy-17 α -hydroxy- Δ^4 -pregnene-3,20-dione	-	-	Struct	Meister	JACS	75 (1953)	416
$C_{23}H_{32}O_5$	3 β -Acetoxy-13 α -hydroxy-12,13-seco-16-allopregnen-20-one-12-carboxylate-12,13-lactone	-	Sol	Band freq	Rochman	JACS	77 (1955)	2228
$C_{23}H_{32}O_5$	17 $\alpha\beta$ -Acetoxymethyl-D-homo-homo- Δ^4 -androster-17 α -ol-3,17-dione	-	Sol	Band freq	Batres	JACS	76 (1954)	5171
$C_{23}H_{32}O_5$	21-Acetoxy-4-pregnen-16 α -ol-3,20-dione	-	-	Struct	Cole	JOC	19 (1954)	131
$C_{23}H_{32}O_5$	Andrenosterone diethylene ketal	-	S	Group freq	Bernstein	JACS	75 (1953)	1481
$C_{23}H_{32}O_5$	$\Delta^8(9)$ -Allopregnene-7,20-dione-3 β ,11 α -diol-3-monoacetate	-	Sol Sol	Band study Freq	Djerassi Djerassi	JACS JACS	73 (1951) 74 (1952)	4496 3321

$C_{23}H_{32}O_5$	S	Group freq	Bernstein	JOC	18 (1953)	1166
Δ^5 -Androsten-17 β -ol-3,11-dione acetate 3-ethylene ketal	-					
Cannogenin	-	Spec	Golab	HCA	42 (1959)	2418
3 β ,6 β -Diacetoxy- Δ^4 -androsten-17-one	Sol	Group freq	Amendolla	JCS	- (1954)	1226
3 β ,17 β -Diacetoxy androst-5-en-16-one	Sol	Group study	Bellamy	JCS	- (1957)	861
6 β ,17 β -Diacetoxy- Δ^4 -androsten-3-one	-	Group freq	Eppstein	JACS	76 (1954)	3174
11 α ,17 β -Diacetoxy- Δ^4 -androsten-3-one	S	Group freq	Bernstein	JOC	18 (1953)	1166
11 α ,21-Dihydroxy-4-pregnene-3,20-dione acetate-21	-	Group freq	Eppstein	JACS	76 (1954)	3174
21,21-Dimethoxy- Δ^4 -pregnene-3,11,20-trione	-	Ident	Eppstein	JACS	75 (1953)	408
2 β ,4b-Dimethyl-7-ethylenedioxy-2-acetonyl-1 β -formylmethyl-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β ,dodecahydrophenanthrene-4-one	S	Ident	Mattox	JACS	74 (1952)	4340
6 β -Hydroxydeoxycorticosterone 21-acetate	S	Group freq	Gould	JACS	75 (1953)	3593
6 β -(9 α)-X-Hydroxy-desoxycorticosterone 21-acetate	S	Band freq	Poos	JACS	77 (1955)	1026
2 α -Hydroxytestosterone diacetate	Sol	Group freq	Amendolla	JCS	- (1954)	1226
2 β -Hydroxytestosterone diacetate	Sol	Band freq	Romo	JOC	19 (1954)	1509
2 β -Hydroxytestosterone diacetate	-	Group freq	Stone	JACS	77 (1955)	3926
2 α -Hydroxytestosterone diacetate	Sol	Band freq	Sondheim	JACS	75 (1953)	4712
2 β -Hydroxytestosterone diacetate	-	Ident	Clarke	JACS	77 (1955)	661
2 β -Hydroxytestosterone diacetate	Sol	Band freq	Sondheim	JACS	75 (1953)	4712
2 β -Hydroxytestosterone diacetate	-	Ident	Clarke	JACS	77 (1955)	661

$C_{23}H_{32}O_5$	6 β -Hydroxytestosterone 6,17-diacetate	-	Sol	Group freq Ident	Amendolla Romo	JCS JOC	- 19	(1954) (1954)	1226 1509
$C_{23}H_{32}O_5$	9 α ,11 α -Oxidoallopregnane 7,20-dione- β -ol acetate	-	Sol Sol	Freq Band freq	Djerassi Djerassi	JACS JACS	73 75	(1951) (1953)	4496 3505
$C_{23}H_{32}O_5$	16 α ,17 α -Oxidoallopregnane -11 α -ol- β ,20-dione acetate	-	-	Band study	Romo	JACS	75	(1953)	1277
$C_{23}H_{32}O_5$	$\Delta^{4,16}$ -Pregnadiene-11 β ,21- diol- β ,20-dione-20 ethylene ketal	-	S	Band freq	Allen	JACS	77	(1955)	1028
$C_{23}H_{32}O_5$	Pregnanol-21-trione- β ,11, 20 acetate	- 1700	Sol Sol	Assign Freq, Struct	Jones Jones	JACS JACS	70 71	(1948) (1949)	2024 241
$C_{23}H_{32}O_5$	Δ^4 -Pregnenediol-11 β ,21- dione- β ,20-acetate-21	-	Sol	Freq, Spec, Struct	Jones	JACS	74	(1952)	2820
$C_{23}H_{32}O_6$	3 β -Acetoxy-13 α -hydroxy- 16 α ,17 α -epoxy-12-carboxy- -12,13-secoallopregnan- 20-one-12,13-lactone	-	-	Ident	Rochman	JACS	77	(1955)	2228
$C_{23}H_{32}O_6$	17 α β -Acetoxymethyl-D-homo- Δ^4 -androstene 11 β ,17 α -diol- β ,17-dione	-	Sol	Ident	Batres	JACS	76	(1954)	5171
$C_{23}H_{32}O_6$	Allopregnane- β ,11,20- trione-17 α ,21-diol-21- acetate	-	-	Spec, Struct Spec, Ident Band study	Oliveto Pataki Romo	JACS JACS JACS	74 74 75	(1952) (1952) (1953)	2248 5615 1277
	2.5-16 μ 950-1350	-	S,Sol S,Sol	Spec, Freq Band study	Dickson Rosenkrantz	JCS AC	- 28	(1955) (1956)	443 31
$C_{23}H_{32}O_6$	Dihydrocortisone acetate	-	-	Ident	Holysz	JACS	75	(1953)	4432
		-	-	Purity	Hanze	JACS	76	(1954)	3179
		-	-	Ident	Oliveto	JACS	76	(1954)	6113
$C_{23}H_{32}O_6$	11 β ,17 α -Dihydroxypregnane- β ,20-dione-11,17- diformate	-	-	Group freq	Oliveto	JACS	77	(1955)	3564

$C_{23}H_{32}O_6$	Group freq	JACS	72 (1950)	956
3,12-Diketo-7 α -acetoxy- etiocolanic acid methyl ester	-	-	-	-
$C_{23}H_{32}O_6$	17 α -Hydroxycorticosterone -17-acetate	-	-	-
$C_{23}H_{32}O_6$	17 α -Hydroxycorticosterone -21-acetate	Ident Ident	JACS 75 (1953) JACS 75 (1953)	2273 502
$C_{23}H_{32}O_6$	Methyl 3 β -acetoxy-11:18- epoxy-18-keto-5 α -etianate	Ident Ident Ident Ident Spec	JACS 76 (1954) JACS 77 (1955) JACS 77 (1955) HCA 37 (1954)	5017 2224 3564 1200
$C_{23}H_{32}O_6$	Pregnan-17 α ,21-diol-3,11, 20-trione-21-acetate	Spec, Struct, Freq Spec Ident Band study	JACS 74 (1952) JACS 74 (1952) JACS 76 (1954) AC 28 (1956)	2820 2248 4474 31
$C_{23}H_{32}O_6$	Δ^4 -Pregnene-11 α ,17 α ,21- triol-3,20-dione 11-acetate	Confirmation of reaction	JACS 75 (1953)	3651
$C_{23}H_{32}O_6$	Δ^4 -Pregnene-11 β ,17 α ,21- triol-3,20-dione 11-acetate	Confirmation of reaction	JACS 75 (1953)	5486
$C_{23}H_{32}O_6$	Δ^4 -Pregnene-11 β ,17 α ,21- triol-3,20-dione 21-acetate	Freq, Spec, Struct	JACS 74 (1952)	2820
$C_{23}H_{32}O_6$	Δ^4 -Pregnene-11 α ,17 α ,21- triol-3,20-dione 21-monoacetate	Band study Ident	JACS 75 (1953) JACS 75 (1953)	1277 412
$C_{23}H_{32}O_6$	3 β ,5,14-Trihydroxy-19- oxo- Δ^{20} (22)-cardenolide	Spec, Freq	JACS 81 (1959)	5242
$C_{23}H_{32}O_7$	21-Acetoxy-5 α ,17 α - dihydroxyallopregnane 3,11,20-trione	Group freq	JCS - (1954)	125

$C_{23}H_{32}O_7$	Methyl alloquassinolate	-	S	Freq	Hanson	JCS - (1954)	4238
$C_{23}H_{32}O_8$	Allopregnane-3,11,20-trione-5 α ,6 β ,17 α ,21-tetrol acetate-21	-	S	Band freq	Sondheimer	JACS 76 (1954)	5020
$C_{23}H_{32}O_{11}$	2-Methyl-5-(1'-tetra-o-acetylglucopyranosyloxyethylidene)cyclohexanone	1377-1770	S	I	Briggs	JCS - (1954)	4182
$C_{23}H_{33}BrO_4$	12 α -Bromopregnanol-3 α -dione-11,20 acetate	-	Sol	Group freq	Jones	JACS 74 (1952)	2828
$C_{23}H_{33}BrO_5$	16 β -Bromo-3 β -acetoxy-17 α -hydroxyallopregnane-12,20-dione	-	-	Freq	Mueller	JACS 75 (1953)	4888
$C_{23}H_{33}BrO_5$	16-Bromoallopregnane-3 β ,17 α -diol-12,20-dione-3-acetate	1700	Sol	Band study, Group freq	Rothman	JACS 77 (1955)	2229
$C_{23}H_{33}BrO_5$	21-Bromoallopregnane-3 β ,17 α -diol-12,20-dione-3-acetate	1700	Sol	Band study, Group freq	Rothman	JACS 77 (1955)	2229
$C_{23}H_{33}BrO_5$	12 α -Bromo-11-keto-3 α -acetoxyetiocolanic acid methyl ester	-	Sol	Group freq	Jones	JACS 74 (1952)	2828
$C_{23}H_{33}ClO_5$	4-Chloro-17 α -hydroxy-pregnane-3,11,20-trione 3-ethylene ketal	-	-	Struct	Levin	JACS 76 (1954)	546
$C_{23}H_{33}FO_6$	Allodihydro-9 α -fluoro-hydrocortisone acetate	-	S,Sol	Group freq	Hirschmann	JACS 77 (1955)	3166
$C_{23}H_{33}NO_6$	Dimethyl oxoatisine dicarboxylate	-	-	Group freq	Pelletier	JACS 76 (1954)	4496
$C_{23}H_{33}NO_8$	Carbonyloxy tetra-L-alanyl-L-alanine	-	S	Struct	Zahn	A 636 (1960)	132
$C_{23}H_{34}$	1-Fridecyl-naphthalene	690-3248	L	Table, I	Anderson	JCS - (1953)	443

$C_{23}H_{34}O_2$	2-Tridecylonaphthalene	720-3239	L	Table, I	Anderson	JCS	- (1953)	443
$C_{23}H_{34}N_2O_2$ HClO ₄	d-6-(p-Methoxybenzyl) sparteine perchlorate	1038-1619	S	Table	Leonard	JACS	77 (1955)	1552
$C_{23}H_{34}O_2$	3-(Pentadecatrienyl-8',11',13')-veratrole	-	-	Struct	Sunthakar	JACS	76 (1954)	5070
$C_{23}H_{34}O_3$	20 α -Acetoxy- Δ^4 -pregnenone-3	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
$C_{23}H_{34}O_3$	$\Delta^9(11)$ -Allopregnen-3 β -20-one acetate	920-1292	Sol	Table	Jones	JACS	77 (1955)	651
$C_{23}H_{34}O_3$	Δ^{16} -Allopregnenol-3 β -one-20-acetate	-	Sol	Group freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{23}H_{34}O_3$	3-Ethynylandrostan-3 ξ ,17 β -diol-17-acetate	3100-3400	S	Ident, Freq	Filler	CIL	- (1957)	1322
$C_{23}H_{34}O_3$	20-Ketoallo- Δ^8 ,14-pregnenol-3 β acetate	-	Sol	Group freq	Mancera	JCS	- (1952)	1021
$C_{23}H_{34}O_3$	$\Delta^{5,16}$ -Pregnadien-3 β -ol-20-one ethylene ketal	-	S	Band freq	Bernstein	JACS	76 (1954)	5674
$C_{23}H_{34}O_3$	Δ^4 -Pregnen-20 β -ol-3-one-acetate	1600-1800	Sol	Band freq	Sondheimier	JACS	75 (1953)	5930
$C_{23}H_{34}O_3$	Δ^5 -Pregnenol-3 β -one-20 acetate	-	-	Assign Freq	Fuson	JACS	76 (1954)	2526
		1300-1500	Sol	Spec, Freq	Jones	JACS	74 (1952)	5648
		940-1289	Sol	Table	Jones	JACS	74 (1952)	5662
		700-1400	Sol	Band study	Jones	JACS	77 (1955)	651
$C_{23}H_{34}O_3$	Δ^5 -17-Isopregnenol-3 β -one-20 acetate	-	S, Sol	Group freq	Tarpley	APS	9 (1955)	69
$C_{23}H_{34}O_3$	Δ^7 -Pregnen-3 α -ol-20-one acetate	-	Sol	Group freq	Velasco	JOC	18 (1953)	92

$C_{25}H_{34}O_3$	Δ^{11} -Pregnenol- 3α -one-20 acetate	-	Assign	JACS	70 (1948)	2024
$C_{25}H_{34}O_3$	Δ^{16} -Pregnenol- 3α -one-20 acetate	1580-3100	Assign Spec	JACS JACS	70 (1948) 72 (1950)	2024 86
$C_{25}H_{34}O_3$	Progesterone β -monocycloethylene ketal	-	Freq	JACS	77 (1955)	192
$C_{25}H_{34}O_3 \cdot H_2O$	$17\alpha, 17\alpha\epsilon$ -Epoxy- β -acetoxy- 17α -methyl-D-homoandroster-5-ene monohydrate	-	Group freq	JCS	- (1953)	1847
$C_{25}H_{34}O_3S$	Allopregnane- $3, 20$ -dione-21-thiol acetate	-	Group freq	JACS	75 (1953)	3700
$C_{25}H_{34}O_3S$	Δ^5 -Androsten- 3β -ol-17-one acetate ethylenehemithio ketal	-	Band freq	JACS	75 (1953)	3704
$C_{25}H_{34}O_4$	3β -Acetoxyallopregnane-11,20-dione	-	Freq	JACS	73 (1951)	3546
		-	Group freq	JCS	- (1953)	3864
		-	Band freq	JACS	75 (1953)	3505
		-	Group freq	JCS	- (1955)	443
		770-3700	Freq, I	JACS	77 (1955)	2237
$C_{25}H_{34}O_4$	3β -Acetoxy- 9β -allopregnane-11,20-dione	-	Group freq	JCS	- (1953)	3864
$C_{25}H_{34}O_4$	3β -Acetoxyallopregnane-12,20-dione	-	Group freq	JACS JACS	75 (1953) 77 (1955)	4888 2229
$C_{25}H_{34}O_4$	Δ^5 - 3β -Acetoxyetiocolenic acid methyl ester	-	Group freq	JACS	72 (1950)	956
$C_{25}H_{34}O_4$	Δ^5 -Allopregnenediol- $3\beta, 17\alpha$ -one-20-acetate- 3	-	Band freq, Spec	JACS	74 (1952)	2820
$C_{25}H_{34}O_4$	Allopregnan-21-ol- $3, 20$ -dione acetate	-	Band freq, Spec	JACS	74 (1952)	2820
		-	Ident	JACS	77 (1955)	661
		700-1400	Band study	JACS	78 (1956)	1152

	950-1350	S, Sol	Band study	Rosenkrantz	AC	28 (1956)	31
$C_{23}H_{34}O_4$ Δ^5 -Androstenediol- $3\beta, 17\alpha$ diacetate	- 1580-3100 -	- Sol Sol	Assign I Group freq	Jones Jones Jones	JACS JACS JACS	70 (1948) 72 (1950) 72 (1950)	2024 86 956
$C_{23}H_{34}O_4$ Δ^5 -Androstene- $3\beta, 17\beta$ - diol diacetate	700-1400	Sol	Band study	Jones	JACS	78 (1956)	1152
$C_{23}H_{34}O_4$ Δ^{16} -Androstene- $3\beta, 17$ - diol diacetate	700-1400	Sol	Band study	Jones	JACS	78 (1956)	1152
$C_{23}H_{34}O_4$ Δ^4 -Androstene- $3, 17$ -dione - $3, 17$ -bisdioxolane	-	-	Group freq	Herzog	JACS	75 (1953)	4425
$C_{23}H_{34}O_4$ $3, 5$ -Cyclo- $6\alpha, 17\beta$ -andro- stanediol diacetate	$3-12 \mu$	Sol	Spec	Wagner	JOC	17 (1952)	529
$C_{23}H_{34}O_4$ $3, 5$ -Cyclo- $6\beta, 17\beta$ -andro- stanediol diacetate	$3-12 \mu$	Sol	Spec	Wagner	JOC	17 (1952)	529
$C_{23}H_{34}O_4$ $3\beta, 17\beta$ -Diacetoxy- Δ^5 - androstene	$2.5-15 \mu$	Sol	Spec	Hirschmann	JACS	74 (1952)	5357
$C_{23}H_{34}O_4$ Digitonigenin	-	-	Spec	Golab	HCA	42 (1959)	2418
$C_{23}H_{34}O_4$ $3\beta, 14$ -Dihydroxy- $\Delta^{20}(22)$ cardenolide	1000-1900	Sol	Spec, Freq	Jones	JACS	81 (1959)	5242
$C_{23}H_{34}O_4$ $16\alpha, 17\alpha$ -Epoxyallopregnanol 3β -one-20 acetate	-	Sol	Band freq	Jones	JACS	74 (1952)	2820
$C_{23}H_{34}O_4$ $3\alpha, 9\alpha$ -Epoxy- 11 -ketobis- norcholeonic acid methyl ester	1712	Sol	Freq, Struct	Jones	JACS	71 (1949)	241
$C_{23}H_{34}O_4$ dl- 3 -Ethylenedioxy- $5, 16$ - pregnadiene- $11\beta, 20\beta$ -diol	-	S	Freq	Arth	JACS	77 (1955)	3834
$C_{23}H_{34}O_4$ dl- Δ^5 - 3 -Ethylenedioxy- pregnene- 11β -ol- 20 -one	-	-	Band freq	Johns	JACS	76 (1954)	5026

$C_{23}H_{34}O_4$	$dl-\Delta^5-3$ -Ethylenedioxy-17- n -pregnene-11 α -ol-20-one	-	-	Band freq	Johns	JACS	76 (1954)	5026
$C_{23}H_{34}O_4$	$dl-\Delta^5-3$ -Ethylenedioxy-17-isopregnene-11 α -ol-20-one	-	-	Band freq	Jhns	JACS	76 (1954)	5026
$C_{23}H_{34}O_4$	Δ^5-3 -Ethylenedioxy-pregnene-20 β -ol-11-one	-	-	Band freq	Constantin	JACS	75 (1953)	1716
$C_{23}H_{34}O_4$	3β -Hydroxy-16 α -acetoxy- Δ^5 -pregnen-20-one	-	S, Sol	Group freq	Hirschmann	JOC	20 (1955)	572
$C_{23}H_{34}O_4$	$\Delta^9(11)-3\alpha$ -Hydroxy-12-ketonorcholenic acid	-	S, Sol	Group freq	Tarpley	APS	9 (1955)	69
$C_{23}H_{34}O_4$	Methyl 3α -Acetoxy- $\Delta^9(11)$ etiocholenate	25-15 μ 2-12 μ	Sol Sol	Spec, Band freq Spec	Hirschmann Woodward	JACS JACS	74 (1952) 74 (1952)	5357 4223
$C_{23}H_{34}O_4$	17 α -Methyl- 3β -acetoxy-17 $\alpha\beta$ -hydroxy- Δ^5 -D-homoandrostenone-17	2.5-15 μ	S	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
$C_{23}H_{34}O_4$	Methyl-3,11-diketobis-norallocholanate	-	-	Struct	Meister	JACS	76 (1954)	5679
$C_{23}H_{34}O_4$	Methyl-3,11-diketobis-norcholanate	-	-	Distinction from allo	Meister	JACS	76 (1954)	5679
$C_{23}H_{34}O_4$	Pregnanol-3 α -dione-11,20 acetate	1700	Sol	Freq	Jones	JACS	71 (1949)	241
		-	Sol	Band freq, Spec	Jones	JACS	74 (1952)	2820
		-	Sol	Band study	Mancera	JACS	75 (1953)	1286
		-	Sol	Band freq	Rosenkrantz	JACS	75 (1953)	4430
		770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{23}H_{34}O_4$	Pregnanol- 3β -dione-16,20 acetate	-	Sol	Band freq, Spec	Jones	JACS	74 (1952)	2820
$C_{23}H_{34}O_4$	Pregnan-11 α -ol-3,20-dione acetate	-	Sol	Band study	Mancera	JACS	75 (1953)	1286

C ₂₃ H ₃₄ O ₄	Pregnanol-21-dione-3, 20 acetate	-	Sol	Band freq, Spec Ident Table Band study	Jones Jones Clarke Rosenkrantz	JACS JACS JACS AC	74 (1952) 77 (1955) 77 (1955) 28 (1956)	2820 651 661 31
C ₂₃ H ₃₄ O ₄	Δ ⁴ -Pregnen-16α-ol-3, 20 dione-20-ethylene ketal	-	S	Band freq	Bernstein	JACS	76 (1954)	5674
C ₂₃ H ₃₄ O ₄	Δ ⁵ -Pregnenediol-3β, 17α-one-20-acetate-3	2.5-15 μ	S Sol	Spec, Band freq Band freq, Spec, Struct	Hirschmann Jones	JACS JACS	74 (1952) 74 (1952)	5357 2820
C ₂₃ H ₃₄ O ₄	Δ ⁵ -Pregnenediol-3β, 21-one-20-acetate-21	-	- Sol Sol	Assign Band freq, Spec Group freq	Jones Jones Kabasakalian	JACS JACS AC	70 (1948) 74 (1952) 31 (1959)	2024 2820 375
C ₂₃ H ₃₄ O ₄ S	Pregnane-3, 20-dione-17α-ol-21-thiol 21-acetate	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3700
C ₂₃ H ₂₄ O ₅	3β-Acetoxy-5α-hydroxy-allopregnane-11, 20-dione	-	S S	Group freq Group freq, Ident	Bladon Bladon	JCS JCS	- (1953) - (1954)	2921 125
C ₂₃ H ₃₄ O ₅	3β-Acetoxy-5α-hydroxy-all-α-9β-pregnane-11, 20-dione	-	S	Group freq	Bladon	JCS	- (1953)	2921
C ₂₃ H ₃₄ O ₅	3β-Acetoxy-17α-hydroxy-allopregnane-12, 20-dione	1700	- Sol	Band freq Spec, Group freq	Mueller Rothman	JACS JACS	75 (1953) 77 (1955)	4888 2229
C ₂₃ H ₃₄ O ₅	21-Acetoxy-Δ ⁴ -pregnene-3β, 6β-diol-20-one	-	Sol	Group freq	Amendolla	JCS	- (1954)	1226
C ₂₃ H ₃₄ O ₅	Allopregnane-3β, 17α-diol-11, 20-dione-3-acetate	770-3700	S S	Group freq Freq, I	Bladon Rosenkrantz	JCS JACS	- (1954) 77 (1955)	125 2237
C ₂₃ H ₃₄ O ₅	Allopregnane-7, 20-dione-3β, 11α-diol-3-acetate	-	S S	Freq Freq	Djerassi Djerassi	JACS JACS	73 (1951) 74 (1952)	4496 3321
C ₂₃ H ₃₄ O ₅	Allopregnane-11α, 17α-diol-3, 20-dione-11-acetate	-	-	Band study	Romo	JACS	75 (1953)	1277

$C_{23}H_{34}O_5$	Allopregnane-11 α ,21-diol-3,20-dione-11-monoacetate	-	Sol	Band freq	Sondheimer	JACS	75 (1953)	2601
$C_{23}H_{34}O_5$	Allopregnane-11 β ,21-diol-3,20-dione-21-acetate	950-1350	S, Sol	Band study	Rosenkrantz	AC	28 (1956)	31
$C_{23}H_{34}O_5$	Δ^5 -Androsten-11 α -ol-3,17-dione-3,17-diethylene ketal	-	S	Group freq	Bernstein	JACS	75 (1953)	1481
		-	S	Group freq	Bernstein	JOC	18 (1953)	1166
		-	S	Ident	Bernstein	JOC	19 (1954)	41
$C_{23}H_{34}O_5$	Δ^5 -Androsten-11 β -ol-3,17-dione-3,17-diethylene ketal	-	S	Group freq	Bernstein	JOC	18 (1953)	166
$C_{23}H_{34}O_5$	dl-3 β ,11 β -Diacetoxyandrostan-17-one	-	-	Ident	Johnson	JACS	76 (1954)	3353
$C_{23}H_{34}O_5$	3 β ,16 α -Diacetoxyandrostan-17-one	-	-	Ident, Band freq	Leeds	JACS	76 (1954)	2943
$C_{23}H_{34}O_5$	3 β ,17 α -Diacetoxyandrostan-16-one	-	-	Band freq	Leeds	JACS	76 (1954)	2943
$C_{23}H_{34}O_5$	6 β ,17 β -Diacetoxyandrostan-3-one	-	Sol	Band freq	Rosenkrantz	JACS	76 (1954)	5024
$C_{23}H_{34}O_5$	3 β ,17 β -Diacetoxy-16 α ,17 α -epoxyandrostan-17-one	-	-	Band freq	Leeds	JACS	76 (1954)	2943
$C_{23}H_{34}O_5$	3,6-Diethylenedioxyandrostan-17-one	-	Sol	Band freq	Rosenkrantz	JACS	76 (1954)	5024
$C_{23}H_{34}O_5$	21,21-Dimethoxypregnan-3,11,20-trione	-	S	Group freq, Assign	Gould	JACS	75 (1953)	3593
$C_{23}H_{34}O_5$	Etiocholanediol-3 α ,17 α -one-11-diacetate	1712	Sol	Freq, Struct	Jones	JACS	71 (1949)	241
$C_{23}H_{34}O_5$	Etiocholanediol-3 α ,17 β -one-11 diacetate	2.5-13 μ	Sol	Freq, Struct	Rosenkrantz	JACS	75 (1953)	903
		-	Sol	Freq	Page	JCS	(1955)	2017
		770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237

$C_{23}H_{34}O_5$	Compogenin	600-4000	Sol	Spec	Watson	AJC	10 (1951)	19
$C_{23}H_{34}O_5$	Methyl 3 α -acetoxy-11-ketoetiocholanate	2-12 μ	Sol	Group freq	Woodward	JACS	74 (1952)	4223
$C_{23}H_{34}O_5$	Methyl 5 α -hydroxy-3,11-diketobisnorallocholanate	-	S	Group freq	Bladon	JCS	- (1953)	2921
$C_{23}H_{34}O_5$	Pregnanediol-3 α ,21-dione-11,20-acetate-21	1700	- Sol	Assign Freq, Struct	Jones Jones	JACS JACS	70 (1948) 71 (1949)	2024 241
$C_{23}H_{34}O_5$	Pregnane-5 α ,21-diol-3,20-dione-21-acetate	-	S	Band freq	Bernstein	JACS	77 (1955)	2233
$C_{23}H_{34}O_5$	Pregnane-11 α ,21-diol-3,20-dione 11-monoacetate	-	Sol	Freq	Sondheimer	JACS	75 (1953)	2601
$C_{23}H_{34}O_5$	Pregnanediol-12 β -21-dione-3,20-acetate-21	-	-	Assign	Jones	JACS	70 (1948)	2024
$C_{23}H_{34}O_5$	Pregnane-17 α ,21-Diol-3,20-dione-21-acetate	950-1350	S,Sol	Band study	Rosenkrantz	AC	28 (1956)	31
$C_{23}H_{34}O_5$	Δ^4 -Pregnen-11 β -ol-3,20-dione-21-al dimethyl-acetal	-	Sol	Group freq	Taub	JACS	76 (1954)	4094
$C_{23}H_{34}O_5$	Δ^4 -Pregnenetriol-17 α ,20,21-one-3-acetate-21	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{23}H_{34}O_6$	3 α -Acetoxy-21,21-dihydroxy-17 α -pregnane-11,20-dione	-	S	Spec	Mattox	JACS	74 (1952)	4340
$C_{23}H_{34}O_6$	3 β -Acetoxy-9 α ,17 α -dihydroxyallopregnane-11,20-dione	-	S	Group freq	Barton	JCS	- (1954)	747
$C_{23}H_{34}O_6$	21-Acetoxypregnan-3 α ,17 α -diol-11,20-dione	-	-	Spec	Hershberg	JACS	74 (1952)	3849

$C_{23}H_{34}O_6$	All opregnane-11 α , 17 α , 21-triol- β , 20-dione 21-monoacetate	-	-	Band study	Romo	JACS 75 (1953)	1277
$C_{23}H_{34}O_6$	3 β , 6 β -Diacetoxysteroid-5 α -ol-17-one	-	Sol	Group freq	Amendolla	JCS - (1954)	1226
$C_{23}H_{34}O_6$	Dimethyl 3 β -acetoxysteroid- Δ^5 -etiobilienate	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS 74 (1952)	5357
$C_{23}H_{34}O_6$	Methyl 3 β -Acetoxy-9 α -hydroxy-11-keto-etiocolanate	-	S	Band freq	Hirschmann	JACS 75 (1953)	2361
$C_{23}H_{34}O_6$	Pregnane-3 β , 17 α , 21-triol-11, 20-dione-21-acetate	770-3700	S	Freq, I	Rosenkrantz	JACS 77 (1955)	2237
$C_{23}H_{34}O_6$	5 α -Pregnane-3 β , 17 α , 21-triol-11, 20-dione 21-acetate	770-3700	S	Group freq Freq, I	Chamberlin Rosenkrantz	JACS 77 (1955) JACS 77 (1955)	1221 2237
$C_{23}H_{34}O_6$	Δ^4 -Pregnene-11 α , 17 α , 21-triol- β , 20-dione 20-ethylene ketal	-	S	Band study	Sondheimer	JACS 75 (1953)	1282
$C_{23}H_{34}O_6$	11 β , 17 α , 21-Trihydroxypregnane- β , 20-dione 21-acetate	-	-	Ident Ident Band study	Oliveto Oliveto Rosenkrantz	JACS 77 (1955) JACS 77 (1955) AC 28 (1956)	3564 2224 31
$C_{23}H_{34}O_6$	3 α , 11 β , 17 α -Trihydroxypregnane-20-one-11, 17-diformate	-	-	Reference for comparison	Oliveto	JACS 77 (1955)	3564
$C_{23}H_{34}O_7$	All opregnane- β , 20-dione-5 α , 6 β , 17 α , 21-tetrol 21-monoacetate	-	S	Band freq	Sondheimer	JACS 76 (1954)	5020
$C_{23}H_{34}O_7$	Pregnane-5 α , 11 β , 17 α , 21-tetrol- β , 20-dione 21-acetate	1245-3530	S	Band freq	Bernstein	JACS 77 (1955)	2233
$C_{23}H_{34}O_8$	Quabagenin	2-16 μ	-	Spec, Ident	Djerassi	JOC 19 (1954)	1351

$C_{23}H_{35}BrO_4$	1700	Sol	Spec, Group freq	Rothman	JACS	77 (1955)	2229
16-Bromoallopregnane- $3\beta, 17\alpha$ -diol-20-one- 3α -acetate							
$C_{23}H_{35}BrO_4$							
21-Bromopregnanediol- $3\alpha, 17\alpha$ -one-20-acetate- 3β	-	Sol	Band freq, Struct, Spec	Jones	JACS	74 (1952)	2820
$C_{23}H_{35}BrO_5$							
4-Bromopregnane- $11\beta, 17\alpha$ -diol- $3, 20$ -dione- 3α -ethylene ketal	-	Sol	Band freq, Spec	Jones	JACS	74 (1952)	2828
$C_{23}H_{35}BrO_5$							
4-Bromopregnane- $11\beta, 17\alpha$ -diol- $3, 20$ -dione- 3α -ethylene ketal	-	-	Ident	Oliveto	JACS	77 (1955)	2224
$C_{23}H_{35}ClO_2$							
3β -Chloro-20 α -acetoxy- Δ^5 pregnene	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
$C_{23}H_{35}NO_6$							
Dimethyl oxoisosatisine dicarboxylate	-	-	Group freq	Pelletier	JACS	76 (1954)	4496
$C_{23}H_{36}O_2$							
20 α -Acetoxy- Δ^5 -pregnene	-	S, Sol	Struct	Daus	JACS	75 (1953)	3840
$C_{23}H_{36}O_2$							
Isolanostenyl acetate	11-14 μ	Sol	Spec	Barton	JCS	- (1951)	3147
$C_{23}H_{36}O_2$							
Δ^5 -20-Isonorcholenol- 3β -one-22	-	S, Sol	Group freq	Tarpley	APS	9 (1955)	69
$C_{23}H_{36}O_2$							
3β -(Pentadecadienyl- $8', 11'$)-veratrole	-	-	Struct	Sunthakar	JACS	76 (1954)	5070
$C_{23}H_{36}O_2$							
Δ^5 -Pregnen- 3β -ol acetate	700-1400	Sol	Spec, Ident	Jones	JACS	78 (1956)	1152
$C_{23}H_{36}O_3$							
Allopregnanol- 3α -one-20 acetate	1195-1280 700-1400	Sol Sol Sol	Group freq I Ident	Jones Jones Jones	JACS JACS JACS	72 (1950) 73 (1951) 78 (1956)	956 3215 1152
$C_{23}H_{36}O_3$							
Allopregnanol- 3β -one-20 acetate	1190-1280 2-12 μ 915-1290	- Sol Sol Sol	Assign I Freq Ident Table Ident	Jones Jones Jones Woodward Jones Ramirez	JACS JACS JACS JACS JACS JACS	70 (1948) 73 (1951) 74 (1952) 74 (1952) 77 (1955) 77 (1955)	2024 3215 5648 4223 651 134

$C_{23}H_{36}O_3$	Allopregnanol-20 α -one-3 acetate	770-3700 700-1400	Sol Sol	Freq, I Ident	Rosenkrantz Jones	JACS JACS	77 (1955) 78 (1956)	2237 1152
$C_{23}H_{36}O_3$	Allopregnane-20 β -ol-3-one acetate	700-1400	Sol	Ident	Jones	JACS	72 (1950)	956
$C_{23}H_{36}O_3$	Allopregnan-21-ol-20-one acetate	2.5-15 μ	Sol	Group freq Spec, Band freq Band freq, Spec, Struct	Hirschmann Jones	JACS JACS JACS	74 (1952) 74 (1952)	5357 2820
$C_{23}H_{36}O_3$	Enol-20-ethyl ether of 3 α -hydroxypregnane-11,20-dione	700-1400	S, Sol	Ident Band study	Jones Rosenkrantz	JACS AC	78 (1956) 28 (1956)	1152 31
$C_{23}H_{36}O_3$	3-Ethylenedioxy- Δ^5 -pregnen-20 β -ol	700-1400	Sol	Ident Spec, Ident	Jones	JACS	78 (1956)	1152
$C_{23}H_{36}O_3$	17-Ethyletiojervane-3 β -ol-11-one acetate	-	S	Band freq, Struct	Clarke Jones	JACS JACS	77 (1955) 78 (1956)	661 1152
$C_{23}H_{36}O_3$	3 β -Hydroxy-20 α -acetoxy- Δ^5 -pregnene	700-1400	Sol	Band study	Belleau	JACS	74 (1952)	2816
$C_{23}H_{36}O_3$	17- Δ^5 -Hydroxy-20 α -acetoxy- Δ^5 -pregnene	-	Sol	Group freq	Sondheimer	JACS	77 (1955)	192
$C_{23}H_{36}O_3$	3 β -Hydroxy-17 α -methyl-D-homoandrostan-17-one acetate	2.5-15 μ	Sol	Group freq Spec, Band freq	Fried	JACS	75 (1953)	4929
$C_{23}H_{36}O_3$	3 β -Hydroxy-17 α -methyl-D-homoandrostan-17-one acetate	-	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
$C_{23}H_{36}O_3$	17-Isopregnan-3 α -ol-20-one acetate	-	Sol	Group freq Group freq	Jones Jones	JACS JACS	72 (1950) 74 (1952)	956 5648
$C_{23}H_{36}O_3$	17-Isopregnan-3 α -ol-20-one acetate	700-1400	Sol	Group freq	Ramirez	JACS	77 (1955)	134
$C_{23}H_{36}O_3$	17-Isopregnan-3 α -ol-20-one acetate	-	-	Assign Band freq, Spec, Struct	Jones Jones	JACS JACS	70 (1948) 74 (1952)	2024 2820
$C_{23}H_{36}O_3$	17-Isopregnan-3 α -ol-20-one acetate	700-1400	Sol	Ident	Jones	JACS	78 (1956)	1152

$C_{23}H_{36}O_3$	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
3β -Methoxy- $16\beta,17\beta$ -dihydroxy- Δ^5 -androstene-16,17-acetonide	-	-	Assign	Jones	JACS	70 (1948)	2024
Pregnanol- 3α -one-20 acetate	1190-1270	Sol	Band study, I	Jones	JACS	73 (1951)	3215
	-	Sol	Band study	Mancera	JACS	75 (1953)	1286
	946-1289	Sol	Table	Jones	JACS	77 (1955)	651
	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
	700-1400	Sol	Ident	Jones	JACS	78 (1956)	1152
Pregnanol- 3β -one-20 acetate	1190-1275	Sol	Band study, I	Jones	JACS	73 (1951)	3215
	1600-3700	Sol	Spec, Struct	Jones	JACS	74 (1952)	2820
	-	Sol	Freq	Jones	JACS	74 (1952)	5648
	946-1289	Sol	Table	Jones	JACS	77 (1955)	651
	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
	700-1400	Sol	Ident	Jones	JACS	78 (1956)	1152
Pregnan- 20α -ol- 3 -one-20 acetate	950-1350	S, Sol	Band study	Rosenkrantz	AC	28 (1956)	31
Allopregnenediol- 3β ,17-one-20-acetate- 3	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
	-	Sol	Group freq	Jones	JACS	74 (1952)	5648
	-	-	Ident	Soloway	JACS	76 (1954)	2941
	770-3700	S	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
Allopregnenediol- 3β 21-one-20-acetate-21	-	Sol	Group freq	Jones	JACS	72 (1950)	956
	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
Allopregnenediol- $17\alpha,20$ -one- 3 -acetate-20	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
Allopregnane- $3\beta,11\alpha$ -diol-20-one,11-monoacetate	-	-	Ident	Mancera	JOC	17 (1952)	1066
Androstenediol- $3\alpha,17\alpha$ diacetate	-	-	Assign	Jones	JACS	70 (1948)	2024
	-	Sol	Freq	Jones	JACS	74 (1952)	5648
Androstane- $3\alpha,17\beta$ -diol- $3,17$ -diacetate	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
	700-1400	Sol	Ident	Jones	JACS	78 (1956)	1152

$C_{23}H_{36}O$	Androstenediol- 3β , 17α diacetate	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{23}H_{36}O$	Androstane- 3β , 17β -diol $3,17$ -diacetate	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{23}H_{36}O$	6β , 17β -Diacetoxystropane	-	S	Band freq	Rosenkrantz	JACS	76 (1954)	5024
$C_{23}H_{36}O$	Δ^5 - 3β , 17α -dihydroxy- bisorcholonic acid methyl ester	1600-3700	Sol	Spec, Freq, Struct	Jones	JACS	74 (1952)	2820
$C_{23}H_{36}O$	Etiocholanone- 3α , 17β -diol $3,17$ -diacetate	770-3700 700-1400	Sol Sol Sol	Group freq Freq, I Ident	Jones Rosenkrantz Jones	JACS JACS JACS	72 (1950) 77 (1955) 78 (1956)	956 2237 1152
$C_{23}H_{36}O$	Etiocholanone- 3β , 17β -diol diacetate	700-1400	Sol	Ident	Jones	JACS	78 (1956)	1152
$C_{23}H_{36}O$	3α -Hydroxy- 11 -ketobis- norcholonic acid methyl ester	1712	Sol Sol	Freq, Struct Freq	Jones Cole	JACS JACS	71 (1949) 74 (1952)	241 5571
$C_{23}H_{36}O$	Methyl 3β -acetoxy- alloetianate	-	-	Spec	Belleau	JACS	74 (1952)	2816
$C_{23}H_{36}O$	Methyl 3α -hydroxy- 12 - ketobisnorcholanic acid	-	S, Sol	Freq	Tarpley	AFS	9 (1955)	69
$C_{23}H_{36}O$	Pregnanediol- 3α , 17β -one - 20 -acetate- 3	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{23}H_{36}O$	Pregnanediol- 3α , 17α - one- 20 -acetate- 3	-	- Sol	Assign Band freq, Spec, Struct	Jones Jones	JACS JACS	70 (1948) 74 (1952)	2024 2820
$C_{23}H_{36}O$	2.5 - 13μ	-	Sol Sol Sol	Freq, Struct Freq Freq, I	Rosenkrantz Page Rosenkrantz	JACS JCS JACS	75 (1953) - (1955) 77 (1955)	903 2017 2237
$C_{23}H_{36}O$	Pregnanediol- 3β , 17α -one 20 -acetate- 3	1600-3700	Sol	Spec, Band freq, Struct	Jones	JACS	74 (1952)	2820
$C_{23}H_{36}O$	-	-	Sol	Freq	Jones	JACS	74 (1952)	2820

	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{23}H_{36}O_4$	-	Sol	Group freq Band freq, Spec, Struct	Jones Jones	JACS	72 (1950) 74 (1952)	956 5648
$C_{23}H_{36}O_4$	-	Sol	Group freq Freq	Jones Jones	JACS	72 (1950) 74 (1952)	956 2820
$C_{23}H_{36}O_4$	-	S	Band freq	Bernstein	JACS	76 (1954)	5674
$C_{23}H_{36}O_5$	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3700
$C_{23}H_{36}O_5$	-	Sol	Freq	Sondheimer	JACS	75 (1953)	2601
$C_{23}H_{36}O_5$	-	-	Freq	Johns	JACS	76 (1954)	5026
$C_{23}H_{36}O_5$	-	S	Freq	Arth	JACS	77 (1955)	3834
$C_{23}H_{36}O_5$	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{23}H_{36}O_5$	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{23}H_{36}O_5$	2-12 μ	Sol	Spec	Simpson	HCA	37 (1954)	1200
$C_{23}H_{36}O_5$	-	S	Group freq	Bladon	JCS	- (1953)	2921

$C_{23}H_{36}O_5$	Pregnane-3 α , 11 β , 17 α - triol-20-one-11-acetate	-	-	Ident	Oliveto	JACS	75 (1953)	5486
$C_{23}H_{36}O_5$	Pregnanetriol-3 α , 12 α , 21-one-20-acetate-21	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{23}H_{36}O_5$	Pregnanetriol-3 α , 12 β , 21- one-20-acetate-21	-	-	Assign	Jones	JACS	70 (1948)	2024
$C_{23}H_{36}O_5$	Pregnane-11 β , 17 α , 20 β - triol-3-one-20-acetate	-	-	Ident	Oliveto	JACS	77 (1955)	2224
$C_{23}H_{36}O_5$	Pregnane-11 β , 17 α -diol- 3, 20-dione-3-ethylene ketal	-	-	I	Oliveto	JACS	77 (1955)	2224
$C_{23}H_{36}O_5$	Δ^4 -Pregnene-11 β , 20 β -diol- 3-one-21-al dimethyl acetal	-	-	Ident	Taub	JACS	76 (1954)	4094
$C_{23}H_{36}O_6$	17 α -Acetoxypregnane-3 β , 5 α , 6 β -triol-20-one	-	S	Group freq	Amendolla	JCS	- (1954)	1226
$C_{23}H_{36}O_6$	Allopregnane-3 β , 11 α , 17 α , 21-tetrol-20-one 11-monoacetate	-	-	Band freq	Romo	JACS	75 (1953)	1277
$C_{23}H_{36}O_6$	Allopregnane-3 β , 11 α , 17 α , 21-tetrol-20-one 21-monoacetate	-	-	Band study	Romo	JACS	75 (1953)	1277
$C_{23}H_{36}O_6$	3 α , 12 α -Dihydroxy-7 α - acetoxyetiocolanic acid, methyl ester	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{23}H_{36}O_6$	17 α , 21-Dihydroxy-3, 3- dimethoxyallopregnane- 11, 20-dione	-	S	Group freq	Page	JCS	- (1955)	2017
$C_{23}H_{36}N_4O_4$	2-Heptadecanone-2, 4- dinitrophenyl- hydrazone	2-15 μ	S	Spec, Ident	Jones	AC	28 (1956)	191

$C_{23}H_{38}O_2$	Allopregnan- 3α -ol acetate	700-1400	Sol	Ident	Jones	JACS 78 (1956)	1152
$C_{23}H_{38}O_2$	Allopregnan- 3β -ol acetate	700-1400	Sol	Ident	Jones	JACS 78 (1956)	1152
$C_{23}H_{38}O_2$	Allopregnan- 20α -ol acetate	700-1400	Sol	Spec, Ident	Jones	JACS 78 (1956)	1152
$C_{23}H_{38}O_2$	Allopregnan- 20β -ol acetate	700-1400	Sol	Spec, Ident	Jones	JACS 78 (1956)	1152
$C_{23}H_{38}O_2$	cis- 3 -(Pentadeceny $1-8'$) veratrole	-	-	Band study	Sunthankar	JACS 76 (1954)	5070
$C_{23}H_{38}O_2$	Pregnan- 3α -ol acetate	700-1400	Sol	Ident	Jones	JACS 78 (1956)	1152
$C_{23}H_{38}O_2$	Pregnan- 3β -ol acetate	- 700-1400	Sol Sol	Group freq Ident	Jones Jones	JACS 72 (1950) JACS 78 (1956)	956 1152
$C_{23}H_{38}O_2$	Pregnanol- 20α acetate	-	Sol	Band freq, Spec, Struct	Jones	JACS 74 (1952)	2820
$C_{23}H_{38}O_2$	Allopregnane- $3\alpha,20\alpha$ -diol acetate- 3	- 700-1400 650-1350	Sol Sol	Group freq Band study, Ident Discussion, Generalization	Jones Jones	JACS 74 (1952) JACS 78 (1956) JACS 80 (1958)	5648 1152 6121
$C_{23}H_{38}O_2$	Allopregnane- $3\alpha,20\alpha$ -diol acetate- 20	700-1400 650-1350	Sol Sol	Ident Discussion, Struct	Jones Jones	JACS 78 (1956) JACS 80 (1958)	1152 6121
$C_{23}H_{38}O_2$	Allopregnane- $3\beta,20\beta$ -diol acetate	700-1400	Sol	Ident	Jones	JACS 78 (1956)	1152
$C_{23}H_{38}O_2$	3α -Hydroxybismorcholanolic acid methyl ester	- -	Sol Sol	Group freq Freq	Jones Cole	JACS 72 (1950) JACS 74 (1952)	956 5571
$C_{23}H_{38}O_2$	Pregnane- $3\alpha,20\alpha$ -diol acetate	700-1400	Sol	Ident	Jones	JACS 78 (1956)	1152
$C_{23}H_{38}O_2$	Pregnandiol- $3\alpha,20\alpha$ -monoacetate- 20	-	Sol	Group freq	Jones	JACS 72 (1950)	956

$C_{23}H_{38}O_4$	3 α ,20 β -Dihydroxypregnan-11-one-11-ethylene ketal	-	-	Absorption study	Magerlin	JACS	77 (1955)	1904
$C_{23}H_{38}O_4$	Pregnane-3 α ,11 α -diol 20-one 20-ethylene ketal	-	Sol	Group study	Sondheimer	JACS	75 (1953)	1282
$C_{23}H_{38}O_4$	Pregnanetriol-3 α ,12 α ,20 α -acetate-12	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{23}H_{38}O_4$	Pregnanetriol-3 α ,12 α ,20 β -acetate-12	1600-3700	Sol	Spec, Band freq, Struct	Jones	JACS	74 (1952)	2820
$C_{23}H_{38}O_4$	Pregnanetriol-3 α ,12 α ,20 α -acetate-20	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{23}H_{38}O_5$	3 β -Acetoxy-9 β -allopregnane-5 α ,11 ξ ,20 ξ -triol	-	-	Struct	Bladon	JCS	- (1953)	2921
$C_{23}H_{38}O_5$	Pregnanediol-3 α ,20-one 11 diacetate	1700	Sol	Freq, Struct	Jones	JACS	71 (1949)	241
$C_{23}H_{38}O_5$	Pregnanediol-3 α ,20 (epi)-one-11 diacetate	1700	Sol	Freq, Struct	Jones	JACS	71 (1949)	241
$C_{23}H_{39}N$	Δ^5 -Dimethylaminopregnene	-	-	Group freq, Struct	Haworth	JCS	- (1953)	1102
$C_{23}H_{40}$	9-Phenylheptadecane	2-15 μ	L	Spec, Struct	Hawkes	SA	16 (1960)	633
$C_{23}H_{40}O$	2,6-Di- <i>tt</i> -octyl-4-methylphenol	3 μ	S, L, Sol	H bond	Sears	JACS	71 (1949)	4110
$C_{23}H_{42}O_3$	Tetrahydrofurfuryl oleate	2-15 μ	L	Spec	Kendall	APS	7 (1953)	179
$C_{23}H_{42}Si$	Benzyl- <i>n</i> -hexadecylsilane	2-16 μ	Sol	Freq	Kniseley	SA	15 (1959)	651
$C_{23}H_{42}Si$	Benzyl di- <i>n</i> -octylsilane	2-16 μ	Sol	Freq	Kniseley	SA	15 (1959)	651
$C_{23}H_{44}O_2$	Amyl oleate	2-15 μ	L	Spec	Kendall	APS	7 (1953)	179

C ₂₄ H ₄₆	9-Cyclohexyl-heptadecane	9-14 μ	L	Spec	Fred	AC	21 (1949)	900
C ₂₃ H ₄₈	n-Tricosane	9-14 μ 700-1500	Sol, S	Struct Freq, Assign	Snyder Snyder	JCP JMS	27 (1957) 4 (1960)	969 411
C ₂₃ H ₄₈ ^{S1}	Allyl di-n-decylsilane	2-16 μ	Sol	Freq	Kniseley	SA	15 (1959)	651
C ₂₃ H ₄₈ ^{S1}	Cyclopentamethylene-dimethylsilane	2-35 μ	L	Assign	Oshesky	JACS	79 (1957)	2057
C ₂₃ H ₅₀ ^{NO, P}	Palmitoylglycolleithin	2-16 μ	S	Spec	Bear	JACS	75 (1953)	5533
<u>C₂₄ COMPOUNDS</u>								
C ₂₄ H ₄₀	1,12-Diphenyl-1,3,5,7,9,11-dodecahexayne	-	Sol	Group freq, I	Armitage	JCS	- (1954)	147
C ₂₄ H ₄₂ ^{N6}	2,4,6-Tri-(o-cyanophenyl)-1,3,5-triazine	2-16 μ	S	Spec	Ross	JACS	72 (1950)	3302
C ₂₄ H ₄₂ ^{O2}	1,2,6,7-Dibenzpyrene-3,8-quinone	-	S	Band freq	Hadzi	JACS	73 (1951)	5460
C ₂₄ H ₄₄	3,4,8,9-Benzpyrene	650-2010	S	Spec	Cannon	SA	4 (1951)	373
C ₂₄ H ₄₄	4,5,8,9-Dibenzpyrene	650-2010	S	Spec	Cannon	SA	4 (1951)	373
C ₂₄ H ₄₄	3,4(2',3')naphthapyrene	650-2030	S	Spec	Cannon	SA	4 (1951)	373
C ₂₄ H ₄₄ ^{O3}	2-(1-Pyrenoyl)benzoic acid	5.5-6.5 μ	Sol	Band study, Ident	Sawicki	AC	31 (1959)	523
C ₂₄ H ₁₅ ^{Cl, N, O, S}	3,3',5-Trichlorodiphenyl-quinone dibenzene-sulfonimide	-	-	Group study	Adams	JACS	74 (1952)	3033
C ₂₄ H ₁₆	5-Phenyl-1,2-benzanthracene	660-2010	S	Spec	Cannon	SA	4 (1951)	373

$C_{24}H_{16}$	6-Phenyl-1,2-benzanthracene	650-2020	S	Spec	Carmon	SA	4 (1951)	373
$C_{24}H_{16}Cl_2N_2O_2S_2$	3,3'-Dichlorodiphenylquinone dibenzene-sulfonimide	-	-	Band freq	Adams	JACS	74 (1952)	3033
$C_{24}H_{16}Cl_4N_2O_2S_4$	N-(2,3,5,6-Tetrachloro-4-benzenesulfonamido-phenyl)-N-(phenyl)benzenesulfonamide	-	-	Group freq	Adams	JACS	74 (1952)	5557
$C_{24}H_{16}O_4$	3,10-Diacetoxyperylene	692-1764	S	Table	Brown	JCS	- (1954)	1280
$C_{24}H_{16}O_{10}$	2,5-Diacetoxy-3,6-p-dicarboxyphenyl-1,4-benzoquinone	5-15 μ	S	Spec, Struct	Edwards	JAPC	10 (1960)	246
$C_{24}H_{17}ClN_2O_2S_2$	3-Chlorodiphenylquinone-dibenzene-sulfonimide	-	-	Group freq	Adams	JACS	74 (1952)	3033
$C_{24}H_{17}Cl_3N_4$	2-Amino-5-p-chloroanilino-p-benzoquinone-di-p-chloro anil	-	-	Ident	Hughes	JCS	- (1954)	4630
$C_{24}H_{17}F_3N_4$	2-Amino-5-p-fluoroanilino-p-benzoquinone-di-p-fluoro anil	-	-	Ident	Hughes	JCS	- (1954)	4630
$C_{24}H_{17}I_3N_4$	2-Amino-5-p-iodoanilino-p-benzoquinone-di-p-iodo anil	-	-	Ident	Hughes	JCS	- (1954)	4630
$C_{24}H_{17}N_3$	2,3-DI-[3'-indyl]indole	2-12 μ	Sol	Spec	Witkop	JACS	73 (1951)	713
$C_{24}H_{17}N_3.HCl$	2,3-DI-[3'-indyl]- ψ -indole hydrochloride	2-10 μ	S	Spec, Struct, Assign	Witkop	JACS	73 (1951)	713
$C_{24}H_{17}N_3O$	2,2-Bis-[3'-indyl]indoxyl	2-12 μ	Sol	Spec, Iso	Witkop	JACS	73 (1951)	713
$C_{24}H_{18}$	9,10-Dimethyl-1,2,5,6-Allylbenzanthracene	650-2000	S	Spec	Carmon	SA	4 (1951)	373

$C_{24}H_{18}$	1-Phenyl-2-(3-xenyl) benzene	5-38 μ	S	Spec, Freq, Assign	Stewart	JRNB	60 (1958)	125
$C_{24}H_{18}$	1-Phenyl-3-(4-xenyl) benzene	5-38 μ	S	Spec, Freq, Assign	Stewart	JRNB	60 (1958)	125
$C_{24}H_{18}$	O, O' -Quaterphenyl	2-25 μ 5-38 μ	S, Sol S	Spec, Assign Spec, Freq, Assign	Dale Stewart	ACS JRNB	11 (1957) 60 (1958)	640 125
$C_{24}H_{18}$	O, p' -Quaterphenyl	2-25 μ	S, Sol	Spec, Assign	Dale	ACS	11 (1957)	640
$C_{24}H_{18}$	p, p' -Quaterphenyl	650-2000 2-25 μ 5-38 μ	S S, Sol S	Spec Spec, Assign Spec, Freq, Assign	Cannon Dale Stewart	SA ACS JRNB	4 (1951) 11 (1957) 60 (1958)	373 640 125
$C_{24}H_{18}$	m-Quaterphenyl	5-38 μ	S	Spec, Freq, Assign	Stewart	JRNB	60 (1958)	125
$C_{24}H_{18}$	1, 3, 5-Triphenylbenzene	1050-1800 640-2010	- Sol	Spec Spec	Barnes Cannon	IEC SA	15 (1943) 4 (1951)	659 373
$C_{24}H_{18}Cl_3N_3O_3$	1, 3, 5-Tris-p-chloro-benzoylperhydro-s-triazine	-	-	Ident, Struct, Group freq	Emmons	JACS	74 (1952)	5524
$C_{24}H_{18}N_2O_5S_2$	Diphenoquinonedibenzene-sulfonimide	-	-	Band freq	Adams	JACS	74 (1952)	3033
$C_{24}H_{18}N_2O_5S$	p, p' -Dinitrodiphenyl p-hydroxydiphenyl complex	650-4000	S	Spec, Freq, Assign	Kross	SA	8 (1956)	142
$C_{24}H_{18}O_2$	5-Benzylidene-3,4-diphenyl-4-hydroxy- Δ^2 -cyclopentenone	1600-1800	Sol	Group freq	Fuson	JACS	76 (1954)	2526
$C_{24}H_{18}O_4$	Isophthaloyldiacetophenone	1500-3500	S	Freq, Assign, Struct	Martin	JACS	80 (1958)	4891
$C_{24}H_{18}O_4$	Terephthaloyldiacetophenone	1500-3500	S, Sol	Freq, Assign, Struct	Martin	JACS	80 (1958)	4891
$C_{24}H_{18}O_6$	2,2' -Dihydroxy-3,3' -diacetoxy-1,1' -binaphthyl	2-12 μ	Sol	Spec, Struct	O'Connor	JACS	76 (1954)	2368

$C_{24}H_{18}O_6$	Tri-m-cresotide	1700-1800	S, Sol	Group freq	Short	JCS	- (1952)	206
$C_{24}H_{18}O_6$	Tri-o-cresotide	1700-1800	S, Sol	Group freq	Short	JCS	- (1952)	206
$C_{24}H_{18}O_6$	Tri-p-cresotide	1700-1800	S, Sol	Group freq	Short	JCS	- (1952)	206
$C_{24}H_{19}ClN_2O_4S_3$	2-Chloro-5-phenylmercapto -p-phenylenedi benzene sulfonamide	-	-	Ident	Adams	JACS	75 (1953)	663
$C_{24}H_{19}ClN_2O_4S_3$	2-Benzene sulfonyl-3- chloro-p-phenylene- dibenzene sulfonamide	-	-	Ident, Iso	Adams	JACS	76 (1954)	1114
$C_{24}H_{19}ClN_2O_4S_3$	2-Chloro-5-benzene- sulfonyl-p-phenylene- dibenzene sulfonamide	-	-	Ident	Adams	JACS	75 (1953)	3235
$C_{24}H_{19}ClN_2O_4S_3$	2-Chloro-Z-benzene sulfonyl -p-phenylenedi benzene - sulfonamide	-	-	Ident	Adams	JACS	75 (1953)	3235
$C_{24}H_{19}N$	Triphenyl- β -pyridyl- methane	1300-1900	S	Struct, Spec, Anal	Adams	JACS	71 (1949)	387
$C_{24}H_{19}NO_3$	1-(2-Phenylethyl)-4,4- diphenyl-2,3,5- pyrrolidenetrione	-	-	Spec	Skinner	JACS	72 (1950)	5569
$C_{24}H_{19}N_2O_5S_2$	Qf-(1,4-Naphthoquinone- dibenzene sulfonamido-2) nitroethane	-	-	Group study	Adams	JACS	74 (1952)	5557
$C_{24}H_{19}N_5O_5$	5-(Indole-3'-methylene) -3-(phenyl-p-azophenyl)- 2-thiohydantoin	600-4000	S	Spec, Ident	Epp	AC	29 (1957)	1283
$C_{24}H_{20}Cl_4N_4P_4$	Phenyl phosphonitrilic chloride tetramer	1100-1350	-	Freq, Struct	Shaw	CIL	- (1959)	54
$C_{24}H_{20}N_2$	1,4-Naphthoquinone-di-o- methyl anil	-	-	Group freq, Struct	Adams	JACS	75 (1953)	4642
$C_{24}H_{20}N_2$	Tetraphenylhydrazine	625-900	-	Substitution effect	Margoshes	SA	7 (1955)	14

C ₂₄ H ₂₀ N ₂ O ₆ S ₂	2-Acetoxy-1,4-naphthalene dibenzenesulfonamide	-	-	Group study	ADAMS	JACS	14 (1952)	JACS
C ₂₄ H ₂₀ N ₂ O ₆ S ₂	1,4-Naphthalene dibenzene sulfonamido-2-acetic acid	-	-	Group study	Adams	JACS	74 (1952)	5557
C ₂₄ H ₂₀ OSi	Diphenyl-p-phenoxy-phenylsilane	2-16 μ	Sol	Group freq	Kniseley	SA	15 (1959)	651
C ₂₄ H ₂₀ O ₂	1-Keto-5-methoxy-1,3,5-triphenyl-2,4-pentadiene	-	Sol	Band freq	Berson	JACS	74 (1952)	358
C ₂₄ H ₂₀ O ₆	2,5-Diacetoxy-3,6-di-p-tolyl-1,4-benzoquinone	5-15 μ	S	Spec, Struct	Edwards	JAPC	10 (1960)	246
C ₂₄ H ₂₀ O ₈	2,5-Diacetoxy-3,6-di-p-anisyl-1,4-benzoquinone	5-15 μ	S	Spec, Struct	Edwards	JAPC	10 (1960)	246
C ₂₄ H ₂₀ O ₁₀	1-(3',4',5'-Trimethoxyphenyl)-2,3-dicarboxy-4-acetoxy-6,7-methylene-dioxy-1,2-dihydro-naphthalene anhydride	-	Sol	Group freq	Walker	JACS	75 (1953)	3390
C ₂₄ H ₂₀ As	Tetraphenylarsine	625-900	Sol	Substitution effect	Margoshes	SA	7 (1955)	14
C ₂₄ H ₂₀ Si	Diphenyl-p-biphenyl-silane	2-16 μ	Sol	Group freq	Kniseley	SA	15 (1959)	651
C ₂₄ H ₂₀ Si	Tetraphenylsilane	-	-	Ident	Brook	JACS	76 (1954)	2338
		-	Sol	Group freq	Margoshes	AC	27 (1955)	351
		625-900	Sol	Substitution effect	Margoshes	SA	4 (1955)	14
		1106	Sol	Freq	Kross	JACS	77 (1955)	6858
		8-11 μ	S	Band freq	Noltes	CIL	- (1959)	298
		2-15 μ	Sol	Freq, Spec, Struct	Smith	SA	16 (1960)	87
C ₂₄ H ₂₁ ClN ₂ O ₄ S ₂	2-Chloro-6,7-dimethyl-1,4-naphthalene dibenzene-sulfonamide	-	S	Group freq	Adams	JACS	76 (1954)	2408

$C_{24}H_{24}$	Cyclotetracosane-1,3,9,11,17,19-hexayne	3-15 μ	S	Spec	Wolovsky	JACS	81 (1959)	4600
$C_{24}H_{24}$	Tri-p-Xylylene	-	-	Band freq	Baker	JCS	- (1951)	1114
$C_{24}H_{24}NB$	Ammonium tetraphenylborate	250-4000	S, Sol	Spec, Freq	Waddington	JCS	- (1958)	4340
$C_{24}H_{24}N_2O_2$	3,3-Bis(4'-dimethylaminophenyl) phthalide	330-2000	S	Freq	Jakobsen	APS	14 (1960)	61
$C_{24}H_{24}N_2O_4S_2$	5,8-Dihydro-6,7-dimethylnaphthalene-1,4-dibenzenesulfonamide	-	-	Group study	Adams	JACS	74 (1952)	2603
$C_{24}H_{24}N_4$	Mesotetramethylchlorin	400-4000	S	Spec, H bond	Mason	JCS	- (1958)	976
$C_{24}H_{24}O_2$	3,10-Dibenzylidene-1,2-cyclodecanedione	-	S	Group freq	Leonard	JACS	75 (1953)	2714
$C_{24}H_{24}O_2$	Methyl- β,β' -triphenylpivalate	-	-	Group freq	McElvain	JACS	75 (1953)	3987
$C_{24}H_{24}O_6$	Methyl-2,4-diphenacyl-1,3-cyclobutane-dicarboxylate	2-13 μ	S	Spec, Struct, Band freq	Reid	JACS	73 (1951)	1985
$C_{24}H_{25}BrO_{10}$	1-Bromo-2-naphthyl-tetraacetyl- β -D-glucopyranoside	5-13 μ	Sol	Spec, Band freq	Tsou	JACS	74 (1952)	3066
$C_{24}H_{25}BrO_{10}$	6-Bromo-3-naphthyl-tetraacetyl- β -D-glucopyranoside	5-13 μ	Sol	Spec, Band freq	Tsou	JACS	74 (1952)	3066
$C_{24}H_{25}NO_5$	2-(β -Phenyl- α,β -dihydroxyethyl)-4-phenylhydroxymethyl-5-anilino-1,3-dioxolane	-	-	Band freq	Smith	JOC	16 (1951)	972
$C_{24}H_{26}$	p-Di-(2-p-tolyethyl)benzene	-	-	Band freq	Baker	JCS	- (1951)	1114

$C_{24}H_{26}NO_5^F$	N-Dibenzylphosphoryl- d,l-phenylalanine methyl ester	3-15 μ	L,S	Spec, Group freq	Li	JACS 77 (1955)	3519
$C_{24}H_{26}N_2O_6$	Ethyl- β -(5-benzoyloxy- indolyl-3)- α -carbethoxy - α -formamidopropionate	2.84-10.63 μ	Sol	Group freq, Band freq, I	Eka	JACS 76 (1954)	5579
$C_{24}H_{26}O_2$	Mesityl-(2-methoxy-5- methylphenyl)-phenyl- carbinol	- -	-	Struct, Assign	Fuson	JOC 15 (1950)	1155
$C_{24}H_{26}O_4$	Suberoyldiacetophenone	1500-3500	S	Freq, Assign, Struct	Martin	JACS 80 (1958)	4891
$C_{24}H_{26}O_6$	1,3-Dihydro-8,9-dimethoxy -4-methyl-3-(2,3,5- trimethoxyphenyl)- naphtho[2,3,c]furan	-	-	Group study	Hochstein	JACS 75 (1953)	5455
$C_{24}H_{26}O_8$	1-Acetoxy-2-hydroxymethyl -3-carboxy-4-(3',4'- dimethoxyphenyl)-6,7- dimethoxytetralin lactone	-	Sol	Band freq	Walker	JACS 75 (1953)	3393
$C_{24}H_{26}O_8$	Epipicropodophyllin ethyl ether	-	Sol	Group freq	Schrecker	JACS 75 (1953)	5916
$C_{24}H_{26}O_8$	Epipodophyllotoxin ethyl ether	-	Sol	Group freq	Schrecker	JACS 75 (1953)	5916
$C_{24}H_{26}O_8$	2-Hydroxymethylene-3- carbethoxy-4-(3',4'- dimethoxyphenyl)-6,7- dimethoxy-1-tetralone	-	Sol	Band freq	Walker	JACS 75 (1953)	3393
$C_{24}H_{26}O_9$	α -(3,4-Methylenedioxy- benzyl)-2-(3,4,5- trimethoxybenzylidene) succinic acid α -ethyl ester	-	Sol	Group freq	Walker	JACS 76 (1954)	6205
$C_{24}H_{26}O_{10}$	2-Naphthyl tetraacetyl β -D-glucopyranoside	5-13 μ	Sol	Spec	Tsou	JACS 74 (1952)	3066

$C_{24}H_{27}N_2O_2$	400-4000	-	Freq	Gagnon	CJC	3/ (1959)	110
3,3'-Imino-bis(4-propylidene-1-phenyl-5-hydroxy)pyrazolone							
$C_{24}H_{28}N_8$	400-4000	S	Spec, H bond	Mason	JOS	- (1958)	976
Octamethyltetraazaporphin							
$C_{24}H_{28}OSi$	-	-	Inductive effect	Josien	CPR	249 (1959)	826
Triphenylsilylbutyl ethyl ether							
$C_{24}H_{28}OSi$	-	-	Inductive effect	Josien	CPR	249 (1959)	826
Triphenylsilylethyl butyl ether							
$C_{24}H_{28}OSi$	-	-	Inductive effect	Josien	CPR	249 (1959)	826
Triphenylsilylpentyl methyl ether							
$C_{24}H_{28}O_2$	-	-	Struct, Ident	Van Heyningen	JACS	74 (1952)	4861
Bis-(1,1'-diphenyl)cyclopentylacetyloin							
$C_{24}H_{28}O_2$	-	-	Group freq	Fuson	JACS	75 (1953)	5950
1,5-Dimesityl-2,4-pentadien-2-ol-1-one methyl ether							
$C_{24}H_{28}O_2$	-	-	Group freq, Struct	Fuson	JACS	75 (1953)	5950
1-Duryl-5-mesityl-2,4-pentadien-2-ol-1-one							
$C_{24}H_{28}O_2$	-	-	Group freq	Fuson	JACS	77 (1955)	3781
2-Hydroxy-4-t-butyl-3,4-dihydro-1-naphthyl mesityl ketone							
$C_{24}H_{28}O_4$	-	Sol	Band freq	Djerassi	JACS	76 (1954)	1722
3-Acetoxy-17-(α -Acetoxyvinyl)- $\Delta^{1,3,5(10),16}$ -estratetraene							
$C_{24}H_{28}O_5$	-	Sol	Band freq	Djerassi	JACS	76 (1954)	1722
3-Acetoxy-17(acetoxyacetyl)- $\Delta^{1,3,5(10),16}$ -estratetraene							
$C_{24}H_{28}O_7$	-	-	Group study	Hochstein	JACS	75 (1953)	5455
2-Hydroxymethyl-4-methyl-3-(α -hydroxy-2,3,5-trimethoxybenzyl)-1,8-dimethoxynaphthalene							
$C_{24}H_{28}O_8$	-	-	Ident	Schrecker	JACS	75 (1953)	5916
Ethyl isodesoxydopphyllate							

$C_{24}H_{28}O_8$	Flavaspidic acid	3.16-13.85 μ S	-	Struct Band freq, I	Birch Birch	JCS JCS	- (1951) - (1952)	3026 3102
$C_{24}H_{28}O_{10}S_2$	Diethyl di-p-tolyl- sulfonyloxydihydro- muconate	2-16 μ	S	Spec, Group freq	Tipson	JOC	18 (1953)	952
$C_{24}H_{28}Si$	Tri- β -phenylethylsilane	2-16 μ	Sol	Group freq	Kniseley	SA	15 (1959)	651
$C_{24}H_{29}NO_3$	Isomyl-p-(p-ethoxy- benzalamino)- α -methyl- cinnamate	2-12 μ	L	Spec	Taschek	JCP	6 (1938)	542
$C_{24}H_{29}N_3O$	1-Methyl-3,5-di-(p- dimethylaminobenzylidene) -4-piperidone	-	S	Group freq	Leonard	JACS	77 (1955)	1852
$C_{24}H_{29}N_3O$	1-Methyl-3,5-di-(p- dimethylaminobenzyl) -4-pyridone	-	S	Group freq	Leonard	JACS	77 (1955)	1852
$C_{24}H_{30}N_2O_4$	Diacetyljama line	-	S	Group freq	Anet	JCS	- (1954)	1242
$C_{24}H_{30}N_2O_5$	Acetylmethylcanesate	-	-	Group freq	Klohs	JACS	77 (1955)	4084
$C_{24}H_{30}N_3B_3$	B-triethyl-N-triphenyl- borazole	-	Sol	Struct	Watanabe	SA	16 (1960)	78
$C_{24}H_{30}N_4O_5$	3,5-Dimethyl-1,8-dioxo- 2,4-di-n-propyl-3a,4,5, 6,7,7a-hexahydro-4,7- methanoindene-8-2,4- dinitrophenylhydrazone	-	S	Group freq	Allen	JOC	20 (1955)	323
$C_{24}H_{30}O_2$	2,4-Diallyloestrone	2-12 μ	S	Group freq	Patton	CIL	- (1960)	1567
$C_{24}H_{30}O_3$	p-Acetoxyphenyl-2,4,6- triiisopropylphenyl ketone	-	-	Group freq	Fuson	JACS	75 (1953)	5410
$C_{24}H_{30}O_3Si_3$	2,4,6-Triethyltriphenyl cyclotrisiloxane	2-16 μ	Sol	Spec	Young	JACS	70 (1948)	3758
$C_{24}H_{30}O_4$	Dibenzyl sebacate	2-15 μ	L	Spec	Kendall	APS	7 (1953)	179

C ₂₄ H ₃₀ O ₅	Sol	Band freq, Ident	Djerassi	JACS	76 (1954)	1722
3-Acetoxy-17β(acetoxy-acetyl)-Δ ^{1,3,5(10)} -estratriene	-	-	-	-	-	-
C ₂₄ H ₃₀ O ₆	Sol	Band freq	Walker	JACS	75 (1953)	3393
1-(3',4'-Dimethoxyphenyl)-2-carbomethoxy-3-methyl-6,7-dimethoxytetralin	-	-	-	-	-	-
C ₂₄ H ₃₀ O ₆	-	Assign	Jones	JACS	70 (1948)	2024
1,3,5:10-Estratrien-3,16,17-triacetate	-	-	-	-	-	-
C ₂₄ H ₃₀ O ₆	Sol	Ident, Band	Jones	JACS	78 (1956)	1152
1,3,5(10)-Estratrien-3,16β,17β-triol triacetate	-	-	-	-	-	-
C ₂₄ H ₃₀ O ₆	Sol	Ident, Band	Jones	JACS	78 (1956)	1152
1,3,5(10)-Estratrien-3,16β,17β-triol triacetate	-	-	-	-	-	-
C ₂₄ H ₃₀ O ₆	Sol	Band freq	Scheer	JACS	77 (1955)	3300
Estriol triacetate	-	-	-	-	-	-
C ₂₄ H ₃₀ O ₈	-	Ident	Soloway	JACS	75 (1953)	5442
4-Oxa-17α,21-diacetoxy-Δ ⁵ -pregnene-3,11,20-trione	-	-	-	-	-	-
C ₂₄ H ₃₀ O ₁₀ S ₂	S	Spec	Tipson	JOC	18 (1953)	952
Diethyl di-p-tolyl-sulfonyloxytetrahydro-muconate	2-16 μ	-	-	-	-	-
C ₂₄ H ₃₀ O ₁₂ S ₂	S	Spec	Tipson	JOC	18 (1953)	952
Diethyl di-o-p-tolyl-sulfonylmuconate	2-16 μ	-	-	-	-	-
C ₂₄ H ₃₂ N ₂ O ₂	S	Spec	Stafford	AC	21 (1949)	1454
Bis-(n-benzyl) sebacamide	700-1700	-	-	-	-	-
C ₂₄ H ₃₂ N ₂ O ₄	-	Ident	Mac Phillamy	JACS	77 (1955)	4335
3-Isoreserpinol acetate	-	-	-	-	-	-
C ₂₄ H ₃₂ N ₂ O ₈	S	Spec, H bond	Mason	JCS	- (1958)	976
Tetrahydrooctamethyl-tetraazaporphin	400-4000	-	-	-	-	-
C ₂₄ H ₃₂ O ₄	Sol	Spec	Ananchenko	IANS	- (1960)	1641
2,2-Bis[2-(2-methyl-3-oxo-1-cyclohexenyl)ethyl]-3-cyclohexanedione	1550-1750	-	-	-	-	-

$C_{24}H_{32}O_4$	16 β -Carbomethoxy-16,17-cyclopropano-4-pregnene-3,20-dione	-	-	Group freq	Mueller	JACS	76 (1954)	3686
$C_{24}H_{32}O_4$	Methyl α -(3 β -acetoxy-5,7,9-estratrien-17-yl) propionate	-	Sol	Group freq Band freq	Mosettig Scheer	JOC JACS	17 (1952) 77 (1955)	764 3300
$C_{24}H_{32}O_4$	$\Delta^{1,3,5,10}$ -1-Methyl-3-methoxy-17-(2-acetoxyacetyl)estratriene	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{24}H_{32}O_5$	2 α ,4b-Dimethyl-1-carboxymethylene-2-methyl-7-ethylenedioxy-1,2,3,4,4 α ,4b,5,6,7,8,10,10 β -dodecahydrophenanthrene-4-one	-	S	Band freq	Arth	JACS	76 (1954)	1715
$C_{24}H_{32}O_5$	2 β ,4b-Dimethyl-1-carboxymethylene-2-methyl-7-ethylenedioxy-1,2,3,4,4 α ,4b,5,6,7,8,10,10 β -dodecahydrophenanthrene-4-one	-	S	Band freq	Arth	JACS	76 (1954)	1715
$C_{24}H_{32}O_5$	β -(4-Methyl-3-oxocyclohexylidene) β -tetra-oacetylglucopyranosyloxypropionic acid	729-3226	S	I	Briggs	JCS	- (1954)	4182
$C_{24}H_{33}BrO_2$	p-Hydroxy-p'-(ω -bromo-n-decyloxy)bibenzyl	-	-	Group freq	Fuson	JACS	75 (1953)	1325
$C_{24}H_{33}NO_3$	3 β -Acetoxy-20-cyancallopregn-17-en-11-one	-	S	Group freq	Bladon	JCS	- (1954)	125
$C_{24}H_{33}NO_6$	6 β -Nitro-3 β ,16 β -dihydroxy- Δ^5 -bisorcholenic-22 \rightarrow 16-lactone-3-acetate	-	Sol	Band freq	Anagnostopoulos	JACS	76 (1954)	532
$C_{24}H_{34}N_2$	p,p'-Diaminobibenzyl-N,N'-decamethylene	-	-	Group freq	Fuson	JACS	75 (1953)	1327

$C_{24}H_{34}N_2O_3$			Group freq	Mueller	JACS	76 (1954)	3686
$C_{24}H_{34}O_2$	β -Acetoxy-16,17-[3,1(Δ -pyrazolinol)]-5-pregnen-20-one	-	Spec, H bond	Coggeshall	JACS	72 (1950)	2836
$C_{24}H_{34}O_2$	1,1-Bis-(2-hydroxy-3-t-butyl-5-methylphenyl)ethane	2.75-3.05 μ	Group freq	Ambelang	JACS	75 (1953)	947
$C_{24}H_{34}O_3$	D1-(4-hydroxy-2-methyl-t-butylphenyl)methylmethane	2.5-3.4 μ	Group freq	Mueller	JACS	76 (1954)	3686
$C_{24}H_{34}O_3$	β -Acetoxy-16,17-cyclopropano-5-pregnen-20-one	-	Config.				
$C_{24}H_{34}O_3$	20-Hydroxy-3-keto- Δ^4 -cholonic acid lactone	1000-1900	Spec, Group freq	Jones	JACS	81 (1959)	5242
$C_{24}H_{34}O_3$	$\Delta^{5,16}$ -16-methylpregnadienol- β -one-20-acetate	-	Group freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{24}H_{34}O_4$	16 α β -Carbomethoxy-16,17-cyclopropano- β -hydroxy-5-pregnen-20-one	-	Group freq	Mueller	JACS	76 (1954)	3686
$C_{24}H_{34}O_4$	17 α -Methyldeoxycorticosterone acetate	-	Group freq	Englel	JACS	76 (1954)	4909
$C_{24}H_{34}O_5$	β -Acetoxy-5 α -hydroxy-bisnorallochole-7,9(11)-dienic acid	-	Group freq	Bladon	JCS	- (1953)	2921
$C_{24}H_{34}O_5$	2 β ,4 β -Dimethyl-1-carbethoxy-methyl-2-methyl-1,2,3,4,4 α ,4 β ,5,6,7,9,10,10 α β -dodecahydrophenanthrene-1 β -ol-4,7-dione	-	Band freq	Arth	JACS	76 (1954)	1715

$C_{24}H_{34}O_5$	2 α ,4b-Dimethyl-1-carboxy-methylene-2-methyl-7-ethylenedioxy-1,2,3,4,4 α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4 α -ol	-	S	Band freq	Arth	JACS	76 (1954)	1715
$C_{24}H_{34}O_5$	2 β ,4b-Dimethyl-1-carboxy-methylene-2-methyl-7-ethylenedioxy-1,2,3,4,4 α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4 β -ol	-	S	Band freq	Arth	JACS	76 (1954)	1715
$C_{24}H_{34}O_5$	2 β ,4b-Dimethyl-7-ethylene-dioxy-2-methyl-1 β -carboxymethyl-1,2,3,4,4 α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4-one	-	S	Band freq	Poos	JACS	77 (1955)	1026
$C_{24}H_{34}O_5$	3 β -Formyloxy-16 α -acetoxy- Δ^5 -pregnen-20-one	-	Sol	Group freq	Hirschmann	JACS	75 (1953)	4682
$C_{24}H_{34}O_5$	6-Keto-3 β ,16 β -dihydroxy-bisnorallocholanolic-22 \rightarrow 16-lactone-3-acetate	-	-	Group freq	Hirschmann	JOC	20 (1955)	572
$C_{24}H_{34}O_5$	3,11,12-Triketonorcholanolic acid methyl ester	1700	Sol	Freq, Struct	Jones	JACS	71 (1949)	241
$C_{24}H_{34}O_6$	2 α ,4b-Dimethyl-1 β -carboxymethyl-2-acetyloxy-7-ethylenedioxy-1,2,3,4,4 α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4-one	-	S	Freq	Arth	JACS	77 (1955)	3834
$C_{24}H_{34}O_6$	2 β ,4b-Dimethyl-1 β -carboxymethyl-2-acetyloxy-7-ethylenedioxy-1,2,3,4,4 α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4-one	-	S	Freq	Arth	JACS	77 (1955)	3834
$C_{24}H_{34}O_7$	3 α ,11 β ,17 α -Trihydroxy-pregnan-20-one triformate	-	-	Group study	Oliveto	JACS	77 (1955)	3564

Chemical Name	Wavenumber (cm ⁻¹)	Phase	Assignment	Author	Year	Page
C ₂₄ H ₃₆ 1-Tetradecylnaphthalene	691-3235	L	Table, I	Anderson	(1953)	443
C ₂₄ H ₃₆ 2-Tetradecylnaphthalene	720-3252	L	Table, I	Anderson	(1953)	443
C ₂₄ H ₃₆ N ₂ O ₄ Diacylhexahydro- ajmaline	-	S	Group freq	Anet	(1954)	1242
C ₂₄ H ₃₆ O ₃ Δ ^{9,11} -3-keto-cholenic acid	1580-3100	Sol	Group study, I	Jones	72 (1950)	86
C ₂₄ H ₃₆ O ₃ Δ ⁵ -Pregnenol-3-one-20- propionate	-	S,Sol	Group freq	Tarpley	9 (1955)	69
C ₂₄ H ₃₆ O ₃ Δ ⁵ -Androsten-3β-ol-17-one acetate trimethylene hemithioetal	-	Sol	Band freq	Djerassi	75 (1953)	3704
C ₂₄ H ₃₆ O ₄ 3β-Acetoxy-11-oxo-9β- bisorallocholanal	-	Sol	Group freq	Cameron	(1953)	3864
C ₂₄ H ₃₆ O ₄ Δ ⁵ -3β-Acetoxybisor- cholenic acid	-	S,Sol	Group freq	Tarpley	9 (1955)	69
C ₂₄ H ₃₆ O ₄ 3β,16β-Dihydroxybisor- cholanol-22-16-lactone -3-acetate	-	Sol	Band freq	Anagnostopoulos	76 (1954)	532
C ₂₄ H ₃₆ O ₄ 11,12-Diketonocholelanic acid methyl ester	1700	Sol	Struct, Freq	Jones	71 (1949)	241
C ₂₄ H ₃₆ O ₄ 2β,4b-Dimethyl-7-ethylene- dioxy-2-methyl-1β-(2- hydroxyethyl)-1,2,3,4,4aα, 4b,5,6,7,8,10,10aβ- dodecahydrophenanthrene -4-one	-	S	Group freq	Jones	72 (1950)	956
C ₂₄ H ₃₆ O ₄ 3,6-Dioxocholelanic acid	-	-	Band freq	Joos	77 (1955)	1026
C ₂₄ H ₃₆ O ₄ 3α,9α-Epoxy-11-ketonor- cholelanic acid methyl ester	1712	Sol	Spec	Morcillo	53B (1957)	145
C ₂₄ H ₃₆ O ₄	-	Sol	Freq, Struct, Anal	Jones	71 (1949)	241
C ₂₄ H ₃₆ O ₄	-	Sol	Group freq	Jones	74 (1952)	5648

$C_{24}H_{36}O_4$	Δ^5 -16 α -Methoxyprogrenol -3 β -one-20-acetate	-	Sol	Band freq, Struct Ident	JACS 74 (1952)	2820
$C_{24}H_{36}O_5$	3 β -Acetoxy-11-oxobisnor- allocholanolic acid	-	Sol	Group freq	JACS 74 (1952)	4340
$C_{24}H_{36}O_5$	3 β -Acetoxy-11-oxo-9 β - bisorallocholanolic acid	-	Sol	Group freq	JCS - (1953)	3864
$C_{24}H_{36}O_5$	2 α ,4b-Dimethyl-10 α -carboxy- methyl-2-methylallyl-7- ethylenedioxy-1,2,3,4, 4a α ,4b,5,6,7,8,10,10a β - dodecahydrophenanthrene -4 α -ol	-	S	Band freq	JACS 76 (1954)	1715
$C_{24}H_{36}O_5$	2 α ,4b-Dimethyl-1 β -carboxy- methyl-2-methylallyl-7- ethylenedioxy-1,2,3,4,4a α - 4b,5,6,7,8,10,10a β - dodecahydrophenanthrene -4 α -ol	-	S	Band freq	JACS 76 (1954)	1715
$C_{24}H_{36}O_5$	2 β ,4b-Dimethyl-10 α -carboxy- methyl-2-methylallyl-7- ethylenedioxy-1,2,3,4,4a α - 4b,5,6,7,8,10,10a β -dodeca- hydrophenanthrene-4 α -ol	-	S	Band freq	JACS 77 (1955)	3834
$C_{24}H_{36}O_5$	2 β ,4b-Dimethyl-10 α -carboxy- methyl-2-methylallyl-7- ethylenedioxy-1,2,3,4,4a α , 4b,5,6,7,8,10,10a β -dodeca- hydrophenanthrene-4 β -ol	-	S	Band freq	JACS 76 (1954)	1715
$C_{24}H_{36}O_5$	2 β ,4b-Dimethyl-1 β -carboxy- methyl-2-methylallyl-7- ethylenedioxy-1,2,3,4,4a α , 4b,5,6,7,8,10,10a β -dodeca- hydrophenanthrene-4 α -ol	-	S	Band freq	JACS 76 (1954)	1715
$C_{24}H_{36}O_5$	Ethyl-3 α -acetoxy-11- ketoetianate	-	-	Spec, Ident	JACS 74 (1952)	2816

C ₂₄ H ₃₇ NO ₃	N-Benzoyloxy- α -dodecyl-glutarimide	-	S	Group freq	Ames	JCS - (1955)	631
C ₂₄ H ₃₇ NO ₃	Veratrobazine	-	-	Struct	Stoll	JACS 74 (1952)	4728
C ₂₄ H ₃₈ O ₃	3 α -Hydroxy- Δ ¹¹ -cholonic acid	2.5-15 μ	S	Spec, Band freq	Hirschmann	JACS 74 (1952)	5357
C ₂₄ H ₃₈ O ₃	Δ ¹¹ -3 α -Hydroxynorcholeonic acid, methyl ester	-	Sol	Group freq	Jones	JACS 72 (1950)	956
C ₂₄ H ₃₈ O ₄	Di-(2-ethylhexyl) phthalate	2-14 μ	L	Spec	Kapff	JCP 16 (1948)	446
C ₂₄ H ₃₈ O ₄	3 α ,12 β -Dihydroxy- Δ ²² -cholonic acid	-	S,Sol	Group freq	Tarpley	AFS 9 (1955)	69
C ₂₄ H ₃₈ O ₄	2 β ,4b-Dimethyl-1 α -(2-hydroxyethyl)-2-methyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4 α -ol	-	-	Band freq	Johns	JACS 76 (1954)	5026
C ₂₄ H ₃₈ O ₄	2 β ,4b-Dimethyl-1 α -(2-hydroxyethyl)-2-methyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4 β -ol	-	-	Band freq	Johns	JACS 76 (1954)	5026
C ₂₄ H ₃₈ O ₄	2 β ,4b-Dimethyl-1 β -(2-hydroxyethyl)-2-methyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4 α -ol	-	-	Band freq	Johns	JACS 76 (1954)	5026
C ₂₄ H ₃₈ O ₄	2 β ,4b-Dimethyl-1 β -(2-ethyl)-2-methyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4 β -ol	-	-	Band freq	Johns	JACS 76 (1954)	5026

C ₂₄ H ₄₀ O ₄	-	-	Spec	Morcillo	ARS	55B (1951)	143
Hydoxychoholic acid	-	-	-	-	-	-	-
C ₂₄ H ₄₀ O ₅	-	-	Ident Spec	Hirschmann Morcillo	JACS ARS	75 (1953) 55B (1957)	2361 145
C ₂₄ H ₄₂	5400-8900	Sol	Assign, Spec	Rose	JRNB	19 (1937)	143
C ₂₄ H ₄₂	2-15.5 μ	L	Spec, Struct	Lenneman	JOC	19 (1954)	463
C ₂₄ H ₄₃ NO ₄	2-16 μ	Sol	Spec, Freq	Dupuy	JAOC	35 (1958)	99
C ₂₄ H ₄₃ NO ₅	2-16 μ 2.9-9.53 μ	Sol	Spec Freq	Mislow Shapiro	JACS JACS	74 (1952) 76 (1954)	5155 5894
C ₂₄ H ₄₄	-	-	Band freq	Bomtein	AC	25 (1953)	512
C ₂₄ H ₄₄ N ₁₀ O ₃ . 6HCl	600-4000	S	Spec, Struct	Goto	BCSJ	30 (1957)	729
C ₂₄ H ₄₄ O ₇	-	S	Group freq	Hanson	JCS	- (1954)	4238
C ₂₄ H ₄₄ S ₁	3-12 μ	Sol	Spec	Kanazashi	BCSJ	27 (1954)	441
C ₂₄ H ₄₅ NO ₄	2-16 μ	Sol	Spec, Freq	Dupuy	JAOC	35 (1958)	99
C ₂₄ H ₄₆ O ₄	2-16 μ	Sol	Spec	Stahl	JACS	74 (1952)	5487
C ₂₄ H ₄₆ O ₄	-	Sol	Group freq Spec, Band freq	Davison Minkoff	JCS PRS	- (1951) 224 (1954)	2456 176
C ₂₄ H ₄₇ NO ₂	-	Sol	Group freq	Leonard	JACS	76 (1954)	5708
C ₂₄ H ₄₈	5400-8900	Sol	Assign, Spec	Rose	JRNB	19 (1937)	143
C ₂₄ H ₄₈ O ₂	-	-	Spec	Sobotka	JACS	72 (1950)	5139

$C_{24}H_{48}O_2$	12-n-Hexyloctadecanoic acid	2-16 μ	Sol	Band freq, Spec, Struct	Freeman	JACS	74 (1952)	2523
$C_{24}H_{48}O_2$	18-n-Propylheptadecanoic acid	2-16 μ	Sol	Band freq, Spec, Struct	Freeman	JACS	74 (1952)	2523
$C_{24}H_{48}O_2$	n-Tetracosanoic acid	2-15 μ	S	Spec, Qual, Anal	Meiklejohn	AC	29 (1957)	329
$C_{24}H_{48}O_3$	Ethylene glycol mono-butyl ether stearate	2-15 μ	L	Spec	Kendall	APS	7 (1953)	179
$C_{24}H_{49}N$	2,4-Dimethyldocos-2-enylamine	-	-	Group freq	Bailey	JCS	- (1955)	1547
$C_{24}H_{49}N_2O_6P$	Sphingomyelin	-	S	Group freq, Struct	Marinetti	JACS	75 (1953)	313
$C_{24}H_{50}$	n-Tetracosane	3.10-13.86 μ 2.5-14.5 μ	S S	Group freq, Struct Spec, Group freq	Marinetti Marinetti Marinetti	JACS JACS	76 (1954) 76 (1954)	1345 1347
$C_{24}H_{50}O_2$	Lauraldehyde hemiacetal	3.2-14.7 μ 1470	Sol L,S	Group freq Group anal, Struct Freq	Bryant Francis Stein	JACS AC JCP	75 (1953) 25 (1953) 22 (1954)	6113 1466 1993
$C_{24}H_{51}N$	2,4-Dimethyldocosylamine	700-3000	Sol	Ext. Coefficient	Jones	SA	9 (1957)	235
$C_{24}H_{51}N_2O_6P$	Dihydrosphingomyelin	750-1200	S	Struct	Snyder	JCP	27 (1957)	969
$C_{24}H_{51}N_2O_8P$	Sphingomyelin hydroxylated	650-800	L,S	Freq	Martin	SA	12 (1958)	12
$C_{24}H_{51}O_3B$	Tri-2-octylborate	700-1500	S	Freq, Assign	Snyder	JMS	4 (1960)	411
$C_{24}H_{51}O_3P$	Tri-2-ethylhexyl-3-phosphite	-	Sol	Group freq	Erickson	JACS	76 (1954)	4472
$C_{24}H_{51}O_3P$	Tri-2-ethylhexyl-phosphate	-	-	Group freq	Bailey	JCS	- (1955)	1547
$C_{24}H_{51}O_3P$	Tri-2-ethylhexyl-phosphate	2.5-14.5 μ	S	Spec, Group freq, Struct	Marinetti	JACS	76 (1954)	1347
$C_{24}H_{51}O_3P$	Tri-2-ethylhexyl-phosphate	3.01-13.86 μ	S	Anal Table, Band freq	Marinetti Marinetti	JACS JACS	75 (1953) 76 (1954)	313 1345
$C_{24}H_{51}O_3P$	Tri-2-ethylhexyl-phosphate	670-1800	S	Spec, Freq	Werner	AJC	8 (1955)	355
$C_{24}H_{51}O_3P$	Tri-2-ethylhexyl-phosphate	700-1620	L	Spec, Group freq	Bellamy	JCS	- (1952)	475
$C_{24}H_{51}O_3P$	Tri-2-ethylhexyl-phosphate	700-1570	L	Spec, Group freq	Bellamy	JCS	- (1952)	475
$C_{24}H_{51}O_3P$	Tri-2-ethylhexyl-phosphate	-	-	Group freq	Bellamy	JCS	- (1952)	1701
$C_{24}H_{51}O_3P$	Tri-2-ethylhexyl-phosphate	2-15 μ	L	Spec	Kendall	APS	7 (1953)	179
$C_{24}H_{51}O_3P$	Tri-2-ethylhexyl-phosphate	-	-	Group freq	Bell	JACS	76 (1954)	5185

$C_{24}H_{52}Si$	Tri-n-Octylsilane	2-16 μ	Sol	Group freq	Kniseley	SA	15 (1959)	651
$C_{24}H_{54}N_2B_3$	Tris di-n-butylamino-boron	2-15 μ	L	Freq, Assign	Aubrey	JCS	- (1960)	5239
$C_{24}H_{54}O_9Si_3$	Hexa-tert-butoxycyclo-trisiloxane	-	-	Spec, Assign	Vorantov	ZOK	28 (1958)	2128
$C_{24}H_{57}N_3O_6Si_3$	Hexa-t-butoxy-cyclo-trisilazane	2.93-14.52 μ	Sol	Band freq, I	George	JACS	75 (1953)	6308
<u>C_{25} COMPOUNDS</u>								
$C_{25}H_{10}F_3O_4$	1,5-Pentanediol bisnona-decafluoro caprate	-	L	Group freq	Rappaport	JACS	75 (1953)	2695
$C_{25}H_{14}O_2$	Fluorene-9'-spiro-2-perinaphthane-1,3-dione	-	S	Struct	Greenhow	JCS	- (1953)	3099
$C_{25}H_{16}$	Diphenylfluorene	650-2000	S	Spec	Cannon	SA	4 (1951)	373
$C_{25}H_{16}N_2O_4$	1,4-Diphenyl-3-(2-benzylidene-4,5-diketo-3-oxazolidyl)-2-azetidinone	2-8 μ	Sol	Band freq	Sheehan	JACS	73 (1951)	4756
$C_{25}H_{16}O$	2-(1-Naphthyl)-3-phenylindone	-	-	Spec	Bergmann	BSCF	- (1959)	634
$C_{25}H_{19}ClN_2O_2$	4-Chloro-o-quinonedibenzimidazole cyclopentadiene adduct	-	-	Struct	Adams	JACS	76 (1954)	2763
$C_{25}H_{19}ClN_2O_5S_2$	N',N'-Dibenzenesulfonyl-N-benzoyl-2-chloro-p-phenylenediamine	-	S	Group freq	Adams	JACS	76 (1954)	3584

$C_{25}H_{19}ClN_4O_3S_2$	N-(2,3,5,6-Tetrachloro-4-benzenesulfonamido-phenyl)-N-(2-methyl-4-aminophenyl)benzene sulfonamide	-	-	Group freq	Adams	JACS	74 (1952)	5869
$C_{25}H_{19}ClN_4O_3S_2$	N-(2,3,5,6-Tetrachloro-4-benzenesulfonamido-phenyl)-N-(3-methyl-4-aminophenyl)benzene sulfonamide	-	-	Group freq	Adams	JACS	74 (1952)	5869
$C_{25}H_{19}NO_2$	1-Piperidinoperylene-3,10-quinone	768-1637	S	Table	Brown	JCS	- (1954)	1280
$C_{25}H_{19}N_5O_8$	Benzyl-4-phenyl-2,5-diketeto-3-2,4-dinitrophenylhydrazone-1-pyrrolidine acetate	2-8 μ	S	Spec, Band freq	Sheehan	JACS	74 (1952)	360
$C_{25}H_{20}$	Tetraphenylmethane	3.2-3.6 μ 1300-1900 660-2040	Sol - S	Band freq Struct, Spec, Anal Spec	Wall Adams Cannon	JACS JACS SA	61 (1939) 71 (1949) 4 (1951)	1053 387 373
$C_{25}H_{20}N_2O_2$	1-Methyl-3-(1-phenyl-2-phthalimidoethyl)indole	625-900 8-11 μ	S S	Group freq, I Substitution effect Bands discussed	Pinchas Margoshes Moltes	JCS SA CIL	- (1954) 7 (1955) - (1959)	863 14 298
$C_{25}H_{20}N_2O_2$	2-Methyl-3-(1-phenyl-2-phthalimidoethyl)indole	-	Sol, S	Group freq	Noland	JACS	81 (1959)	1203
$C_{25}H_{20}N_2O_2$	o-Quinonedibenzimide cyclopentadiene adduct	-	-	Freq	Adams	JACS	81 (1959)	1203
$C_{25}H_{20}OSi$	Benzyltriphenylsilane	-	Sol	Freq	Brook	JACS	82 (1960)	5102
$C_{25}H_{20}O_2$	5-Benzylidene-3,4-diphenyl-4-hydroxy-2-methyl- Δ^2 -cyclopentenone	1600-1800	Sol	Group freq	Fuson	JACS	76 (1954)	2526

$C_{25}H_{20}O_2$	1600-1800	Sol	Group freq	Joosen	JACS	74 (1952)	2297
2-Methyl-3-(β , β -diphenyl)ethyl-1,4-naphthoquinone							
$C_{25}H_{20}O_2$	3 μ	Sol	Group freq	Ingraham	JACS	74 (1952)	2297
4-Tritylcatechol							
$C_{25}H_{20}O_3$	2-15 μ	S	Group freq, Spec	Allen	JOC	20 (1955)	306
5,8-Dimethyl-6,7-diphenyl-5,8-methano-1,4,9-trioxo-4a,5,8,8a-tetrahydronaphthalene							
$C_{25}H_{20}O_{12}$	1550-4000	S	Group freq	Hergert	JACS	75 (1953)	1622
3,3',4',5,7-Penta-acetoxy flavone							
$C_{25}H_{20}O_{12}$	1550-4000	S	Group freq	Hergert	JACS	75 (1953)	1622
3,3',4',5,8-Penta-acetoxy flavone							
$C_{25}H_{22}N_2O_5S_2$	-	-	Group study	Adams	JACS	74 (1952)	5557
1,4-Naphthalene dibenzene sulfonamido-2-acetyl-methane							
$C_{25}H_{22}N_2O_5S_3$	-	-	Ident	Adams	JACS	75 (1953)	3235
2-Methoxy-5-phenylmercapto-p-phenylenedibenzene-sulfonamide							
$C_{25}H_{22}N_2O_6S_3$	-	-	Ident	Adams	JACS	75 (1953)	3235
2-Methyl-y-benzene-sulfonyl-p-phenylene-dibenzene-sulfonamide							
$C_{25}H_{22}N_2O_7S_3$	-	-	Ident	Adams	JACS	75 (1953)	3235
2-Methoxy-5-benzene-sulfonyl-p-phenylene-dibenzene-sulfonamide							
$C_{25}H_{22}N_4O_2$	0-0.8 μ	S	Ident	Svatos	JOC	21 (1956)	1171
Zolon							
$C_{25}H_{22}OS_1$	-	-	Inductive effect	Josien	CPR	249 (1959)	826
Triphenylsilylmethyl phenyl ether							
$C_{25}H_{22}O_2$	-	-	Group freq, Struct	Fuson	JACS	77 (1955)	174
1,3-Dibenzoyl-2-phenyl-cyclopentane							
$C_{25}H_{22}O_2Si$	2-16 μ	Sol	Group freq	Kniseley	SA	15 (1959)	651
Phenyl-p-phenoxyphenyl-p-anisyl silane							

$C_{25}H_{22}O_3$	$\Delta^{1,3,5(10),6,8}$ Estrapentaenol-3-one- 17-benzoate	-	Sol	Group freq	Jones	JACS	74 (1952)	5648
$C_{25}H_{22}O_{12}$	d-Dihydroquercetin pentaacetate	700-4000	S	Spec, Config. Assign	Hergert	JOC	18 (1953)	521
$C_{25}H_{22}O_{12}$	$3,3',4',5,7$ -Penta- acetoxy flavone	1550-4000	S	Group freq	Hergert	JACS	75 (1953)	1622
$C_{25}H_{22}Si$	p-Tolyltriphenylsilane	-	Sol	Group freq	Margoshes	AC	27 (1955)	357
$C_{25}H_{23}NO_6$	Dibenzyl carbobenzyloxy- aminomalonate	-	Sol	Group freq	Kissman	JACS	75 (1953)	1967
$C_{25}H_{23}NO_5S_2$	2-(p-Monomethylamino- phenyl)-benzene-1,4- dibenzenesulfonamide	-	-	Group freq, Struct	Adams	JACS	75 (1953)	4642
$C_{25}H_{24}O_2$	1-Acetyl-5-mesityl- acenaphthene	-	-	Ident, Group freq	Fuson	JACS	76 (1954)	810
$C_{25}H_{24}O_3$	$\Delta^{1,3,5:10,7}$ -Estrateraenol -3-one-17-benzoate	-	Sol	Group freq	Jones	JACS	74 (1952)	5648
$C_{25}H_{24}O_{11}$	l-Epicatechol penta- acetate	700-4000	S	Spec, Struct, Assign	Hergert	JOC	18 (1953)	521
$C_{25}H_{24}O_{11}$	d-3',4',5,7-Penta- hydroxyflavan penta- acetate trans	700-4000	S	Spec, Struct, Assign	Hergert	JOC	18 (1953)	521
$C_{25}H_{25}NO_6$	l-Epanorin	650-3800	S, Sol	Spec	Frank	JACS	72 (1950)	4454
$C_{25}H_{25}NO_8$	Pentamethylterrinoilide	-	Sol	Group freq	Hochstein	JACS	75 (1953)	5455
$C_{25}H_{26}NB$	Methylammoniumtetra- phenylborate	-	S	H bond, Band freq	Nuttall	JCS	- (1960)	4965

Formula	Compound Name	S	Group freq	Adams	JACS	Year
C ₂₅ H ₂₆ N ₂ O ₂ S ₂	2,6,7-Trimethyl-5,8-dihydro-1,4-naphthalene-dibenzene sulfonamide	-	Group freq	Adams	JACS	70 (1948)
C ₂₅ H ₂₆ N ₂ O ₂ S	N,N'-Dicarboxymethyl-N,N'-dibenzene sulfonyl diaminomesitylene	S	Melting Point	Adams	JACS	70 (1948)
C ₂₅ H ₂₆ O ₂	3,11-Dibenzylidene-1,2-cyclohexadecanedione	S	Group freq	Leonard	JACS	75 (1953)
C ₂₅ H ₂₆ O ₃	Δ ^{1,3,5;10} -Estratrienol-3-one-17-benzoate	Sol	Group freq	Jones	JACS	74 (1952)
C ₂₅ H ₂₆ O ₆	3,7-Di(m,p-dimethoxybenzylidene)-1,2-cycloheptanedione	S	Group freq	Leonard	JACS	75 (1953)
C ₂₅ H ₂₆ O ₁₀	2-Carbomethoxy-3-carbethoxy-4-(3',4',5'-trimethoxyphenyl)-6,7-methylenedioxy-1-tetralone	Sol	Group freq	Walker	JACS	75 (1953)
C ₂₅ H ₂₈ N ₂ O ₂ S ₂	N-Ethyl-N'-Carboxymethyl-N,N'-dibenzene sulfonyl-diaminomesitylene	S	Melting Point	Adams	JACS	70 (1948)
C ₂₅ H ₂₈ O	1-Keto-2-benzylidenenor-dehydroabietaene	-	Group freq	Zeiss	JACS	75 (1953)
C ₂₅ H ₂₈ O ₃	1,5-Dimesityl-1,3-pentadien-1-ol-5-one acetate	S	Band freq, Group freq	Fuson	JACS	75 (1953)
C ₂₅ H ₂₈ O ₃	1,5-Dimesityl-2,4-pentadien-2-ol-1-one acetate	S	Group freq	Fuson	JACS	75 (1953)
C ₂₅ H ₂₈ O ₄	Azeloyldiacetophenone	S	Freq, Assign, Struct	Martin	JACS	80 (1958)
C ₂₅ H ₃₀ N ₂ O ₄ S ₂	N,N'-Diethyl-N,N'-dibenzene sulfonyl-diaminomesitylene	S	Melting Point	Adams	JACS	70 (1948)

$C_{25}H_{30}N_2O_5$	O, N-Diacetylyohimbine	-	-	Group freq, Band freq	Huebner	JACS	77 (1955)	469
$C_{25}H_{30}OS_1$	Triphenylsilylhexyl methyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{25}H_{30}OS_1$	Triphenylsilylpentyl ethyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{25}H_{30}OS_1$	Triphenylsilylpropyl butyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{25}H_{30}O_2$	1,5-Diduryl-1,3-pentadien-1-ol-5-one	-	S	Band freq, Group freq	Fuson	JACS	75 (1953)	5402
$C_{25}H_{30}O_2$	1,5-Diduryl-2-pentene-1,5-dione	-	S	Band freq, Group freq	Fuson	JACS	75 (1953)	5402
$C_{25}H_{30}O_5$	β^1 -(X-Acetoxy-3-methoxy-estra-1,3,5(10),14-tetraenyl-17)butanolide	-	Sol	Group freq	Sneeden	JACS	77 (1955)	130
$C_{25}H_{30}O_6$	$\Delta^{5,7}$ -Androstadien-3 β -ol-17-one acetate, maleic anhydride adduct	670-3700	S	Spec, Ident, Struct	Antonacci	JOC	16 (1951)	1356
$C_{25}H_{32}N_2O_5$	Quinine α , β -dihydroxy-isovalerate	2-15 μ	S	Ident, Spec	Sjolander	JACS	76 (1954)	1085
$C_{25}H_{32}N_2O_6$	Methyl reserpate acetate	-	S	Ident	MacPhillamy	JACS	77 (1955)	4335
$C_{25}H_{32}N_2O_6$	Methyl-3-isoreserpate acetate	-	S	Group freq	MacPhillamy	JACS	77 (1955)	4335
$C_{25}H_{32}O_4$	3 β -Acetoxy- $\Delta^{14(15),16(17)}$, 20(22)-cardatrienolide	1000-1900	Sol	Spec, Freq	Jones	JACS	81 (1959)	5242
$C_{25}H_{32}O_4$	3 β ,20-Diacetoxy-5,7,9(11)20-pregnate traene	-	-	Band freq	Moffett	JACS	74 (1952)	2183

C ₂₅ H ₃₂ O ₆	-	S	Freq	Arth	JACS	77 (1955)	3834
dl-3-Ethylendioxy-20-acetoxy-5,17-pregnadiene 11,16-dione	-	Sol	Spec Band freq	Simpson Ham	HCA JACS	37 (1954) 77 (1955)	1163 1637
Aldosterone-18,21-diacetate	2-12 μ	Sol	Band freq	Birch	JCS	- (1952)	3102
Albaspidin	2.97-13.57 μ	S	Group freq, Band freq	Florey	JOC	19 (1954)	1174
Methyl-3-oxo-(11?), 19-diacetoxy-14-hydroxy- $\Delta^{1,4}$ -etadienate	-	Sol	Band freq	Rosenkrantz	JACS	77 (1955)	145
Δ^4 -Pregnene-2 α ,17 α ,21-triol-3,11,20-trione 2,21-diacetate	-	S	Band freq	Sondheimer	JACS	76 (1954)	5020
Δ^4 -Pregnene-3,11,20-trione-6 β ,17 α ,21-triol-6,21-diacetate	-	S	Band freq	Edwards	CJC	32 (1954)	708
Lycotamone monoacetate	600-3600	S	Spec	Evans	AC	23 (1951)	1604
1,5-Diphenyl-3-(3-cyclopentylpropyl)pentane	1.1-1.25 μ	L	Anal	Mueller	JACS	76 (1954)	3686
3 β -Acetoxy-16,17-[3,1-(3-carboxy-2-pyrazolino)]-5-pregnen-20-one	-	-	Group freq	Lasslo	JACS	75 (1953)	5980
β -[Epoxy- γ -[β -(3,4-dimethoxyphenyl)-ethyl-amino]-N-[β -(3,4-dimethoxyphenyl)-ethyl]-isovaleramide hydrochloride	2-16 μ	-	Spec	Fuson Fuson	JACS JACS	76 (1954) 77 (1955)	5119 3781
2,4-Di-t-butylphenyl duryl ketone	-	-	Group freq Ident	Cardwell	JCS	- (1954)	2012
12 β -Acetoxy-3 β -hydroxycard-14,20(22)dienolide	-	-	Struct				

$C_{25}H_{34}O_4$	3,20-Diacetoxy-3,5,20-pregnatriene	-	-	Band freq	Moffett	JACS	74 (1952)	2183
$C_{25}H_{34}O_4$	3 β ,20-Diacetoxy-5,16,20-pregnatriene	-	-	Band freq Band freq	Moffett Djerassi	JACS JACS	74 (1952) 76 (1954)	2183 1722
$C_{25}H_{34}O_4$	$\Delta^{3,5,17(20)}$ -Pregnatriene-3,20-diol diacetate	-	Sol	Freq	Djerassi	JACS	77 (1955)	3826
$C_{25}H_{34}O_5$	3 β -Acetoxy-12 β ,14-dihydroxycard-8(14),20(22)dienolide	-	-	Struct	Cardwell	JCS	- (1954)	2012
$C_{25}H_{34}O_5$	3 β -Acetoxy-14-hydroxy- $\Delta^{16(17),20(22)}$ -cardadienolide	1000-1900	Sol	Spec, Freq	Jones	JACS	81 (1959)	5242
$C_{25}H_{34}O_5$	$\Delta^{8,11}$ -Allopregnadiene-3 β ,20 β -diol-7-one-diacetate	-	S	Group freq	Romo	JACS	74 (1952)	2918
$C_{25}H_{34}O_5$	$\Delta^{8:14,15}$ -Allopregnadiene-3 β ,20 β -diol-7-one diacetate	-	Sol	Band freq	Hemin	JACS	75 (1953)	1745
$C_{25}H_{34}O_5$	2 β ,4b-Dimethyl-1-carbo-methoxymethylene-2-methyl-7-ethylenedioxy-1,2,3,4,4aC,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4-one	-	S	Band freq	Arth	JACS	76 (1954)	1715
$C_{25}H_{34}O_5$	$\Delta^{5,16}$ -Pregnadienediol-2,3 β -one-20-diacetate	-	Sol Sol	Group freq Spec, Struct, Group freq	Jones Jones	JACS JACS	72 (1950) 74 (1952)	956 2820
$C_{25}H_{34}O_5$	$\Delta^{5,16}$ -Pregnadiene-3 β ,21-diol-20-one diacetate	-	Sol	Band freq	Djerassi	JACS	76 (1954)	1722
$C_{25}H_{34}O_5$	$\Delta^{5,16}$ -Pregnadiene-21-ol-3,20-diol-21-acetate-3-ethylene ketal	-	S	Band freq	Allen	JACS	77 (1955)	1028

C ₂₅ H ₃₄ O ₆	Acetyl derivative of Cannogenin	600-4000	Sol	Spec	Watson	AJC	10 (1957)	79
C ₂₅ H ₃₄ O ₆	Acetylgomphogenin	600-4000	Sol	Spec	Watson	AJC	10 (1957)	79
C ₂₅ H ₃₄ O ₆	Δ^{16} -Allopregnene- $3\beta, 12\beta$ -diol-11,20-dione diacetate	-	Sol	Group freq Group freq	Martinez Mueller	JACS JACS	75 (1953) 75 (1953)	239 4888
C ₂₅ H ₃₄ O ₆	$\Delta^{8(9)}$ -Allopregnene-7,20-dione- $3\beta, 11\alpha$ -diol diacetate	-	Sol	Group freq Spec Band freq	Djerassi Djerassi Djerassi	JACS JACS JACS	73 (1951) 74 (1952) 75 (1953)	4496 3321 3505
C ₂₅ H ₃₄ - 36^0_6	Decarboxyhydrolimonin	2-16 μ	S	Spec, Band freq, Struct	Rosenfeld	JACS	73 (1951)	2491
C ₂₅ H ₃₄ O ₆	$2\alpha, 3\beta$ -Diacetoxy- Δ^{16} -allopregnene-12,20-dione	-	-	Group freq	Mueller	JACS	75 (1953)	4888
C ₂₅ H ₃₄ O ₆	$3\beta, 20$ -Diacetoxy-(5,6) α -(16,17) α -dioxido-20-pregnene	-	-	Group freq, Struct	Moffett	JACS	76 (1954)	3678
C ₂₅ H ₃₄ O ₆	$3\beta, 5\alpha$ -Diacetoxy-9 $\alpha, 11\alpha$ -epoxyallopregn-7-en-20-one	-	S	Group freq	Bladon	JCS	- (1953)	2916
C ₂₅ H ₃₄ O ₆	$6\beta, 21$ -Diacetoxy-4-pregnene- $3, 20$ -dione	-	-	Ident	Eppstein	JACS	75 (1953)	408
C ₂₅ H ₃₄ O ₆	$2\alpha, 21$ -Dihydroxyprogesterone diacetate	-	-	Ident	Clarke	JACS	77 (1955)	661
C ₂₅ H ₃₄ O ₆	$16\alpha, 21$ -Dihydroxyprogesterone diacetate	-	Sol	Group freq	Hirschmann	JACS	75 (1953)	4862
C ₂₅ H ₃₄ O ₆	Δ^5 - 3 -Ethylenedioxypregnene- 21 -ol- $11, 20$ -dione acetate	-	-	Band freq Band freq	Constantin Poos	JACS JACS	75 (1953) 76 (1954)	1716 5031
C ₂₅ H ₃₄ O ₆	6β -Hydroxydeoxycorticosterone- $6, 21$ -diacetate	-	Sol	Group freq Ident	Amendolla Romo	JCS JOC	- (1954) 19 (1954)	1226 1509

$C_{25}H_{34}O_6$	2 -Hydroxydesoxy- corticosterone diacetate	-	-	Ident	Sondheimer	JACS	75 (1953)	4712
$C_{25}H_{34}O_6$	19-Hydroxy-11-desoxy- corticosterone diacetate	-	Sol	Group freq	Barber	JOC	19 (1954)	1758
$C_{25}H_{34}O_6$	16 α ,17 α -Oxido- Δ^5 -pregnene -3 β ,21-diol-20-one diacetate	-	Sol	Band freq	Djerassi	JACS	76 (1954)	1722
$C_{25}H_{34}O_6$	$\Delta^{5,16}$ -Pregnadien-21-ol -3,11,20-trione-3,20- bisethylene ketal	-	S	Band freq, Group freq	Allen	JACS	77 (1955)	1028
$C_{25}H_{34}O_6$	Δ^4 -Pregnene-11 α ,21-diol -3,20-dione diacetate	-	Sol	Freq	Sondheimer	JACS	75 (1953)	2601
$C_{25}H_{34}O_7$	3-Ethylenedioxcortisone acetate	-	-	Spec, Ident	Poos	JACS	76 (1954)	5031
$C_{25}H_{34}O_7$	Δ^4 -Pregnene-3,20-dione -6 β ,17 α ,21-triol 6,21- diacetate	-	-	Ident Band freq	Meister Sondheimer	JACS JACS	76 (1954) 76 (1954)	4050 5020
$C_{25}H_{34}O_7$	Δ^4 -Pregnene-2 α ,17 α ,21- triol-3,20-dione-2,21- diacetate	-	Sol	Band freq	Rosenkrantz	JACS	77 (1955)	145
$C_{25}H_{34}O_7$	Δ^4 -Pregnene-11 α ,17 α ,21- triol-3,20-dione-11,21 diacetate	-	-	Ident Band freq	Peterson Romo	JACS JACS	75 (1953) 75 (1953)	412 1277
$C_{25}H_{34}O_8$	3-Ethylenedioxy-5 ξ ,6 ξ - Oxidopregnane-11,20- dione-17 α ,21-diol-21- acetate	-	-	Ident	Sondheimer Meister	JACS JACS	75 (1953) 76 (1954)	1282 4050
$C_{25}H_{34}O_8$	Pregnanetriol-4,17 α ,21- trione-3,11,20-diacetate -4,21	-	Sol	Band freq, Spec,	Jones	JACS	74 (1952)	2820

C ₂₅ H ₃₄ O	S	Band freq	Sondheimer	JACS	76 (1954)	5020
Allopregnane-3,11,20-trione-5 α ,6 β ,17 α ,21-tetrol-6,21-diacetate	-					
Methyl-1-oxo-(11?),19-diacetoxy-5,14-dihydroxy- Δ^2 -14 β -etienate	-	Struct	Florey	JOC	19 (1954)	1174
Methyl-3-oxo-(11?),19-diacetoxy-5,14-dihydroxy- Δ^1 -14 β -etienate	-	Struct	Florey	JOC	19 (1954)	1174
Methyl β -(4-methyl-3-oxocyclohexylidene)-tetra-o-acetylglucopyranosylpropionate	S	I, Table	Briggs	JCS	- (1954)	4182
Keto-D-erythro-L-mannononulose octaacetate	-	Ident	Wolfrom	JACS	77 (1955)	3096
12 α -Bromopregnanediol-3 α ,21-dione-11,20-diacetate	Sol	Group freq	Jones	JACS	74 (1952)	2828
21-Iodo- Δ^{16} -allopregnene-3 β ,6 β -diol-20-one diacetate	Sol	Band freq	Romo	JACS	76 (1954)	5169
Lycocotam monoacetate	S	Spec	Edwards	CJC	32 (1954)	708
Lycocotamol monoacetate	S	Spec	Edwards	CJC	32 (1954)	708
1,1-Dibenzylundecane	L,S	Spec, Effect of change of state	Richards	PHS	195 (1948)	1
Hexaacetylmacrozamin	S	Spec, Struct, Group freq	Langley	JCS	- (1951)	2309
2,4-Di-t-butyl-2,3-dihydrophenyl duryl ketone	S	Group freq	Langley	JCS	- (1952)	4191
	-	Group freq	Fuson	JACS	76 (1954)	5119
	-	Group freq	Fuson	JACS	76 (1954)	5466

$C_{25}H_{36}O_2$	2,2-Bis-(2-hydroxy-3-t-butyl-5-methylphenyl)propane	-	S, Sol	H bond	Coggeshall	JACS	72 (1950)	2836
$C_{25}H_{36}O_2$	Di-(4-hydroxy-2-methyl-5-t-butylphenyl)ethylmethane	2.5-3.4 μ	S, Sol	Group freq	Ambelang	JACS	75 (1953)	947
$C_{25}H_{36}O_3$	$\Delta^{8,11}$ -3-Ketocholadienic acid methyl ester	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{25}H_{36}O_4$	$\Delta^{7,17(20)}$ -Allopregnadiene-3 β ,20-diol diacetate	-	S	Band freq	Pataki	JACS	74 (1952)	3436
$C_{25}H_{36}O_4$	$\Delta^{3,5}$ -Androstadienediol-3,17 α -dipropionate	1580-3100	- Sol	Assign I	Jones Jones	JACS JACS	70 (1948) 72 (1950)	2024 86
$C_{25}H_{36}O_4$	3 β ,20-Diacetoxy-16,20- <u>allo</u> pregnadiene	-	-	Band freq	Moffett	JACS	74 (1952)	2183
$C_{25}H_{36}O_4$	3 β ,20-Diacetoxy-5,20-pregnadiene	-	- Sol	Band freq Group freq	Moffett Vanderhaeghe	JACS JACS	74 (1952) 74 (1952)	2183 2810
$C_{25}H_{36}O_4$	3 β ,21-Diacetoxy- $\Delta^{5,17(20)}$ pregnadiene	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
$C_{25}H_{36}O_4$	$\Delta^{5,17(20)}$ -Pregnadiene-diol-3 β ,20-diacetate	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{25}H_{36}O_4$	$\Delta^{5(6),17(20)}$ -Pregnadiene-3 β ,20-diol diacetate A	-	Sol	Group freq, Struct	Vanderhaeghe	JACS	74 (1952)	2810
$C_{25}H_{36}O_4$	$\Delta^{5(6),17(20)}$ -Pregnadiene-3 β ,20-diol diacetate B	-	Sol	Group freq, Struct	Vanderhaeghe	JACS	74 (1952)	2810
$C_{25}H_{36}O_4$	$\Delta^{5,16}$ -Pregnadiene-3,20-diol diacetate	-	S	Band freq, Ident	Bernstein	JACS	76 (1954)	5674

$C_{25}H_{36}O_5$	$\Delta^{5,16}$ -Pregnadien-21-ol- $3,20$ -dione- $3,20$ -bisethylene ketal	-	S	Band freq, Group freq	Allen	JACS	77 (1955)	1028
$C_{25}H_{36}O_5$	Δ^5 -Pregnene- $3\beta,16\alpha$ -diol-20-one diacetate	-	S	Band freq	Bernstein	JACS	76 (1954)	5674
$C_{25}H_{36}O_5$	Δ^5 -Pregnenediol- $3\beta,17\beta$ -one-20 diacetate	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{25}H_{36}O_5$	Δ^5 -Pregnene- $3\beta,20\beta$ -diol-7-one diacetate	-	-	Ident	Romo	JOC	17 (1952)	1413
$C_{25}H_{36}O_5$	Δ^5 -Pregnene- $3\beta,21$ -diol-20-one diacetate	-	-	Ident	Djerassi	JACS	75 (1953)	3493
		700-1400	Sol	Ident	Djerassi	JACS	76 (1954)	1722
			Sol	Band, Ident	Jones	JACS	78 (1956)	1152
$C_{25}H_{36}O_5$	Δ^{16} -Pregnenediol- $3\beta,12\beta$ -one-20 diacetate	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{25}H_{36}O_5$	Δ^5 -Pregnene- $3,20$ -dione- $16\alpha,17\alpha$ -oxide bisethylene ketal	-	S	Band freq	Bernstein	JACS	76 (1954)	5674
$C_{25}H_{36}O_6$	Allopregnan- $3\beta,11\alpha$ -diol-7,20-dione diacetate	-	Sol	Band freq	Djerassi	JACS	73 (1951)	4496
			Sol	Group freq	Djerassi	JACS	74 (1952)	3321
			Sol	Band freq	Djerassi	JACS	75 (1953)	3505
$C_{25}H_{36}O_6$	Allopregnane- $3\beta,12\beta$ -diol-11,20-dione diacetate	-	Sol	Group freq	Martinez	JACS	75 (1953)	239
$C_{25}H_{36}O_6$	Allopregnane- $3\beta,20\beta$ -diol-7,11-dione diacetate	-	Sol	Freq	Romo	JACS	74 (1952)	2918
$C_{25}H_{36}O_6$	Allopregnane- $3\beta,21$ -diol-11,20-dione- $3,21$ -diacetate	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{25}H_{36}O_6$	Allopregnane- $11\alpha,21$ -diol- $3,20$ -dione diacetate	-	Sol	Freq	Sondheimer	JACS	75 (1953)	2601

$C_{25}H_{36}O_6$	Δ^4 -Androstene-11 α ,17 β -dione-11-acetate-3,17-diethylene ketal	-	-	Group freq	JACS	72 (1950)	956
$C_{25}H_{36}O_6$	Δ^4 -Androstene-11 α ,17 β -dione-11-acetate-3,17-diethylene ketal	-	Sol	Group freq	Jones	72 (1950)	956
$C_{25}H_{36}O_6$	Δ^5 -Androstene-11 α ,16 β -17-triacetate	-	-	Assign	Jones	70 (1948)	2024
$C_{25}H_{36}O_6$	11-Dehydrocorticosterone bisethylene ketal	-	S	Band freq	Bernstein	77 (1955)	2331
$C_{25}H_{36}O_6$	3 β ,5 α -Diacetoxyallo-pregnane-11,20-dione	-	S	Band freq	Bladon	- (1954)	125
$C_{25}H_{36}O_6$	16 α ,21-Diacetoxy- Δ^5 -pregnen-3 β -ol-20-one	-	Sol	Group freq	Hirschmann	75 (1953)	4862
$C_{25}H_{36}O_6$	3-Ethoxy- Δ^2 -allopregnen-17 α ,21-diol-11,20-dione-21-acetate	-	-	Ident, Spec	Oliveto	74 (1952)	2248
$C_{25}H_{36}O_6$	dl- Δ^5 -3-Ethylenedioxy-pregnene-11 β ,21-diol-20-one-21-acetate	-	-	Band freq	Poos	76 (1954)	5031
$C_{25}H_{36}O_6$	11 α -Hydroxy-16 α ,17 α -oxido-progesterone-3,20-bis-ethylene ketal	-	-	Group freq	Peterson	77 (1955)	4428
$C_{25}H_{36}O_6$	Methyl-3 β -acetoxy-9 α ,11 α -epoxy-5 α -hydroxybisor-nallochol-7-enate	-	S	Group freq	Bladon	- (1953)	2921
$C_{25}H_{36}O_6$	Methyl-3 β -acetoxy-5 α -hydroxy-11-keto-9 β -bisor-nallochol-7-enate	-	Sol	Group freq	Bladon	- (1953)	2921
$C_{25}H_{36}O_6$	Methyl-3 β -acetoxy-5 β -hydroxy-7-oxo-bisor-nallochol-9(11)-enoate	-	Sol	Band freq	Elks	- (1954)	463

$C_{25}H_{36}O_6$	Methyl- $3\alpha,11$ -diacetoxy- $\Delta^9(11)$ -etiocholenate	-	Sol	Band freq	Hirschmann	JACS	75 (1953)	2361
$C_{25}H_{36}O_6$	$9\alpha,11\alpha$ -Oxidoallopregnane- $3\beta,20\beta$ -diol-7-one diacetate	-	S	Band freq	Stork Djerassi	JACS	73 (1951)	3546
$C_{25}H_{36}O_6$	$16\alpha,17\alpha$ -Oxidoallopregnane- $3\beta,11\alpha$ -diol-20-one diacetate	-	-	Band freq	Romo	JACS	75 (1953)	1277
$C_{25}H_{36}O_6$	$\Delta^{5,7}$ -Pregnadiene- $17\alpha,21$ -diol- $3,20$ -dione- $3,20$ -bisethylene ketal	-	S	Band freq	Antonucci	JACS	76 (1954)	2956
$C_{25}H_{36}O_6$	$5,9(11)$ -Pregnadiene- $17\alpha,21$ -diol- $3,20$ -dione- $3,20$ -bisethylene ketal	-	S	Group freq	Bernstein	JACS	75 (1953)	4830
$C_{25}H_{36}O_6$	$\Delta^{5,6}$ -Pregnadiene- $11\beta,21$ -diol- $3,20$ -dione- $3,20$ -bisethylene ketal	-	S	Band freq, Group freq	Allen	JACS	77 (1955)	1028
$C_{25}H_{36}O_6$	Pregnane- $11\alpha,21$ -diol- $3,20$ -dione diacetate	-	Sol	Freq	Sondheimer	JACS	75 (1953)	2601
$C_{25}H_{36}O_6$	Δ^4 -Pregnene triol- $17\alpha,20,21$ -one- 3 -diacetate- $20,21$	-	Sol	Group freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{25}H_{36}O_6$	$3\beta,16\alpha,17\beta$ -Triacetoxy- Δ^5 -androstene	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
$C_{25}H_{36}O_7$	3β -Acetoxy-14-hydroxy-cardanolide	1000-1900	Sol	Spec, Freq	Jones	JACS	81 (1959)	5242
$C_{25}H_{36}O_7$	3β -Acetoxy-14-hydroxy- 17α -cardanolide	1000-1900	Sol	Spec, Freq	Jones	JACS	81 (1959)	5242
$C_{25}H_{36}O_7$	Allopregnane triol- $3\beta,17\alpha,21$ -dione- $11,20$ -diacetate- $3,21$	770-3700	Sol	Band freq, Spec, Struct Group freq Freq, I	Jones Chamberlin Rosenkrantz	JACS	74 (1952) 77 (1955) 77 (1955)	2820 1221 2237

C ₂₅ H ₃₆ O ₇	1700	Sol	Spec, Group freq	Rothman	JACS	77 (1955)	2229
Allopregnane-3 β ,17 α , 21-triol-12,20-dione- 3,21-diacetate	-	-	Band freq	Romo	JACS	75 (1953)	1277
Allopregnane-11 α ,17 α , 21-triol-3,20-dione-11, 21-diacetate	-	S	Ident	Allen	JACS	76 (1954)	6116
Cortisone bisethylene ketal	-	-	Ident	Schneider	JACS	77 (1955)	4184
17 α ,21-Diacetoxy-3 α - hydroxypregnane-11, 20-dione	1700	Sol	Freq, Struct, Anal	Jones	JACS	71 (1949)	241
3 α ,7 α -Diacetoxy-12-keto- ethiocholanolic acid methyl ester	-	Sol	Group freq	Jones	JACS	72 (1950)	956
3-Keto-7 α ,12 α -diacetoxy- ethiocholanolic acid, methyl ester	770-3700	S	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
Pregnane-3 α ,17 α ,21- triol-11,20-dione-3, 21-diacetate	-	S	Band freq	Bernstein	JACS	77 (1955)	2233
Pregnane-5 α ,6 β ,21-triol- 3,20-dione-6 β ,21- diacetate	-	-	Ident	Oliveto	JACS	75 (1953)	3651
Pregnane-11 α ,17 α ,21- triol-3,20-dione-11,21- diacetate	-	S	Band freq	Sondheimer	JACS	76 (1954)	5020
12-Carboxy-12,13-seco- allopregnane-3 β ,13 α ,17 α , 21-tetrol-20-one-12,15, lactone-3,21-diacetate	1700	Sol	Band freq, Spec	Rothman	JACS	77 (1955)	2229

$C_{25}H_{36}O_8$	7-Keto- β -succinoxy-12-hydroxyetiocolanic acid methyl ester	Sol	-	Group freq	Jones	JACS 72 (1950)	956
$C_{25}H_{36}O_{10}$	Glauucarubin	-	-	Group study	Ham	JACS 76 (1954)	6066
$C_{25}H_{37}BrO_4$	Methyl- β ,11-diketo-12 α -bromochofanate	-	-	Freq	Heyman	JACS 73 (1951)	5252
$C_{25}H_{37}ErO_5$	11-Bromopregnenediol- β ,20-one-12 diacetate	Sol	-	Group freq	Jones	JACS 74 (1952)	2828
$C_{25}H_{37}NO_2 \cdot HBr$	5-Palmitoyl-8-quinolinol hydrobromide	-	-	Struct	Edgerton	JACS 74 (1952)	5209
$C_{25}H_{37}NO_6$	Dihydrolycocotam monoacetate	S	600-3600	Spec	Edwards	CJC 32 (1954)	708
$C_{25}H_{38}$	1-Pentadecyl naphthalene	L	691-3188	Table, I	Anderson	JCS - (1953)	443
$C_{25}H_{38}$	2-Pentadecyl naphthalene	L	720-3245	Table, I	Anderson	JCS - (1953)	443
$C_{25}H_{38}Br_2O_3$	2,2-Dibromoandrostanol-17 β -one-3 hexahydrobenzoate	Sol	-	Group freq	Jones	JACS 72 (1950)	956
$C_{25}H_{38}O_3$	Δ^1 - β ,9 α -Epoxycholeonic acid methyl ester	Sol	650-3100	Group freq Band freq, I	Jones Henbest	JACS 72 (1950) JCS - (1954)	956 800
$C_{25}H_{38}O_3$	Δ^1 (β or γ)-12-Ketocholeonic acid methyl ester	Sol	-	Group freq	Jones	JACS 72 (1950)	956
$C_{25}H_{28}O_3$	Δ^1 - β -Ketocholeonic acid methyl ester	Sol	1580-3100	Group study, I Group freq	Jones Jones	JACS 72 (1950) JACS 72 (1950)	86 956
$C_{25}H_{36}O_5S$	Δ^4 -Pregnen-3-one-20 β -ol acetate ethylenehemithio ketal	Sol	-	Band freq	Djerassi	JACS 75 (1953)	3704
$C_{25}H_{38}O_4$	Δ^1 -Allopregnenediol-3 β ,20 β diacetate	Sol	-	Group freq	Jones	JACS 72 (1950)	956
		Sol	-	Group freq, Spec, Struct	Jones	JACS 74 (1952)	2820

$C_{25}H_{38}O_4$	ois- $\Delta^{17(20)}$ -Allopregnene- β ,20-diol diacetate	-	Sol	Group freq, Struct	Vanderhaeghe	JACS 74 (1952)	2810
$C_{25}H_{38}O_4$	trans- $\Delta^{17(20)}$ -Allopregnene β ,20-diol diacetate	-	Sol	Group freq, Struct	Vanderhaeghe	JACS 74 (1952)	2810
$C_{25}H_{38}O_4$	$\Delta^{17(20)}$ -Allopregnediol- β ,20 diacetate	-	Sol	Group freq, Spec, Struct	Jones	JACS 74 (1952)	2820
$C_{25}H_{38}O_4$	$\Delta^{20(21)}$ -Allopregnene- β ,20-diol diacetate	-	Sol	Group Freq, Struct	Vanderhaeghe	JACS 74 (1952)	2810
$C_{25}H_{38}O_4$	Δ^5 -Androstenediol- β ,17 α dipropionate	-	-	Assign	Jones	JACS 70 (1948)	2024
$C_{25}H_{38}O_4$	16 α ,20 -Diacetoxy- Δ^2 -allopregnene	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS 74 (1952)	5357
$C_{25}H_{38}O_4$	β ,20 α -Diacetoxy- Δ^5 -pregnene	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS 74 (1952)	5357
$C_{25}H_{38}O_4$	3,6-Diketoolchololanic acid, methyl ester	-	Sol	Group freq	Jones	JACS 72 (1950)	956
$C_{25}H_{38}O_4$	3,12-Diketochololanic acid methyl ester	1700	Sol	Freq, Struct, Anal	Jones	JACS 71 (1949)	241
$C_{25}H_{38}O_4$	3 α ,9 α -Epoxy-11-ketocholanic acid methyl ester	1712	Sol	Freq, Struct	Jones	JACS 71 (1949)	241
$C_{25}H_{38}O_4$	Δ^5 -16 α -Ethoxypregnenol β ,one-20-acetate	-	Sol	Group freq	Jones	JACS 74 (1952)	5648
$C_{25}H_{38}O_4$	$\Delta^9(11)$ -12-Keto-3 α -hydroxy cholonic acid methyl ester	1580-3100	Sol	Band freq, Spec, Struct	Jones	JACS 74 (1952)	2820
			Sol	Group study	Jones	JACS 72 (1950)	86
			Sol	Group freq	Jones	JACS 72 (1950)	956
			Sol	Group freq	Cole	JACS 74 (1952)	5571
			Sol	Group freq	Archer	JACS 76 (1954)	4915
			S,Sol	Group freq	Farpley	AFS 9 (1955)	69

$C_{25}H_{38}O$	Methyl-3-keto-9 α ,11 α - oxidocholane	-	-	Band freq	Heymann	JACS	73 (1951)	5256
$C_{25}H_{38}O$	Δ^4 -Pregnenediol-3,20- diacetate	Sol	-	Group freq	Jones	JACS	72 (1950)	956
$C_{25}H_{38}O$	Δ^5 -Pregnene-3 β ,20 β -diol diacetate	S	-	Band freq	Romo	JOC	17 (1953)	1413
$C_{25}H_{38}O$	Δ^{16} -Pregnenediol-3 β ,20 β - diacetate	Sol Sol	1580-3100	Group Study, I Group freq	Jones Jones	JACS JACS	72 (1950) 74 (1952)	86 2820
$C_{25}H_{38}O$	$\Delta^{17(20)}$ -Pregnenediol- 3 α ,20 diacetate	Sol	-	Group freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{25}H_{38}O$	Progesterone bisethylene ketal	S S	-	Group study Ident	Antonucci Allen	JOC JACS	17 (1952) 76 (1954)	1369 6116
$C_{25}H_{28}O_5$	Allopregnane-3 α ,21-diol- 20-one-3,21-diacetate	Sol	770-3700	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{25}H_{38}O_5$	Allopregnane-3 α ,6 β -diol- 20-one diacetate	Sol	-	Band freq	Romo	JACS	76 (1954)	5169
$C_{25}H_{38}O_5$	Allopregnenediol-3 β , 17 α -one-20 diacetate	Sol	-	Band freq, Spec, Struct Ident	Jones	JACS	74 (1952)	2820
$C_{25}H_{38}O_5$	Allopregnane-3 β ,20 β - diol-11-one diacetate	Sol	-	Group freq, Struct	Turner Turner	JACS JACS	74 (1952) 75 (1953)	4220 3489
$C_{25}H_{38}O_5$	3 β ,16 α -Diacetoxyallo- pregnan-20-one	-	-	Group freq	Romo	JACS	74 (1952)	2918
$C_{25}H_{38}O_5$	3 β ,17 β -Diacetoxyallo- pregnan-20-one	-	-	Group freq	Hirschmann	JOC	20 (1955)	572
$C_{25}H_{38}O_5$	3 β ,21-Diacetoxyallo- pregnan-20-one	-	-	Ident	Soloway	JACS	76 (1954)	2941
$C_{25}H_{38}O_5$	3 β ,21-Diacetoxyallo- pregnan-20-one	Sol Sol	770-3700 700-1400	Ident Freq, I Ident	Soloway Rosenkrantz Jones	JACS JACS JACS	76 (1954) 77 (1955) 78 (1956)	2941 2237 1152

$C_{25}H_{38}O_5$	11.9-12.7 μ	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
$3\beta, 20\alpha$ -Diacetoxo-17 α -hydroxy- Δ^5 -pregnene	2.5-15 μ	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
$3\beta, 20$ -Diacetoxo-17 α -hydroxy- Δ^5 -pregnene	-	Band freq	Arth	JACS	76 (1954)	1715
2 $\beta, 4b$ -Dimethyl-1 α -carbo-methoxymethyl-2-methyl-1 β -7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10g β -dodecahydro-phenanthrene-4 α -ol	-	Freq	Heymann	JACS	73 (1951)	5252
Methyl-3 β -hydroxy-3 $\alpha, 9\alpha$ -oxido-11-ketocholanate	770-3700	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
Pregnane-3 $\alpha, 6\alpha$ -diol-20-one-3,6-diacetate	-	Assign	Jones	JACS	70 (1948)	2024
Pregnadiol-3 $\alpha, 11\alpha$ -one-20 diacetate	-	Ident	Mancera	JACS	75 (1953)	1286
Pregnadiol-3 $\alpha, 20\alpha$ -one-11 diacetate	2.5-13 μ	Band freq, Ident	Sondheimer	JACS	75 (1953)	1282
Pregnadiol-3 $\alpha, 20\alpha$ -one-11 diacetate	770-3700	Group freq, Struct Freq	Rosenkrantz	JACS	75 (1953)	903
Pregnane-3 $\alpha, 20\beta$ -diol-11-one-3,20-diacetate	-	Freq, I	Page	JCS	- (1955)	2017
Δ^5 -Pregnene-3 $\alpha, 17\alpha, 20$ -diacetate-3,20	770-3700	Band freq	Rosenkrantz	JACS	77 (1955)	2237
Δ^5 -Pregnen-16 α -ol-3,20-dione bisethylene ketal	-	Ident	Mancera	JACS	75 (1953)	1286
Δ^5 -Pregnen-17 α -ol-3,20-dione bisethylene ketal	-	Freq, I	Oliveto	JACS	75 (1953)	488
		Band freq, Spec,	Rosenkrantz	JACS	77 (1955)	2237
		Band freq, Spec,	Jones	JACS	74 (1952)	2820
		Band freq	Bernstein	JACS	76 (1954)	5674
		Band freq	Bernstein	JACS	76 (1954)	5674

$C_{25}H_{38}O_5$	Δ^5 -Pregnen-21-ol-3,20-dione-3,20-bisethylene ketal	-	S	Band freq	Bernstein	JACS	77 (1955)	2233
$C_{25}H_{38}O_6$	3 α -Acetoxy-21,21-dimethoxy-pregnane-11,20-dione	-	S	Ident	Mattox	JACS	74 (1952)	4340
$C_{25}H_{38}O_6$	Allopregnane-3 β ,7,11 α -triol-20-one-3,11-diacetate	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3505
$C_{25}H_{38}O_6$	Allopregnane-3 β ,11 β ,21-triol-20-one-3,21-diacetate	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{25}H_{38}O_6$	Allopregnane-3 β ,11 α ,17 α -triol-20-one-3,11-diacetate	-	-	Band freq, Ident	Romo	JACS	75 (1953)	1277
$C_{25}H_{38}O_6$	Allopregnane triol-3 β ,17 α ,21-one-20-diacetate-3,21	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
$C_{25}H_{38}O_6$	Δ^7 -Allopregnene-17 α ,21-diol-3,20-dione-3,20-bisethylene ketal	770-3700	S,Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{25}H_{38}O_6$	Androstane triol-2,3,17-triacetate	-	S	Band freq	Antomucci	JACS	76 (1954)	2956
$C_{25}H_{38}O_6$	Androstane-3 α ,16 α ,17 β -triol-3,16,17-triacetate	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{25}H_{38}O_6$	11-Epicorticosterone bisethylene ketal	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{25}H_{38}O_6$	Methyl 3 β -acetoxy-5 α -hydroxy-11-ketobisnorallochololanate	-	S	Band freq	Bernstein	JACS	77 (1955)	2331
$C_{25}H_{38}O_6$	Methyl 3 β -acetoxy-5 α -hydroxy-11-keto-9 β -bisacetylchololanate	-	Sol	Group freq	Bladon	JCS	- (1953)	2921
$C_{25}H_{38}O_6$	Methyl 3 β -acetoxy-5 α -hydroxy-11-keto-9 β -bisacetylchololanate	-	Sol	Group freq	Bladon	JCS	- (1953)	2921

C ₂₅ H ₃₈ O ₆	Pregnatriol-3 α ,11 α ,21-one-20 diacetate	Sol	Band freq, Spec, Struct	JACS	74 (1952)	2820
C ₂₅ H ₃₈ O ₆	Pregnane-3 α ,11 β ,17 α -triol-20-one 11,17-diacetate	-	Ident	JACS	75 (1953)	5486
C ₂₅ H ₃₈ O ₆	Pregnane-3 α ,17 α ,20 β -triol-11-one, 3,20-diacetate	-	Ident	JACS	75 (1953)	488
C ₂₅ H ₃₈ O ₆	Pregnatriol-3 α ,17 α ,21-one-20-diacetate-3,21	Sol	Group freq, Spec Freq, I	JACS	74 (1952)	2820
C ₂₅ H ₃₈ O ₆	Pregnatriol-3 β ,17 α ,21-one-20-diacetate-3,21	S	Band freq, Spec, Struct Freq, I	JACS	77 (1955)	2237
C ₂₀ H ₃₈ O ₆	Pregnol-17 α -trione-3,11,20-3,20-bisethylene ketal	S,Sol	Group freq	APS	9 (1955)	69
C ₂₅ H ₃₈ O ₆	Δ^5 -Pregnene-17 α ,21-diol-3,20-bisethylene ketal	S	Band freq	JACS	76 (1954)	2956
C ₂₅ H ₃₈ O ₆	3 β ,16 α ,17 β -Triacetoxysterane	Sol	Spec	JACS	74 (1952)	5357
C ₂₅ H ₃₈ O ₆	3 β ,16 β ,17 β -Triacetoxysterane	-	Ident	JACS	76 (1954)	2943
C ₂₅ H ₃₈ O ₆	3,6,17-Triethylenedioxyandrostane	-	Ident	JACS	76 (1954)	2943
C ₂₅ H ₃₈ O ₇	21-Acetoxy-17 α -hydroxy-3,3-dimethoxyallopregnane-11,20-dione	S	Group freq	JCS	- (1955)	2017
C ₂₅ H ₃₈ O ₇	All opregnane-3 α ,11 β ,17 α ,21-tetrol-20-one-3,21-diacetate	S	Freq, I	JACS	77 (1955)	2237
C ₂₅ H ₃₈ O ₇	All opregnane tetrol-3 β ,11 β ,17 α ,21-one-20-diacetate-3,21	Sol	Band freq, Spec, Struct Freq, I	JACS	74 (1952)	2820

$C_{25}H_{38}O_7$	3,3-Dimethoxypregnane-17 α ,21-diol-11,20-dione 21-acetate	-	-	Group study	Oliveto	JACS	76 (1954)	6113
$C_{25}H_{38}O_7$	2 α ,4b-Dimethyl-1 β -carbo-methoxymethyl-2-methyl 2,3-dihydroxypropyl)-7-ethylenedioxy-1,2,3,4,4 α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4-one	-	S	Freq	Arth	JACS	77 (1955)	3834
$C_{25}H_{38}O_7$	11-epihydrocortisone bisethylene ketal	-	-	Ident Group study Ident	Antonacci Sondheimer Allen	JOC JACS JACS	18 (1953) 75 (1953) 76 (1954)	70 1282 6116
$C_{25}H_{38}O_7$	3 α -Hydroxy-7 α ,12 α -di-acetoxyetiocolanic acid, methyl ester	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{25}H_{38}O_7$	Pregnane tetrol-3 α ,11 β ,17,21-one-20-diacetate-3,21	-	Sol	Band freq, Spec, Struct Freq, I	Jones	JACS	74 (1952)	2820
$C_{25}H_{38}O_7$	Pregnane-3 β ,11 β ,17 α ,21-tetrol-20-one-3,21-diacetate	770-3700	S	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{25}H_{38}O_7$	Pregnane-3 β ,11 β ,17 α ,21-tetrol-20-one-3,21-diacetate	770-3700	S	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{25}H_{38}O_7$	Δ^5 -Pregnene-11 β ,17 α ,21-triol-3,20-dione-3,20-diethylene ketal	-	-	Ident	Antonacci	JOC	18 (1953)	70
$C_{25}H_{38}Si$	Phenylbenzyl-n-dodecyl silane	2-16 μ	Sol	Freq	Kniseley	SA	15 (1959)	651
$C_{25}H_{39}BrO_6$	4-Bromopregnane-11 β ,17 α -diol-3,20-dione-3,20-bisethylene ketal	-	-	Group freq	Oliveto	JACS	77 (1955)	2224
$C_{25}H_{39}ClO_3$	$\Delta^9:11$ -3 α -Hydroxy-12 α -chlorocholenic acid methyl ester	-	Sol	Freq	Cole	JACS	74 (1952)	5571

$C_{25}H_{39}NO$	5-Hexadecyl-8-quinolinol	-	Struct	Edgerton	JACS	74 (1952)	5209
$C_{25}H_{40}O_2$	Methyl- $\Delta^9(11)$ -cholenate	700-1000	Spec, Band freq Freq	Bladon Heymann	JCS JACS	- 73 (1951)	2402 5252
$C_{25}H_{40}O_3$	3α -Hydroxy- $\Delta^9:11$ -cholenic acid methyl ester	1580-3100	Assign Group study, I	Jones Jones	JACS JACS	70 (1948) 72 (1950)	2024 86
$C_{25}H_{40}O_3$	3α -Hydroxy- Δ^{11} -cholenic acid methyl ester	1580-3100	Assign Group study, I Group freq Group freq	Jones Jones Jones Henbest	JACS JACS JACS JCS	70 (1948) 72 (1950) 74 (1952) - (1954)	2024 86 5648 800
$C_{25}H_{40}O_3$	Δ^5 - 3β -Hydroxycholenic acid methyl ester	1580-3100	Group study, I Group freq Group freq Spec, Band freq Discussion	Jones Jones Cole Hirschmann Jones	JACS JACS JACS JACS JACS	72 (1950) 72 (1950) 74 (1952) 74 (1952) 80 (1950)	86 956 5571 5357 6121
$C_{25}H_{40}O_3$	Methyl- $\Delta^9:11$ - 3β -hydroxycholenate	700-1000	Spec, Band freq	Bladon	JCS	- (1951)	2402
$C_{25}H_{40}O_4$	Allopregnane- $3\alpha,20\alpha$ -diol- $3,20$ -diacetate	770-3700 700-1400	Freq, I Band discussed, Ident	Hirschmann Jones	JACS JACS	77 (1955) 78 (1956)	2237 1152
$C_{25}H_{40}O_4$	Allopregnanediol- $3\beta,20\alpha$ -diacetate	770-3700 700-1400	Group freq Freq, I Spec, Ident	Jones Rosenkrantz Jones	JACS JACS JACS	72 (1950) 77 (1955) 78 (1956)	956 2237 1152
$C_{25}H_{40}O_4$	Allopregnane- $3\beta,20\beta$ -diol diacetate	770-3700 700-1400	Group freq Freq, I Ident	Jones Rosenkrantz Jones	JACS JACS JACS	72 (1950) 77 (1955) 78 (1956)	956 2237 1152
$C_{25}H_{40}O_4$	Benzoyl stearyl peroxide	-	Group freq	Davison	JCS	- (1951)	2456
$C_{25}H_{40}O_4$	$3\alpha,12\beta$ -Dihydroxy- $\Delta^9:11$ -cholanic acid methyl ester	-	Assign	Jones	JACS	70 (1948)	2024

$C_{25}H_{40}O_4$	9 α ,11 α -Epoxy-3 α -hydroxy-cholanic acid methyl ester	-	Sol	Group freq	Cole	JACS	74 (1952)	5571
$C_{25}H_{40}O_4$	3 α -Hydroxy-11 α ,12 α -Epoxycholanic acid, methyl ester	-	-	Assign Group freq	Jones Cole	JACS JACS	70 (1948) 74 (1952)	2024 5571
$C_{25}H_{40}O_4$	3 α -Hydroxy-6-ketocholanic acid methyl ester	-	Sol Sol	Group freq Group freq	Jones Cole	JACS JACS	72 (1950) 74 (1952)	956 5571
$C_{25}H_{40}O_4$	3 α -Hydroxy-11-ketocholanic acid methyl ester	1700	Sol Sol	Freq, Struct, Anal Group freq	Jones Cole	JACS JACS	71 (1949) 74 (1952)	241 5571
$C_{25}H_{40}O_4$	3 α -Hydroxy-12 β -methoxy- $\Delta^9:11$ -cholanic acid	-	-	Assign	Jones	JACS	70 (1948)	2024
$C_{25}H_{40}O_4$	Methyl-3 α -hydroxy-12-ketocholananate	-	Sol S,Sol	Group freq Group freq	Archer Tarpley	JACS APS	76 (1954) 9 (1955)	4915 69
$C_{25}H_{40}O_4$	Pregnanediol-3 α ,20 α -diacetate	770-3700	- Sol	Assign Freq, I	Jones Rosenkrantz	JACS JACS	70 (1948) 77 (1955)	2024 2237
$C_{25}H_{40}O_4$	Pregnanediol-3 α ,20 β -diacetate	-	- Sol	Assign Band freq	Jones Jones	JACS JACS	70 (1948) 74 (1952)	2024 80
$C_{25}H_{40}O_4$	Pregnanediol-3 β ,20 β -diacetate	770-3700	- Sol	Assign Freq, I	Jones Rosenkrantz	JACS JACS	70 (1948) 77 (1955)	2024 2237
$C_{25}H_{40}O_5$	Allopregnane-3 β ,11 β ,20 β -triol-3,20-diacetate	-	-	Band freq	Romo	JACS	74 (1952)	2918
$C_{25}H_{40}O_5$	Allopregnane-3 β ,17 α ,20 α -triol-3,20-diacetate	770-3700	- Sol	Ident Freq, I	Soloway Rosenkrantz	JACS JACS	76 (1954) 77 (1955)	2941 2237
$C_{25}H_{40}O_5$	Allopregnane-3 β ,17 α ,20 β -triol-3,20-diacetate	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{25}H_{40}O_5$	3 α ,12 α -Dihydroxy-7-ketocholanic acid methyl ester	1700	Sol	Freq, Struct	Jones	JACS	71 (1949)	241

C ₂₅ H ₄₀ O ₅	Methyl-3 α , 12 β -dihydroxy-11-ke tocholinate	-	S, Sol	Group freq	Tarpley	APS	9 (1955)	69
C ₂₅ H ₄₀ O ₅	Pregnanetriol-3 α , 12 α -20 β -diacetate-3, 12	-	Sol	Band freq, Spec, Struct Group freq	Jones Jones	JACS JACS	74 (1952) 74 (1952)	2820 5648
C ₂₅ H ₄₀ O ₅	Pregnanetriol-3 α , 12 α , 20 β -diacetate-3, 20	1600-3700	Sol	Spec, Band freq, Struct Group freq	Jones Jones	JACS JACS	74 (1952) 74 (1952)	2820 5648
C ₂₅ H ₄₀ O ₅	Pregnanetriol-3, 17 α , 20-diacetate-3, 20	-	Sol	Band freq, Spec, Struct	Jones	JACS	74 (1952)	2820
C ₂₅ H ₄₀ O ₆	Androstane-3 β , 17 β -diol dicathylate	-	-	Freq	Fieser	JACS	74 (1952)	3309
C ₂₅ H ₄₀ O ₆	Pregnane-5 α , 21-diol-3, 20-dione-3, 20-bisethylene ketal	-	S	Band freq	Bernstein	JACS	77 (1955)	2233
C ₂₅ H ₄₀ O ₈	Pregnane-5 α , 11 β , 17 α , 21-tetrol-3, 20-dione-3, 20-bisethylene ketal	-	S	Band freq	Bernstein	JACS	77 (1955)	2233
C ₂₅ H ₄₁ NO ₄	3 β , 17 α -Dihydroxy-20 α -acetamidoallopregnane-3-monoacetate	-	-	Struct	Ramirez	JACS	77 (1955)	134
C ₂₅ H ₄₁ NO ₄ .HCl	Pregnanediol-3 α , 12 α -amine-20-hydrochloride diacetate	-	-	Assign	Jones	JACS	70 (1948)	2024
C ₂₅ H ₄₂ N ₂ O ₅ .HCl	dl-threo-2-Amino-1-(p-nitrophenyl)-1-o-palmitoyl-1,3-propanediol hydrochloride	-	-	Band freq	Edgerton	JACS	77 (1955)	27
C ₂₅ H ₄₂ N ₂ O ₄	2-Nonadecanone-2,4-dinitrophenylhydrazone	2-15 μ	S	Band freq, Spec	Jones	AC	28 (1956)	191
C ₂₅ H ₄₂ O ₂	Cholic acid methyl ester	-	Sol	Group freq	Jones	JACS	72 (1950)	956

$C_{25}H_{42}O_3$	Bisnorallocholane- 3β , 16 β ,22-triol acetoneide	-	S	Band freq	Klass	JACS 77 (1955)	3829
$C_{25}H_{42}O_3$	3,4-Bisnorcholestane-5, 5-diol-2- <i>oic</i> -2 \rightarrow 5- lactole	-	-	Group freq	Weisnborn	JACS 76 (1954)	552
$C_{25}H_{42}O_3$	3 α -Hydroxycholanic acid methyl ester	-	-	Assign Group freq	Jones Cole	JACS 70 (1948) 74 (1952)	2024 5571
$C_{25}H_{42}O_4$	3 α ,12 α -Dihydroxycholanic acid methyl ester	1692-1792	Sol	Ext. Coefficient, I	Jones	JACS 74 (1952)	80
$C_{25}H_{42}O_4$	3 β ,12 β -Dihydroxycholanic acid methyl ester	-	-	Assign	Jones	JACS 70 (1948)	2024
$C_{25}H_{42}O_4$	Hydeoxycholic acid methyl ester	-	-	Spec	Morcillo	ARS 53B (1957)	145
$C_{25}H_{42}O_5$	Bisnorallocholane-2 α , 3 β ,15 β ,16 β ,22-pentaol acetoneide	-	S	Band freq	Klass	JACS 77 (1955)	3829
$C_{25}H_{44}$	9-(2-Phenylethyl)- heptadecane	1.1-1.25 μ	L	Anal	Evans	AC 23 (1951)	1604
$C_{25}H_{44}$	10-Phenylnonadecane	2-15 μ	L	Spec	Hawkes	SA 16 (1960)	633
$C_{25}H_{46}$	1,5-Dicyclohexyl-3-(2- cyclohexylethyl) pentane	3.4-14.7 μ	Sol	Struct, Group anal	Francis	AC 25 (1953)	1466
$C_{25}H_{46}$	1,5-Dicyclohexyl-3-(3- cyclopentylpropyl) pentane	1.1-1.25 μ	L	Anal	Evans	AC 23 (1951)	1604
$C_{25}H_{46}$	1,7-Dicyclohexyl-4-(2- cyclohexylethyl)- heptane	1.1-1.25 μ	L	Anal	Evans	AC 23 (1951)	1604
$C_{25}H_{46}$	1,7-Dicyclohexyl-4-(3- cyclopentylpropyl)heptane	-	-	Band freq	Bomstein	AC 25 (1953)	512

C ₂₅ H ₄₈	1.1-1.25 μ L	Spec, Anal	Evans	AC	23 (1951)	1604
1-Cyclohexyl-3-(2-cyclohexylethyl)heptane	1.1-1.25 μ L	Spec, Anal	Evans	AC	23 (1951)	1604
1-Cyclopentyl-4-(3-cyclopentylpropyl)dodecane	3-14.7 μ Sol, L	Struct, Group anal	Francis	AC	25 (1953)	1466
1-n-Pentadecyldecahydronaphthalene	3.4-14.7 μ Sol	Struct, Group anal	Francis	AC	25 (1953)	1466
Di(2-ethylhexyl)azelate	2-15 μ L	Spec	Kendall	APS	7 (1953)	179
9-(3-cyclopentylpropyl)heptadecane	3-14.7 μ Sol, L	Struct, Group anal	Francis	AC	25 (1953)	1466
Hydroxyformoxy-sphingomyelin	3.01-13.86 μ S	Band freq	Marinetti	JACS	76 (1954)	1345
9-Octylheptadecane	1.1-1.25 μ L	Anal	Evans	AC	23 (1951)	1604
n-Pentacosane	3-14.7 μ Sol, L	Struct, Group anal	Francis	AC	25 (1953)	1466
Cyclopentamethylene-didecylsilane	750-1150 S	Struct, Band freq	Snyder	JCP	27 (1957)	969
Stearoyl glycolleithin hydrate	700-1500 S	Assign, Freq	Snyder	JMS	4 (1960)	411
Dibiphenyleneethylene	2-35 μ L	Assign	Osheky	JACS	79 (1957)	2057
2-Benzamido-N-benzoyl-3,5,2',4'-tetrachlorodiphenylamine	2-16 μ S	Spec	Baer	JACS	75 (1953)	5533
Dibiphenyleneethylene	660-4000 Sol	Spec	Wood	AC	30 (1958)	1339
2-Benzamido-N-benzoyl-3,5,2',4'-tetrachlorodiphenylamine	3-15 μ -	Group freq	Ford	JCS	- (1953)	3529

C₂₆ COMPOUNDS

C ₂₆ H ₁₆						
C ₂₆ H ₁₆ Cl ₄ N ₂ O ₂						

$C_{26}H_{16}N_2O_4$	1,2-Dinitro-1,2-bisdi-phenyleneethane	650-5000	S	Spec	Freeman	JOC	21 (1956)	472
$C_{26}H_{16}O_2$	Dibenzanthrone	600-2000	S	Spec	Durie	AJC	10 (1957)	429
$C_{26}H_{16}O_3$	2-(5-chrysenoyl) benzoic acid	5.5-6.5 μ	Sol	Ident, Substitution effect	Sawicki	AC	31 (1959)	523
$C_{26}H_{17}N_3$	4',4''-Dihydrodiquinolino (2':3'-1:2) (3":2"-5:6) isojuline	-	-	Band freq, I	Braunholtz	JCS	- (1955)	393
$C_{26}H_{17}N_3$	Diquinolino (2':3'-1:2) (3":2"-5:6) juline	-	-	Band freq, Ident	Braunholtz	JCS	- (1955)	393
$C_{26}H_{18}$	10,10-Diphenyldibenzo-fulvene	660-4000	Sol	Spec	Wood	AC	30 (1958)	1339
$C_{26}H_{18}N_2O_2$	p-Azobenzophenone	800-4000	S	Spec	Curtin	JACS	76 (1954)	494
$C_{26}H_{18}N_2O_4S_2$	9,10-Anthraquinone dibenzenesulfonimide	-	-	Group freq	Adams	JACS	74 (1952)	2593
$C_{26}H_{18}N_2O_5$	P,P'-Dibenzoxyazoxy-benzene	-	S	Ident	Leonard	JOC	17 (1952)	1071
$C_{26}H_{18}N_4$	Phenylazo- β - $\alpha\beta'$ -azo-naphthalene	-	S	Freq	Lefevre	AJC	10 (1957)	26
$C_{26}H_{18}O_2$	Fluorenepinacol	3 μ	Sol	Spec, Freq	Kuhn	JACS	74 (1952)	2492
$C_{26}H_{18}O_6$	1,3,10-Triacetoxyperylene	743-1770	S	Table	Brown	JCS	- (1954)	1280
$C_{26}H_{19}ClN_2O_4S$	4-Chloro-6-benzene-sulfonyl-o-phenylene-dibenzamide	-	-	Ident	Adams	JACS	76 (1954)	2763
$C_{26}H_{19}NO_5S$	Anthracene-p-quinone-monobenzene sulfonimide mono adduct	-	-	Freq	Adams	JACS	74 (1952)	2605

$C_{26}H_{19}NO_3$	9,10- σ -Benzeno-4-benzene-sulfonamido-1-hydroxyanthracene	-	-	Group study	Adams	JACS	74 (1952)	2605
$C_{26}H_{20}$	cis-9,10-Dihydro-9,10-diphenylphenanthrene	-	-	Band freq	Bergmann	JOC	19 (1954)	1387
$C_{26}H_{20}$	trans-9,10-Dihydro-9,10-diphenylphenanthrene	-	-	Band freq	Bergmann	JOC	19 (1954)	1387
$C_{26}H_{20}$	Tetraphenylethylene	3.39-14.40 μ	Sol	Ident	Brewster	JACS	76 (1954)	6368
$C_{26}H_{20}O_2$	4-Benzamid α -N-benzoyl-diphenylamine	3-15 μ	-	Group freq	Ford	JCS	- (1953)	3529
$C_{26}H_{20}O_2S_2$	9,10-Anthracene dibenzene-sulfonamide	-	-	Group study	Adams	JACS	74 (1952)	2593
$C_{26}H_{20}N_4$	1,2,2a,3,10,10a-Hexahydro-diindolo(3',2'-4:5)(2'';3''-8;9)-2a,10a-diazapyrene	-	-	Struct	Almond	JCS	- (1951)	1906
$C_{26}H_{20}O$	Benzopinacolone	5.97-14.69 μ	S Sol	Table Freq	Brewster Brook	JACS JACS	76 (1954) 82 (1960)	6368 5102
$C_{26}H_{20}O_2S$	9-(9-Phenylfluorenyl)-p-tolylsulfone	1100-1400	Sol	Spec, Freq	Bavin	SA	16 (1960)	1312
$C_{26}H_{20}O_3$	2-Hydroxy-4-diphenyl-hydroxymethylbenzophenone	-	-	Band freq	Wasserman	JACS	77 (1955)	973
$C_{26}H_{20}O_{10}$	2,5-Diacetoxy-3,6-di-p-acetoxyphenyl-1,4-benzoquinone	5-15 μ	S	Spec, Struct	Edwards	JAPC	10 (1960)	246
$C_{26}H_{21}ClN_2O_4S_2$	1,4-Dihydro-2-chloro-9,10-anthracene dibenzenesulfonamide	-	-	Group freq	Adams	JACS	74 (1952)	2593

$C_{26}H_{21}ClN_2O_4S_2$	3,3'-Dimethyl-5-chloro-diphenylquinone dibenzesulfonimide	-	-	Band freq	Adams	JACS	74 (1952)	3038
$C_{26}H_{21}ClN_2O_4S_2$	N-(2,3,5,6-Tetrachloro-4-benzesulfonamido-phenyl)-N-(3,5-dimethyl-4-aminophenyl)benzenesulfonamide	-	-	Freq	Adams	JACS	74 (1952)	5896
$C_{26}H_{21}ClN_2O_4S_2$	N-(2,3,5,6-Tetrachloro-4-benzesulfonamido-phenyl)-N-(4-dimethylaminophenyl)benzenesulfonamide	-	-	Freq	Adams	JACS	74 (1952)	5869
$C_{26}H_{21}NO_2$	1-Cyclohexylaminoperylene-3,10-quinone	769-3300	S	Table	Brown	JCS	- (1954)	1280
$C_{26}H_{22}$	Unsym-Tetraphenylethane	3.42-14.35 μ	Sol	Ident, Table Ident	Brewster Fuson	JACS JACS	76 (1954) 77 (1955)	6368 1138
$C_{26}H_{22}BrN_2O_4S_2$	3,3'-Dibromo-4,4'-diphenylsulfonamidobibenzyl	-	-	Group freq	Fuson	JACS	75 (1953)	5744
$C_{26}H_{22}ClN_2O_4S_2$	N,N'-Dibenzesulfonyl-3,3'-dimethyl 5,5'-dichlorobenzidine	-	-	Spec, Ident	Adams	JACS	74 (1952)	3038
$C_{26}H_{22}ClN_2O_6S_2$	N,N'-Dibenzesulfonyl-2,2'-dichloro-3,3'-dimethoxybenzidine	-	-	Iso., Band study	Adams	JACS	75 (1953)	5901
$C_{26}H_{22}Cl_2N_2O_6S_2$	N,N'-Dibenzesulfonyl-2,2'-dichloro-5,5'-dimethoxybenzidine	-	-	Iso., Band study	Adams	JACS	75 (1953)	5901
$C_{26}H_{22}ClN_2O_6S_2$	N,N'-Dibenzesulfonyl-5,5'-dichloro-3,3'-dimethoxybenzidine	-	-	Iso., Band study	Adams	JACS	75 (1953)	5901
$C_{26}H_{22}NO_2$	1,2-Dimethyl-3-(1-phenyl-tryptamine)phthalimide	-	S, Sol	Freq	Noland	JACS	81 (1959)	1203

C ₂₆ H ₂₂ N ₂ O ₂	S, Sol	Freq	JACS	81 (1959)	1203
2-Methyl-3-(1-phenyl-2-phthalimidopropyl)indole	-				
1,4-Dihydro-9,10-anthracene dibenzenesulfonamide	-	Group freq	JACS	74 (1952)	2593
3,3'-Dime thylidiphenone dibenzene-sulfonimide	-	Group freq, Band study	JACS	74 (1952)	3038
1,4,4a,9a-Tetrahydro-9,10-anthraquinone dibenzenesulfonimide	-	Group freq	JACS	74 (1952)	2593
Di-p-amidinophenyl disulfide dibenzene-sulfonate	S	Spec, Band freq	JCS	- (1951)	1332
10-(trans-1,2-Dimethoxycarbonylviny)acridinium methoxide picrate	-	Ident	JCS	- (1954)	3240
Dibenzhydryl ether	Sol	Ident	JACS	76 (1954)	3622
Mesityl 1-phenyl-2-naphthyl ketone	-	Reference	JACS	76 (1954)	4622
Benzophenone pinacol	3 μ	Grignard react. prod.	JOC	16 (1951)	643
2-Hydroxy-4-diphenylhydroxymethylbenzhydrol	-	Ident	JACS	74 (1952)	2492
Terephthaloyl bis-(p-methoxyacetophenone)	S	Spec, Freq	JACS	76 (1954)	3622
1-Phenyl-3-methyl-4,4-dicarbobenzyloxy 2-azetidinone	-	Ident	JACS	77 (1955)	973
Dibenzyl-(α-chloropropionyl)anilinalonate	S	Freq, Assign, Struct	JACS	80 (1958)	4891
	Sol	Spec	JACS	73 (1951)	1761
	Sol	Spec	JACS	73 (1951)	1761

$C_{26}H_{24}OSi$	Triphenylsilylethyl phenyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{26}H_{24}O_6B_2$	Tetraphenylethylene-diborate	6-14 μ	L, S	Freq, Struct	Blau	JOS	- (1960)	380
$C_{26}H_{24}Si$	Diphenyldi-p-tolylsilane	-	Sol	Freq	Margoshes	AC	27 (1955)	351
$C_{26}H_{25}N_3O_4S_2$	2-(p-Dimethylamino-phenyl)benzene-1,4-dibenzenesulfonamide	-	-	Group freq, Struct	Adams	JACS	75 (1953)	4642
$C_{26}H_{26}$	1-Neopentyl-2,3-diphenyl-indene	-	-	Ident	Fuson	JOC	17 (1952)	255
$C_{26}H_{26}O$	α -Benzal- γ -phenyl-butylromesitylene	-	-	Group freq	Fuson	JOC	18 (1953)	1263
$C_{26}H_{27}N_2O_5P$	N-Dibenzylphosphoryl-DL-tryptophan methyl ester	3-15 μ	S, L	Spec, Group freq	Li	JACS	77 (1955)	3519
$C_{26}H_{28}NB$	Dimethylammonium-tetraphenylborate	-	S	H bond, Band freq	Nuttall	JOS	- (1960)	4965
$C_{26}H_{28}N_4O_{11}$	2,4-Dicarboxy-3-(3',4'-methylenedioxyphenyl)-5-hydroxy-5-methylcyclohexanone 2,4-dinitrophenyl-hydrazone	-	Sol	Band freq	Walker	JACS	77 (1955)	3664
$C_{26}H_{28}O$	α , β -Dimesityl- β -phenyl vinyl alcohol	2.7-2.9 μ	Sol	Spec OH data	Buswell Fuson	JACS JACS	69 (1947) 68 (1946)	770 389
$C_{26}H_{28}O_6$	Ethyl-2,4-diphenacyl-1,3-cyclobutanedicarboxylate.	2-13 μ	S	Band freq, Spec, Struct	Reid	JACS	73 (1951)	1985
$C_{26}H_{28}O_{14}$	Apin	-	L	Freq	Inglett	JOC	23 (1958)	93
$C_{26}H_{30}N_2O_2$	1-Methyl-3-benzal-4-piperidone dimer	-	S	Group freq	McElvain	JACS	77 (1955)	492

$C_{26}H_{30}O_2$	all trans-2,4,6,8,10,16, 18,20,22,24-Hexacosadecaen -13-yne-12,15-diol	S	Group freq, I	Allen	JCS	(1955)	1874
$C_{26}H_{30}O_3$	3-Benzyl-oxy- $\Delta^{3,5}$ -andro- stadiene-11,17-dione	S	Group freq	Bernstein	JOC	18 (1953)	1166
$C_{26}H_{30}O_3$	8,20-Dicarboxy 6,6 para- cyclophane anhydride	3.27-11.47 μ Sol	I, Group freq	Cram	JACS	77 (1955)	1179
$C_{26}H_{30}O_3$	8,21-Dicarboxy 6,6 para- cyclophane anhydride	3.27-11.47 μ Sol	I, Group freq	Cram	JACS	77 (1955)	1179
$C_{26}H_{30}O_3$	1-Duryl-5-mesityl-2,4- pentadien-2-ol-1-one acetate	-	Band freq	Fuson	JACS	75 (1953)	5950
$C_{26}H_{30}O_3$	2-Hydroxy-4-t-butyl-3,4- dihydro-1-naphthyl mesityl ketone acetate	-	Group freq	Fuson	JACS	77 (1955)	3781
$C_{26}H_{30}O_4$	1,4-di-(2-Acetoxy-3,4,6- trime-thylphenyl)-1,3- butadiene	-	Spec, Band freq,	Smith	JACS	73 (1951)	3851
$C_{26}H_{30}O_6$	1,4-di-(2-Hydroxy-3,4,6- trime-thylphenyl)-butane 1,4-dione diacetate	-	Spec, Band freq,	Smith	JACS	73 (1951)	3847
$C_{26}H_{30}O_9$	2-Hydroxyme-thylene-3- carbe-thoxy-4-(3',4'- dimethoxyphenyl)-6,7- dimethoxy-1-tetralone ethylene acetal	Sol	Band freq	Walker	JACS	75 (1953)	3393
$C_{26}H_{30}O_{15}$	Tetraacetylasperuloside	746-1773	I	Briggs	JCS	(1954)	4182
$C_{26}H_{31}NO$	1-Methyl-3,5-di-(p-iso- propylbenzylidene)-4- piperidone	S	Group freq	Leonard	JACS	77 (1955)	1852
$C_{26}H_{31}NO$	1-Methyl-3,5-di-(p-iso- propylbenzyl)-4-pyridone	S	Group freq	Leonard	JACS	77 (1955)	1852

$C_{26}H_{32}O_{31}$	Triphenylsilylbutyl butyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{26}H_{32}O_{31}$	Triphenylsilylheptyl methyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{26}H_{32}O_{31}$	Triphenylsilylhexyl ethyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{26}H_{32}O_2$	(7-p-7-p)-Cyclophandione-1,14	-	Sol	Group freq	Schubert	JACS	76 (1954)	5462
$C_{26}H_{32}O_3$	Δ^4 -Androsteno-17 α -one- β -benzoate	-	-	Assign	Jones	JACS	70 (1948)	2024
$C_{26}H_{32}O_3$	Δ^4 -Androsten-17 β -ol- β -one benzoate	682-1330	Sol S,Sol	Table Group freq	Jones Tarpley	JACS APS	77 (1955) 9 (1955)	651 69
$C_{26}H_{32}O_3$	Δ^5 -Androsteno-1- β -one-benzoate	-	-	Assign	Jones	JACS	70 (1948)	2024
$C_{26}H_{32}O_4$	β -Acetoxy- $\Delta^{14}(15),16(17),20,22$ butatetraenolide	1000-1900	Sol	Spec, Freq	Jones	JACS	81 (1959)	5242
$C_{26}H_{32}O_4$	Methylbixin (natural)	6.8-14 μ	S,Sol	Spec	Lunde	JACS	77 (1955)	1647
$C_{26}H_{32}O_4$	Methylbixin (all-trans)	6.7-14 μ	S,Sol	Spec	Lunde	JACS	77 (1955)	1647
$C_{26}H_{32}O_4$	Neomethylbixin-A	6.8-14 μ	S,Sol	Spec, Band study	Lunde	JACS	77 (1955)	1647
$C_{26}H_{32}O_4$	Neomethylbixin-C	6.8-9 μ	Sol	Spec	Lunde	JACS	77 (1955)	1647
$C_{26}H_{32}O_9$	1-Hydroxy-2-ethylene-dioxymethyl-3-carbethoxy-3-(3',4'-dimethoxyphenyl)-6,7-dimethoxy tralin	-	Sol	Band freq	Walker	JACS	75 (1953)	3393

$C_{26}H_{34}BrNO_5$				JACS	73 (1951)	4748
$C_{26}H_{34}N_2O_5$	1- β -(N-Methylbenzyl-sulfonamido)-ethyl-5-bromo-7,8-dimethoxy-2-hydroxy-2- δ -(α -butylene)-1,2,3,4-tetrahydronaphthalene	-	-			
$C_{26}H_{34}N_2O_2$	2,2'-Dimethyl-4,4'-(hexamethylenedilimino)bibenzyl diacetate	-	-	JACS	75 (1953)	5744
$C_{26}H_{34}N_2O_5$	Quinine- α,β -dihydroxy-methylvalerate	2-15 μ	S	JACS	76 (1954)	1085
$C_{26}H_{34}O_2$	Sym-Di-(P-Carboethoxy-pentamethylenephényl)-ethane cyclic acyloin	-	-	JACS	74 (1952)	1621
$C_{26}H_{34}O_3$	Androstanol-3 α -one-17-benzoate	-	-	JACS	70 (1948)	2024
$C_{26}H_{34}O_3$	Androstanol-3 β -one-17-benzoate	-	Sol	JCS	- (1953)	571
$C_{26}H_{34}O_3$	Δ^5 -Androstenediol-3 β ,17 β -3-benzoate	-	S,Sol	APS	9 (1955)	69
$C_{26}H_{34}O_3$	3-Benzylloxy- $\Delta^{3,5}$ -androsta-1,1 β ,17 β -diol	-	S	JOC	18 (1953)	1166
$C_{26}H_{34}O_3$	Etiocolanol-3 α -one-17-benzoate	-	-	JACS	70 (1948)	2024
$C_{26}H_{34}O_3$	19-Nor- $\Delta^{1,3,5}(10),6$ -22a-spirostatetraen-3-ol	-	Sol	JACS	76 (1954)	2230
$C_{26}H_{34}O_4$	Dehydroisoandrostenyl p-toluenesulfonate	670-3700	S	JOC	16 (1951)	679

$C_{26}H_{35}NO_7$	3-Cyanopregnane-3,17 α , 21-triol-11,20-dione- 3,21-diacetate	-	Sol	Freq	Graber	JACS	76 (1954)	4474
$C_{26}H_{36}O_3$	1,4-Androstadienol-17 α - one-3-hexahydroben- zoate	1580-3100 - 670-1380	Sol Sol Sol	I Group freq Spec	Jones Jones Jones	JACS JACS JACS	72 (1950) 72 (1950) 77 (1955)	86 956 651
$C_{26}H_{36}O_3$	3 β -Hydroxy- $\Delta^{5,7,9:10}$ - 22-iso-19-norspirosta- triene	-	Sol Sol	Group freq Band freq	Mosetting Scheer	JOC JACS	17 (1952) 77 (1955)	764 3300
$C_{26}H_{36}O_3$	19-Nor- $\Delta^{1,3,5(10)}$ -22 β - spirostatriene-3-ol	-	Sol	OH study	Sondheimer	JACS	76 (1954)	2230
$C_{26}H_{36}O_4S$	Epiandrosterone p- toluenesulfonate	-	Sol	Band study	Iriarte	JOC	20 (1955)	542
$C_{26}H_{36}O_5$	3 β ,22-Diacetoxibisnor- chola-7,9,20(22)- trien-5 α -ol	-	S	Group freq	Bladon	JCS	- (1953)	2916
$C_{26}H_{36}O_5$	2 α ,4b-Dimethyl-1-carbethoxy -methylene-2-methyl-7- ethylenedioxy-1,2,3,4,4 α , 4b,5,6,7,8,10,10 β -dodeca- hydrophenanthrene-4-one	-	S	Band freq	Arth	JACS	76 (1954)	1715
$C_{26}H_{36}O_5$	2 β ,4b-Dimethyl-1-carbethoxy -methylene-2-methyl-7- ethylenedioxy-1,2,3,4,4 α , 4b,5,6,7,8,10,10 β -dodeca- hydrophenanthrene-4-one	-	S	Band freq	Arth	JACS	76 (1954)	1715
$C_{26}H_{36}O_5$	2 α ,4b-Dimethyl-1-ethoxy- ethynyl-2-methyl-7- ethylenedioxy-1,2,3,4,4 α , 4b,5,6,7,8,10,10 β -dodeca- hydrophenanthrene-1 β -ol- 4-one	-	S	Band freq	Arth	JACS	76 (1954)	1715

C ₂₆ H ₃₆ O ₅	S	Band freq	Arth	JACS	76 (1954)	1715
2β-4b-Dimethyl-1-ethoxy- ethynyl-2-methyl-7- ethylenedioxy-1,2,3,4,4α, 4b,5,6,7,8,10,10aβ-dodeca- hydrophenanthrene-10-ol- 4-one	-					
C ₂₆ H ₃₆ O ₅	S	Band freq	Arth	JACS	76 (1954)	1715
2β,4b-Dimethyl-1-ethoxy- ethynyl-2-methyl-7- ethylenedioxy-1,2,3,4, 4α,4b,5,6,7,8,10,10aβ- dodecahydrophenanthrene -1β-ol-4-one	-					
C ₂₆ H ₃₆ O ₅	S	Freq	Arth	JACS	77 (1955)	3834
dl-Ethylenedioxy-16-iso- propoxy-5,16-pregnadiene- 11,20-dione	-					
C ₂₆ H ₃₆ O ₅	S	Freq	Arth	JACS	77 (1955)	3834
dl-3-Ethylenedioxy-20- isopropoxy-5,17- pregnadiene-11,16-dione	-					
C ₂₆ H ₃₆ O ₆	S	Group freq	Bladon	JCS	- (1953)	2916
3β,5α-Diacetoxy-(9α,11α)- epoxybisorchol-7-en-22- al	-					
C ₂₆ H ₃₆ O ₆	Sol	Band freq	Arth	JACS	76 (1954)	1715
2α,4b-Dimethyl-1-carboxy- methylene-2-methyl-7- ethylenedioxy-1,2,3,4, 4α,4b,5,6,7,8,10,10aβ- dodecahydrophenanthrene -4α-ol acetate	-					
C ₂₆ H ₃₆ O ₇	Sol	Group freq	Hirschmann	JACS	75 (1953)	4862
3β-Formyloxy-16α,21- diacetoxy-Δ ⁵ -pregnen- 20-one	-					
C ₂₆ H ₃₆ O ₇	-	Group freq	Moore	JACS	74 (1952)	6287
16α-Methoxy-Δ ⁵ -pregnen- 2,3β-diol-12,20-dione diacetate	-					
C ₂₆ H ₃₇ BrO ₃	Sol	Group freq	Jones	JACS	72 (1950)	956
Δ ¹ -2-Bromoandrostenol-17β- one-3-hexahydrobenzoate	-					

$C_{26}H_{37}BrO_3$	Δ^4 -2-Bromoandrost-17 β -one-3-hexahydrobenzoate	Sol	Group freq	JACS	72 (1950)	956
$C_{26}H_{37}ClO_5$	2 β ,4-b-Dimethyl-1-(2-chloro-2-ethoxy)ethenyl-2-methyl-7-ethylenedioxy-1,2,3,4,4 α ,4b,5,6,7,8,10,10 α β -dodecahydro-phenanthrene-1 β -ol-4-one	S	Band freq	JACS	76 (1954)	1715
$C_{26}H_{38}Br_2O_3$	2,4-Dibromoandrost-17 β -one-3-hexahydrobenzoate	Sol	Group freq	JACS	72 (1950)	956
$C_{26}H_{38}N_2O$	N,N-Diethyl-2-benzyl-5-diethylamino-3-phenylvaleramide	-	Ident	JACS	76 (1954)	1893
$C_{26}H_{38}N_2O$	N,N-Diethyl-4-benzyl-5-diethylamino-3-phenylvaleramide	-	Ident	JACS	76 (1954)	1893
$C_{26}H_{38}N_2O_9$	Carbobenzoxypenta-L-alanyl-L-alanine	S	Struct	A	636 (1960)	132
$C_{26}H_{38}O$	2-t-Amyl-4-t-butyl-2,3-dihydrophenyl duryl ketone	-	Group freq	JACS	76 (1954)	5466
$C_{26}H_{38}O$	4-t-Amyl-2-t-butyl-2,3-dihydrophenyl duryl ketone	-	Group freq	JACS	76 (1954)	5466
$C_{26}H_{38}O_2$	1,1-Bis-(2-hydroxy-3-t-butyl-5-methylphenyl)isobutane	S,Sol	H bond	Coggeshall	72 (1950)	2836
$C_{26}H_{38}O_2$	2,2-Bis-(2-hydroxy-3-t-butyl-5-methylphenyl)butane	S,Sol	H bond, Spec	Coggeshall	72 (1950)	2836
$C_{26}H_{38}O_2$	Di-(4-Hydroxy-2-methyl-5-t-butylphenyl)propylmethane	S,Sol	Freq	JACS	75 (1953)	947

$C_{26}H_{38}O_2$	Di-(4-Hydroxy-2-methyl-5-t-butylphenyl)isopropylmethane	2.5-3.4 μ	S	Band freq	Amelang	JACS 75 (1953)	947
$C_{26}H_{38}O$	Δ^1 -Androsteno1-17 α -one-3-hexahydrobenzoate	1580-3100 - 746-1272	Sol Sol Sol	Group freq Group freq Table	Jones Jones Jones	JACS 72 (1950) JACS 72 (1950) JACS 77 (1955)	86 956 651
$C_{26}H_{38}O_4$	3 β -Acetoxy-20-hydroxy- Δ^5 -cholonic acid lactone	1000-1900	Sol	Spec, Freq	Jones	JACS 81 (1959)	5242
$C_{26}H_{38}O_4$	3 β ,22-Diacetoxy-5,20(22)bisnorcholeliene	-	-	Band study	Moffett	JACS 74 (1952)	2183
$C_{26}H_{38}O_4$	Lupulone	2-10 μ	S	Spec, Group freq, Struct	Howard	JCS - (1952)	1902
$C_{26}H_{38}O_4$	5 α ,22a-C-Norspirostane-3,11-dione	-	-	Freq	Wendler	JACS 77 (1955)	1632
$C_{26}H_{38}O_4$	Δ^5 -20-(Spiro-2-oxa-3-oxocyclopentano)pregnenol-3 β -acetate	-	Sol	Group freq	Jones	JACS 72 (1950)	956
$C_{26}H_{38}O_5$	$\Delta^9(11)$ -3 α -Acetoxy-12-ketocholelic acid	1700	Sol Sol,S	Struct, Anal, Freq Group freq	Jones Tarpley	JACS 71 (1949) AFS 9 (1955)	241 69
$C_{26}H_{38}O_5$	3 β ,22-Diacetoxibisnorallanol-20(22)-en-11-one	-	Sol	Group freq	Cameron	JCS - (1953)	3864
$C_{26}H_{38}O_5$	3 β ,22-Diacetoxy-9 β -bisnorallanol-20(22)-en-11-one	-	Sol	Group freq	Cameron	JCS - (1953)	3864
$C_{26}H_{38}O_5$	11 α ,22-Diacetoxibisnor-4-cholen-3-one	-	-	Struct	Meister	JACS 76 (1954)	5679

$C_{26}H_{38}O_5$	2 β ,4b-Dimethyl-1-carbethoxy-methylene-2-methylallyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4 β -ol	S	Band freq	Arth	JACS 76 (1954)	1715
$C_{26}H_{38}O_5$	2 β ,4b-Dimethyl-1-ethoxy-ethynyl-2-methylallyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-1 β ,4 β -diol	S	Band freq	Arth	JACS 76 (1954)	1715
$C_{26}H_{38}O_5$	Methyl 3 α -formoxy- Δ^9 (11)12-ketocholenate	Sol	Group freq	Archer	JACS 76 (1954)	4915
$C_{26}H_{38}O_6$	3 β ,5 α -Diacetoxy-11-oxobis-norcholan-22-al	Sol	Group freq	Bladon	JCS - (1954)	125
$C_{26}H_{38}O_6$	2 α ,4b-Dimethyl-1-carbethoxy-methyl-2-methylallyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-1 β -ol-4-one	S	Band freq	Arth	JACS 76 (1954)	1715
$C_{26}H_{38}O_6$	2 β ,4b-Dimethyl-1-carbethoxy-methyl-2-methylallyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-1 α -ol-4-one	S	Band freq	Arth	JACS 76 (1954)	1715
$C_{26}H_{38}O_6$	2 β ,4b-Dimethyl-1-carbethoxy-methyl-2-methylallyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-1 β -ol-4-one	S	Band freq	Arth	JACS 76 (1954)	1715
$C_{26}H_{38}O_6$	Methyl-3 α -formoxy-11,12-diketocholanae	Sol	Group freq	Archer	JACS 76 (1954)	4915

C ₂₆ H ₃₈ O ⁷	Ethyl 3β,19-diacetoxy-5-hydroxy-Δ ¹⁴ -etiocolanate	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
C ₂₆ H ₃₈ O ⁸	Quabagenin monoacetone	2-16 μ	S	Ident Spec, Ident	Sneeden Djerassi	JACS JOC	75 (1953) 19 (1954)	3510 1351
C ₂₆ H ₃₆₋₃₈ O ⁹	Hydroxylimoninic acid	2-16 μ	S	Spec, Band freq, Struct	Rosenfeld	JACS	73 (1951)	2491
C ₂₆ H ₃₉ BrO ³	2-Bromoandrostanol-17β-one-3-hexahydrobenzoate	-	Sol	Group freq	Jones	JACS	72 (1950)	956
C ₂₆ H ₄₀	1-Hexadecyl-naphthalene	690-3239	L	Table, I	Anderson	JCS	- (1953)	443
C ₂₆ H ₄₀	2-Hexadecyl-naphthalene	720-3242	L	Table, I	Anderson	JCS	- (1953)	443
C ₂₆ H ₄₀ ⁴	Δ ⁵ -3β-Acetoxycholeonic acid	-	S, Sol	Group freq	Tarpley	APS	9 (1955)	69
C ₂₆ H ₄₀ ⁴	Methyl 3β-acetoxyallonor-16-choleolate	-	S	Band study	Ryer	JACS	74 (1952)	4464
C ₂₆ H ₄₀ ⁴	22a,5α-C-Nor-D-homo-18-nor-spirostan-3β-ol-17a-one	-	-	Band study Ident	Hirschmann Hirschmann	JACS JACS	74 (1952) 76 (1954)	2693 4013
C ₂₆ H ₄₀ ⁵	3α-Acetoxy-11-ketonorcho-1700 lanic acid methyl ester	1700	Sol	Struct, Group freq	Jones	JACS	71 (1949)	241
C ₂₆ H ₄₀ ⁵	Methyl 3α-formoxy-11-ketocholanoate	-	Sol	Group freq	Archer	JACS	76 (1954)	4915
C ₂₆ H ₄₀ ⁵	Methyl 3α-formoxy-12-ketocholanoate	-	Sol	Group freq	Archer	JACS	76 (1954)	4915
C ₂₆ H ₄₀ ⁵	Methyl 1-3β-methoxy-3α,9α-oxido-11-ketocholanoate	-	-	Band study	Heymann	JACS	73 (1951)	5252
C ₂₆ H ₄₀ ⁶	Methyl 1-3α-formoxy-12β-hydroxy-11-ketocholanoate	-	Sol	Group freq	Archer	JACS	76 (1954)	4915
C ₂₆ H ₄₀ ⁸	d1-Dimethyl-3β,1β-diacetoxytioallohomobilanoate	-	-	Ident	Johnson	JACS	76 (1954)	3353

$C_{26}H_{41}NO_2$	16 α -Piperidino-5-pregnen-3 β -ol-20-one	-	Ident	Gould	JACS	76 (1954)	5567
$C_{26}H_{42}$	$\Delta^{3,5}$ -B-Norcholestadiene	-	Ident	Fieser	JACS	75 (1953)	4386
$C_{26}H_{42}O_2$	Δ^5 -Norcholestenol-3 β -one-24	S, Sol	Group freq	Tarpley	APS	9 (1955)	69
$C_{26}H_{42}O_2$	Δ^5 -Norcholestenol-3 β -one-25	S, Sol	Group freq	Tarpley	APS	9 (1955)	69
$C_{26}H_{42}O_2$	B-Norcoprostane-3,6-dione	Sol	Band freq, Ident	Fieser	JACS	75 (1953)	4386
$C_{26}H_{42}O_4$	Dinonyl phthalate	-	Band freq, I	Kendall	APS	7 (1953)	179
$C_{26}H_{42}O_4$	Methyl 3 β -acetoxyallonorcholeanate	S	Band freq	Ryer	JACS	74 (1952)	4464
$C_{26}H_{42}O_5$	3 β -Acetoxy-22,22-dimethoxy-bisnorallocholan-11-one	Sol	Group freq	Page	JCS	- (1955)	2017
$C_{26}H_{42}O_5$	Methyl 3 β -acetoxy-17 α -hydroxyallonorcholeanate	-	Band freq	Ryer	JACS	74 (1952)	4464
$C_{26}H_{42}O_5$	Methyl 3 β -Methoxy-3 α ,9 α -oxido-11-hydroxycholeanate	-	Freq	Heymann	JACS	73 (1951)	5252
$C_{26}H_{44}O$	2-Oxo-A-norcholestane	Sol	Group freq	Smith	JACS	76 (1954)	6119
$C_{26}H_{44}O$	3-Oxo-A-norcholestane	Sol	Group freq	Smith	JACS	76 (1954)	6119
$C_{26}H_{44}O_2$	5-Hydroxy-3,5-seco 4-norcholestan-3-oic acid lactone	S	Spec, Freq	Jones	JACS	81 (1959)	5242
$C_{26}H_{44}O_4$	3 α ,12 α -Dihydroxycholelanic acid ethyl ester	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{26}H_{44}O_5$	Ethyl 3 α ,7 α ,12 α -tri-hydroxycholelate	Sol	Group study	Kabasakalian	AC	31 (1959)	375
$C_{26}H_{46}$	1,3-Dimethyl-2-n-octadecylbenzene	-	Freq	Schlatter	JACS	76 (1954)	4952

C ₂₆ H ₄₆	1-Phenyleicosane	2-15 μ	L	Spec	Nielsen	AC	21 (1949)	369
C ₂₆ H ₄₆	2-Phenyleicosane	2-15 μ	L	Spec	Nielsen	AC	21 (1949)	369
C ₂₆ H ₄₆	3-Phenyleicosane	2-15 μ	L	Spec	Nielsen	AC	21 (1949)	369
C ₂₆ H ₄₆	4-Phenyleicosane	2-15 μ	L	Spec	Nielsen	AC	21 (1949)	369
C ₂₆ H ₄₆	5-Phenyleicosane	2-15 μ	L	Spec	Nielsen	AC	21 (1949)	369
C ₂₆ H ₄₆	7-Phenyleicosane	2-15 μ	L	Spec	Nielsen	AC	21 (1949)	369
C ₂₆ H ₄₆	9-Phenyleicosane	2-15 μ	L	Spec	Nielsen	AC	21 (1949)	369
C ₂₆ H ₄₆	8-p-Tolylnonadecane	1.1-1.25 μ	L	Anal, Absorption	Evans	AC	23 (1951)	1604
C ₂₆ H ₄₈	9-n-Dodecyltetradeca- hydroanthracene	12.6-14.7 μ	Sol, L	Struct	Francis	AC	25 (1953)	1466
C ₂₆ H ₅₀	9-[α -(cis-0.3,3-Bicyclo -octyl)-methyl]heptade -cane	1.1-1.25 μ 12.6-14.7 μ	L L	Anal Struct, Anal	Evans Francis	AC AC	23 (1951) 25 (1953)	1604 1466
C ₂₆ H ₅₀ ^O ₄	Di-(2-ethylhexyl) sebacate	2-14 μ	L	Spec	Kapf	JCP	16 (1948)	446
C ₂₆ H ₅₀ ^O ₄	Di-n-octylsebacate	2-16 μ	Sol	Spec	Stahl	JACS	74 (1952)	5487
C ₂₆ H ₅₂	1-Cyclohexyleicosane	2-15 μ	L	Spec, Anal	Nielsen	AC	21 (1949)	369
C ₂₆ H ₅₂	2-Cyclohexyleicosane	3.4-14.7 μ	Sol	Anal	Francis	AC	25 (1953)	1466
C ₂₆ H ₅₂	3-Cyclohexyleicosane	2-15 μ	L	Spec, Anal	Nielsen	AC	21 (1949)	369
C ₂₆ H ₅₂	4-Cyclohexyleicosane	2-15 μ	L	Spec, Anal	Nielsen	AC	21 (1949)	369
C ₂₆ H ₅₂	5-Cyclohexyleicosane	2-15 μ	L	Spec, Anal	Nielsen	AC	21 (1949)	369
C ₂₆ H ₅₂	7-Cyclohexyleicosane	2-15 μ	L	Spec, Anal	Nielsen	AC	21 (1949)	369
C ₂₆ H ₅₂	9-Cyclohexyleicosane	2-15 μ	L	Spec, Anal	Nielsen	AC	21 (1949)	369

$C_{26}^H_{52}$	11-Cyclohexyleicosane	2-15 μ	L	Spec, Anal	Nielsen	AC	21 (1949)	369
$C_{26}^H_{52}$	11-Cyclopentylheneicosane	1.1-1.25 μ	L	Group absorption coeff. anal	Evans	AC	23 (1951)	1604
$C_{26}^H_{52}$	1,4-Di-n-decylcyclohexane	12.6-14.7 μ	Sol, L	Struct, Anal	Francis	AC	25 (1953)	1466
$C_{26}^H_{52}O_2$	n-Hexacosanoic acid	2-15 μ	S	Spec, Anal	Meiklejohn	AC	29 (1957)	329
$C_{26}^H_{54}$	5,14-Dibutyloctadecane	1.1-1.25 μ 12.6-14.7 μ	L Sol, L	Anal, Absorption Anal	Evans Francis	AC AC	23 (1951) 25 (1953)	1604 1466
$C_{26}^H_{54}$	11-(2',2'-Dimethylpropyl)heneicosane	1.1-1.25 μ	L	Anal, Absorption	Evans	AC	23 (1951)	1604
$C_{26}^H_{54}$	3-Ethyltetracosane	8-13 μ 700-2800	- L, S	Spec Spec	Thompson Richards	N PRS	158 (1946) 195 (1948)	234 1
$C_{26}^H_{54}$	n-Hexacosane	700-2800 12.6-14.7 μ 1470	L, S Sol L, S	Spec Struct, Anal Freq	Richards Francis Stein	PRS AC JCP	195 (1948) 25 (1953) 22 (1954)	1 1466 1993
		700-3000 750-1150	Sol S	Ext. coefficient Struct	Jones Snyder	SA JCP	9 (1957) 27 (1957)	235 969
		700-1500	S	Freq, Assign	Snyder	JMS	4 (1960)	411
$C_{26}^H_{54}$	11-n-Pentylheneicosane	12.6-14.7 μ	Sol, L	Struct, Anal	Francis	AC	25 (1953)	1466
$C_{27}^H_{54}$	1-Carboxybenzylidene-2-hydroxy-4-benzohydrilidene-2,5-cyclohexadiene lactone	-	Sol	Band freq	Wasserman	JACS	77 (1955)	973
$C_{27}^H_{19}N_3O_5S_2$	2-(2'-Pyridono)-1,4-naphthoquinone dibenzene sulfonimide	-	-	Group freq	Adams	JACS	76 (1954)	702
$C_{27}^H_{20}N_2$	2-Phenyl 3-benzohydrilinoxaline	-	-	Ident	House	JACS	76 (1954)	1235

C_{27} COMPOUNDS

$C_{27}^H_{18}O_2$

1-Carboxybenzylidene-2-hydroxy-4-benzohydrilidene-2,5-cyclohexadiene lactone

$C_{27}^H_{19}N_3O_5S_2$

2-(2'-Pyridono)-1,4-naphthoquinone dibenzene sulfonimide

$C_{27}^H_{20}N_2$

2-Phenyl 3-benzohydrilinoxaline

$C_{27}H_{20}O_2$	2,2,4,4-Tetraphenyl-oxetanone	-	-	Group freq, Band freq Struct	Hoey Murr	JACS JACS	77 (1955) 77 (1955)	391 4430
$C_{27}H_{21}ClN_2O_4$	α -p-Nitrobenzoyloxy- β -(1-benzyl-2-pyridyl)-styrene chloride	-	S	Group freq	Baker	JOC	20 (1955)	118
$C_{27}H_{21}N_3O_5S_2$	N-(1',4'-Dibenzenesulfonamido-2'-naphthyl)-2-pyridone	-	-	Group freq	Adams	JACS	76 (1954)	702
$C_{27}H_{22}$	9,9-Dibenzylfluorene	700-1400	Sol	Spec	Scherf	CJC	38 (1960)	697
$C_{27}H_{22}ClNO_2 \cdot H_2O$	α -Benzoyloxy- β -(1-benzyl-2-pyridyl)-styrene chloride hydrate	-	-	Group freq	Baker	JOC	20 (1955)	118
$C_{27}H_{22}N_2O_5S_2$	Cyclopentadiene-1,4-naphthoquinone dibenzene-sulfonimide adduct	-	-	Group freq	Adams	JACS	74 (1952)	2593
$C_{27}H_{22}N_2O_6S_2$	1,4-Naphthoquinomedibenzene-sulfonimido-2-acetylactone	-	-	Group indic	Adams	JACS	74 (1952)	5557
$C_{27}H_{22}O$	cis-1,1,2,3-Tetraphenyl-2-propen-1-ol	-	-	Group freq, Struct	Lutz	JACS	77 (1955)	366
$C_{27}H_{22}O$	1,2,3,3-Tetraphenyl-2-propen-1-ol	-	-	Group freq	Lutz	JACS	77 (1955)	366
$C_{27}H_{22}O$	o-Tolyl trityl ketone	-	-	Group freq	Fuson	JACS	77 (1955)	1138
$C_{27}H_{22}O_2$	p-Anisyl trityl ketone	-	-	Group freq	Fuson	JACS	77 (1955)	1138
$C_{27}H_{22}O_2$	α -Hydroxy-sym-tetraphenylacetone	-	S	Group freq	Dean	JACS	76 (1954)	4988
$C_{27}H_{22}O$	2,2,4,4-Tetraphenylloxetanol	-	S, Sol	Group freq, Band freq	Hoey	JACS	77 (1955)	391
$C_{27}H_{22}O_5S$	9-(9-Benzylfluorenyl)-p-tolyl sulfone	1100-1400	Sol	Spec, Freq	Bavin	SA	16 (1960)	1312
$C_{27}H_{23}NO_3$	3,6-Dimethyl-3,6-methano-4-nitro-7-oxo-1,2,5-triphenylcyclohexene	2-15 μ	S	Struct	Allen	JOC	20 (1955)	306

$C_{27}H_{24}$	1,1,1,3-Tetraphenylpropane	-	Sol	Group freq	Pinchas	JCS	- (1954)	863
$C_{27}H_{24}N_2O_2$	1,2-Dimethyl-3-(1-phenyl-2-phthalimidopropyl)indole	-	S	Freq	Noland	JACS	81 (1959)	1203
$C_{27}H_{24}N_2O_2S_2$	1,4-Dihydro-2-methyl-9,10-anthracene dibenzene-sulfonamide	-	-	Group freq	Adams	JACS	74 (1952)	2593
$C_{27}H_{24}N_2O_2S_2$	1,4,4a,9a-Tetrahydro-2-methyl-9,10-anthraquinone dibenzene-sulfonamide	-	-	Group freq	Adams	JACS	74 (1952)	2593
$C_{27}H_{24}N_2O_2S_2$	1,4-Naphthalene dibenzene-sulfonamido-2-acetylacetone	-	-	Group indic	Adams	JACS	74 (1952)	5557
$C_{27}H_{24}N_2O_4$	10-(trans-1,2-Dimethoxycarbonylvinyl)-acridinium ethoxide picrate	-	S	Ident	Acheson	JCS	- (1954)	3240
$C_{27}H_{24}O$	Mesityl 1-benzyl-2-naphthyl ketone	-	-	Grignard react-prod	Fuson	JOC	16 (1951)	643
$C_{27}H_{24}O$	Mesityl 1-p-tolyl-2-naphthyl ketone	-	-	Grignard react-prod	Fuson	JOC	16 (1951)	643
$C_{27}H_{25}N_2O_4$	2-Phenyl-N,N'-bis(4-carboethoxyphenyl)-4,6-diamino-s-triazine	2-15 μ	S	Assign	Reimschuessel	JACS	82 (1960)	3756
$C_{27}H_{26}OSi$	Triphenylsilylpropyl phenyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{27}H_{26}Si$	Tri-p-tolylphenylsilane	-	-	Purity Group freq	Brook Margoshes	JACS AC	76 (1954) 27 (1955)	2333 351
$C_{27}H_{27}NO$	cis-1-Cyclohexyl-2-phenyl-3-(p-phenylbenzoyl)ethylenimine	1122-3070 650-4000	S S,Sol	Table, Freq, I Group freq, I	Cromwell Cromwell	JOC JACS	17 (1952) 75 (1953)	414 6252

C ₂₇ H ₂₇ NO	trans-1-Cyclohexyl-2-phenyl-3-(p-phenylbenzoyl)ethanimine	1125-3070 650-4000	S S, Sol	Table, Freq, I Group freq, I	Cromwell Cromwell	JOC JACS	17 (1952) 75 (1953)	414 6252
C ₂₇ H ₂₇ N ₃ O ₆	1,3,5-Tris-p-methoxybenzoylperhydro-s-triazine	-	-	Struc, Ident, Group freq	Emmons	JACS	74 (1952)	5524
C ₂₇ H ₂₈ O	α-Benzal-δ-phenyl-valeromesitylene	-	-	Group freq	Fuson	JOC	18 (1953)	1263
C ₂₇ H ₂₉ NO	1-Methyl-3-(3,3-diphenyl-2-propenyl)-4-phenyl-4-hydroxypiperidine	-	-	Group freq	McElvain	JACS	76 (1954)	5625
C ₂₇ H ₂₉ NO.HCl	1-Methyl-3-(3,3-diphenyl-2-propenyl)-4-phenyl-4-hydroxypiperidine hydrochloride	-	-	Group freq	McElvain	JACS	76 (1954)	5625
C ₂₇ H ₃₀	Cycloheptacos-1,3,10,12,19,21-hexayne	3-15 μ	S	Spec	Wolovsky	JACS	81 (1959)	4600
C ₂₇ H ₃₀ NB	Trimethylammonium-tetraphenylborate	-	S	H bond, Band freq	Nuttall	JCS	- (1960)	4965
C ₂₇ H ₃₀ N ₂ O ₂	Benzyldeacetyl-aspidospermine	-	-	Group freq, I, Struc	Witkop	JACS	76 (1954)	5603
C ₂₇ H ₃₀ O ₂	α-Hydroxybenzyl-δ-phenyl-valeromesitylene	-	-	Group freq	Fuson	JOC	18 (1953)	1263
C ₂₇ H ₃₀ O ₁₆	Rutin	1550-4000	S L	Group freq, H bond Freq	Hergert Inglett	JACS JOC	75 (1953) 23 (1958)	1622 93
C ₂₇ H ₃₁ N ₃ O ₅	Haplophytine	800-3500	Sol - -	Spec, Band freq Ident Band freq	Rogers Snyder Snyder	JACS JACS JACS	74 (1952) 76 (1954) 76 (1954)	1987 2819 4601
C ₂₇ H ₃₂ N ₂ O	Benzyldeacetylaspido-spermine	-	-	Group freq, I, Struc	Witkop	JACS	76 (1954)	5603

$C_{27}H_{32}N_2O_6S_2$	N-Ethyl-N'-carbethoxymethyl-N,N'-dibenzene-sulfonyldiaminomesitylene	650-3900	-	Spec	Adams	JACS 70 (1948)	4204
$C_{27}H_{32}N_4O_{10}$	2,4-Dicarbethoxy-3-(3',4'-dimethoxyphenyl)-5-methylcyclohexanone 2,4-dinitrophenylhydrazone	-	Sol	Group freq	Walker	JACS 77 (1955)	3664
$C_{27}H_{32}N_4O_{11}$	2,4-Dicarbethoxy-3-(3',4'-dimethoxyphenyl)-5-hydroxy-5-methylcyclohexanone 2,4-dinitrophenylhydrazone	-	Sol	Group freq	Walker	JACS 77 (1955)	3664
$C_{27}H_{32}N_8O_{14}$	(d,l, - or dl-) sparteine dipicrate	650-3500	S, Sol	Spec	Leonard	JACS 72 (1950)	1316
$C_{27}H_{32}O_3$	1,5-Diduryl-1,3-pentadien-1-ol-5-one acetate	-	S	Band & Group freq	Fuson	JACS 75 (1953)	5402
$C_{27}H_{32}O_{14}$	Naringin	-	L	Freq	Inglett	JOC 23 (1958)	93
$C_{27}H_{33}BrO_{16}$	Tetraacetylasperuloside bromomethoxide	800-1773	S	Table, I	Briggs	JCS - (1954)	4182
$C_{27}H_{35}NO_3$	2,2',2"-Trihydroxy-3,3',3",5,5',5"-hexamethyltribenzylamine	-	-	Spec, Freq, Assign	Ignonin	DANS 121 (1958)	652
$C_{27}H_{33}N_2O_5$	Dihydrohaplophytine	-	-	Band freq	Snyder	JACS 76 (1954)	2819
$C_{27}H_{34}N_4O_6$	Testosterone acetate 2,4-dinitrophenylhydrazone	-	-	Ident	Beereboom	JACS 75 (1953)	3500
$C_{27}H_{34}OSi$	Triphenylsilylheptyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826

C ₂₇ H ₃₄ OSi	Triphenylsilyloctyl methyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
C ₂₇ H ₃₄ OSi	Triphenylsilylpentyl butyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
C ₂₇ H ₃₄ O ₃	2,4b-Dimethyl-2-methyl-1,2,3,4,4a,4b,5,6,7,8,10,10aβ-dodecahydrophenanthrene-7β-ol-1-one benzoate	-	S	Band freq	Sarett	JACS	75 (1953)	2112
C ₂₇ H ₃₄ O ₆	Δ ^{5,7} -Pregnadien-3β-ol-20-one acetate maleic anhydride adduct	670-3700	S	Spec, Ident, Struct	Antonucci	JOC	16 (1951)	1356
C ₂₇ H ₃₄ O ₈	3,5-Pregnadiene-3,21,21-triol-11,20-dione triacetate	-	S	Group freq, Ident	Gould	JACS	75 (1953)	3593
C ₂₇ H ₃₄ O ₉	Δ ⁴ -Pregnene-2α,17α,21-triol-3,11,20-trione triacetate	-	Sol	Band freq	Rosenkrantz	JACS	77 (1955)	145
C ₂₇ H ₃₄ Si	Tri-γ-propylphenylsilane	2-16 μ	Sol	Freq	Kniseley	SA	15 (1959)	651
C ₂₇ H ₃₅ NO ₃	1,14-Dimethyl-2-keto-3-methylanilinomethylene-6,7-dihydroxy-Δ ¹⁽¹¹⁾ -dodecahydrophenanthrene acetonide	2-12 μ	Sol	Spec	Woodward	JACS	74 (1952)	4223
C ₂₇ H ₃₆ O ₃	Δ ^{1,4,6} -22-isospirostatrien-3-one	-	-	Band freq	Yashin	JACS	73 (1951)	4654
C ₂₇ H ₃₆ O ₃	Δ ^{4,6,8} -22-isospirosta-trien-3-one	-	-	Band freq	Yashin	JACS	73 (1951)	4654
C ₂₇ H ₃₆ O ₃	Δ ^{4,7,9(11)} -22-isospirosta-trien-3-one	-	-	Band freq	Yashin	JACS	73 (1951)	4654

$C_{27}H_{36}O_4$	dl-17-Furfurylidene-D-homoeplandrosterone acetate	-	-	Ident	Johnson	JACS 75 (1953)	2275
$C_{27}H_{36}O_4$	22a-Spirosta-4,8-diene- β ,11-dione	-	Sol	Group freq	Djerassi	JCS - (1954)	2346
$C_{27}H_{36}O_5$	7 α ,8 α -9 α ,11 α -Diepoxy-22a-spirost-4-en- β -one	-	Sol	Band freq	Djerassi	JCS - (1954)	2346
$C_{27}H_{36}O_5$	9 α ,11 α -Epoxy- $\Delta^{4,6}$ -22a-spirostadien-8 ξ -ol- β -one	-	Sol	Band freq	Lemin	JACS 76 (1954)	5672
$C_{27}H_{36}O_5$	$\Delta^{8(9)}$ -22-Isoallospirosten- β ,7,11-trione	-	Sol	Freq, Band study	Djerassi	JACS 74 (1952)	1712
$C_{27}H_{36}O_6$	3 β ,16-Diacetoxy- $\Delta^{14(15),20(22)}$ -cardadien-olide	1000-1900	Sol	Spec, Freq	Jones	JACS 81 (1959)	5242
$C_{27}H_{36}O_6$	$\Delta^{5,9(11),16}$ -Pregnatrien-21-ol- β ,20-dione-21-acetate β ,20-bis-ethylene ketal	-	S	Band freq, Group freq	Allen	JACS 77 (1955)	1028
$C_{27}H_{36}O_7$	$\Delta^{5,16}$ -Pregnadien-21-ol- β ,11,20-trione 21-acetate β ,20-bisethylene ketal	-	S	Band freq	Allen	JACS 77 (1955)	1028
$C_{27}H_{36}O_7$	$\Delta^{5,7,9(11)}$ -Pregnatriene-17 α ,21-diol- β ,20-dione-21-acetate β ,20-bisethylene ketal	-	S	Band freq	Antonucci	JACS 76 (1954)	2956
$C_{27}H_{37}BrO_4$	$\Delta^{4,23}$ -Bromo-22a-spirostene- β ,12-dione	-	Sol	Band freq	Djerassi	JACS 75 (1953)	4885
$C_{27}H_{37}ClO_2$	3-Chloro- $\Delta^{3,5,7}$ -22-isospirostatriene	-	-	Group indic, Struct	Dauben	JACS 75 (1953)	3255

C ₂₇ H ₃₈ N ₂ O ₄ S ₂	Dehydroisoandrostenylisothiuronium p-toluene-sulfonate	670-3700	S	Spec	JOC	16 (1951)	679
C ₂₇ H ₃₈ O	Neogestosterone	- 720-1630	Sol S, Sol	Group freq Band freq	JOC JACS	17 (1952) 77 (1955)	764 3300
C ₂₇ H ₃₈ O ₃	Δ ^{4,7} -22-isospirosteradiene-3-one	-	-	Band freq	JACS	73 (1951)	4654
C ₂₇ H ₃₈ O ₃	Δ ^{7,9(11)} -22-Isospirostadien-3-one	-	-	Band freq	JACS	73 (1951)	4654
C ₂₇ H ₃₈ O ₄	Δ ⁴ -22a-Spirostene-3,6-dione	-	S	Band freq	JOC	19 (1954)	1509
C ₂₇ H ₃₈ O ₄	Δ ⁴ -22a-Spirostene-3,12-dione	-	-	Group freq	JACS	75 (1953)	4885
C ₂₇ H ₃₈ O ₄	Δ ⁸ -22a-Spirostene-3,11-dione	-	-	Band freq	JACS	76 (1954)	5672
C ₂₇ H ₃₈ O ₄	Δ ⁸ -22a,5β-Spirostene-3,11-dione	-	Sol	Band freq	JACS	76 (1954)	5672
C ₂₇ H ₃₈ O ₅	3β-Acetoxy-16,17-cyclopropano-16α-carbethoxy-5-pregn-20-one	-	-	Group freq	JACS	76 (1954)	3686
C ₂₇ H ₃₈ O ₅	Anhydrohecogenoic acid	-	S	Band freq	JCS	- (1955)	637
C ₂₇ H ₃₈ O ₅	7ξ,8Ξ,9α,11α-Diepoxystero-22a,5β-spirostan-2-one	-	Sol	Band freq	JACS	76 (1954)	5672
C ₂₇ H ₃₈ O ₅	9α,11α-Epoxy-3-oxo-22a-spirost-7-en-5α-ol	-	Sol	Band freq	JCS	- (1954)	2346

$C_{27}H_{38}O_5$	$\Delta^{8(9)}$ -22-Isocallospirosten-3,7-dione-11 α -ol	-	S	Band freq, Group freq	Djerassi	JACS	74 (1952)	1712
$C_{27}H_{38}O_5$	9 α ,11 α -Oxido-22-isocallospirostan-3,7-dione	-	S	Freq, Group band	Djerassi	JACS	74 (1952)	1712
$C_{27}H_{38}O_6$	$\Delta^{16,20}$ -Allopregnadiene-3 β ,6 β ,20-triol triacetate	-	Sol	Band freq	Romo	JACS	76 (1954)	5169
$C_{27}H_{38}O_6$	7 α ,8 α ,9 α ,11 α -Diepoxy-5- α -hydroxy-22 α -spirostan-3-one	-	Sol	Band freq	Djerassi	JCS	- (1954)	2346
$C_{27}H_{38}O_6$	$\Delta^{5,16}$ -Pregnadien-21-ol-3,20-dione-21-acetate 3,20-bisethylene ketal	-	S	Band & Group freq	Allen	JACS	77 (1955)	1028
$C_{27}H_{38}O_7$	16 α -Ethoxy- Δ^5 -pregnen-2,3 β -diol-12,20-dione diacetate	-	-	Group indic	Moore	JACS	74 (1952)	6287
$C_{27}H_{38}O_7$	$\Delta^{4,7}$ -Pregnadiene-17 α ,21-diol-3,20-dione 21-acetate 3,20 bisethylene ketal	-	S	Band freq	Antomucci	JACS	76 (1954)	2956
$C_{27}H_{38}O_7$	$\Delta^{5,7}$ -Pregnadiene-17 α ,21-diol-3,20-dione 21-acetate 3,20-bis-ethylene ketal	-	S	Band freq	Antomucci	JACS	76 (1954)	2956
$C_{27}H_{38}O_7$	$\Delta^{5,9(11)}$ -Pregnadiene 17 α ,21-diol-3,20-dione 21-acetate 3,20-bis-ethylene ketal	-	S	Group freq	Bernstein	JACS	75 (1953)	4830
$C_{27}H_{38}O_8$	9(11) α ,17(20) α -Diepoxy-5 α -pregnane-3,11,20-triol-3,11,20-triacetate	-	-	Group freq	Chamberlin	JACS	77 (1955)	1221

$C_{27}H_{38}O_8$	$C_{27}H_{38}O_8$	$C_{27}H_{38}O_9$	$C_{27}H_{38}O_9$	$C_{27}H_{38}O_{10}$	$C_{27}H_{38}O_{11}$	$C_{27}H_{38}O_{18}$	$C_{27}H_{38}O_{18}$	$C_{27}H_{39}BrN_2O_{17}S$	$C_{27}H_{39}IO_3$	$C_{27}H_{39}NO_2$	$C_{27}H_{39}NO_3$
Δ^5 -Pregnene-17 α ,21-diol-3,11,20-trione-3,20-diethylene ketal-21-acetate	3 α ,17 α ,21-Triacetoxypregnane-11,20-dione	3 α -Succinoxy-7 α -acetoxyl-12-ketotiocholanolic acid methyl ester	3 α -Succinoxy-12 α -acetoxyl-7-ketotiocholanolic acid methyl ester	β -Quabagenin diacetate	Methyl-1-oxo-3 β , (11), 19-triacetoxy-5, 14-dihydroxy-14 β -etianate	β -D-Galactopyranosyl-(1 \rightarrow 4)-D-al tryptanose-1, 2-(methyl orthoacetate) hexaacetate	β -D-Glucopyranosyl-(1 \rightarrow 4)-D-mannopyranose 1, 2-(methyl orthoacetate) hexaacetate	S-(Hep taacetyl- β -D-cellobiosyl) thiuronium bromide	6-Iodo- Δ^4 -22 α ,25 α , spirosten-3-one	Veratramine	Jervine
		1700	1700	2-16 μ	-	2-15 μ	2-15 μ	8-15 μ	-	-	1500-3700
		Sol	Sol	-	-	S	S	S	Sol	Sol S	S, Sol Sol
		Ident	Absorp freq, Struct, Anal Group freq	Spec	Struc	Spec	Spec	Spec	Freq	Anal Spec	Group freq, Spec Anal
		Soloway	Jones Jones Jones	Djerassi	Florey	Tipson	Tipson	Bouner	Djerassi	Papineau Tamm	Marion Papineau
		JACS 75 (1953)	JACS 71 (1949) JACS 72 (1950)	JOC 19 (1954)	JOC 19 (1954)	JRNB 62 (1959)	JRNB 62 (1959)	JACS 73 (1951)	JACS 77 (1955)	AC 24 (1952) JACS 74 (1952)	JACS 73 (1951) AC 24 (1952)
		5442	241 956	1351	1174	257	257	2241	3826	1918 3842	305 1918

$C_{27}H_{40}O_4$	β -Hydroxy-22a-spirosten-5-en-12-one	2.5-3.5 μ	Sol	Group study	Kabasakalian	AC	31 (1959)	375
$C_{27}H_{40}O_4$	6β -Hydroxy- Δ^4 -22a-spirosten-3-one	-	Sol	Band freq, Group study	Romo	JOC	19 (1954)	1509
$C_{27}H_{40}O_4$	Δ^8 -22a-5 α -14-Iso(β)-spirosten-3 β -ol-11-one	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3496
$C_{27}H_{40}O_4$	Δ^{13} (17a)-22a,5 α -C-Nor/D-homospirosten-3 β -ol-11-one	2-16 μ	Sol	Spec	Hirschmann	JACS	76 (1954)	4013
$C_{27}H_{40}O_4$	22a-Spiresta- Δ^7 ,9(11)diene-3 β ,5 α -diol	-	Sol	Group freq	Djerassi	JCS	- (1955)	2346
$C_{27}H_{40}O_4$	22a,5 α -Spirostane-3,6-dione	-	Sol	Band freq	Romo	JOC	19 (1954)	1509
$C_{27}H_{40}O_4$	22a,5 α -Spirostane-3,11-dione	-	Sol	Band freq	Djerassi	JACS	74 (1952)	1712
$C_{27}H_{40}O_4$	22a,5 β -Spirostane-3,11-dione	-	Sol	Band freq	Djerassi	JACS	76 (1954)	5533
$C_{27}H_{40}O_4$	22a,5 α -Spirostane-3,12-dione	-	-	Ident	Djerassi	JACS	75 (1953)	4885
$C_{27}H_{40}O_4$	22a,5 β -Spirostane-3,12-dione	-	-	Ident, Band freq	Djerassi	JACS	75 (1953)	4885
$C_{27}H_{40}O_4$	Δ^8 -22a,5 α -Spirosten-3 β -ol-7-one	-	Sol	Group freq, Band freq	Mancera	JACS	75 (1953)	4428
$C_{27}H_{40}O_4$	Δ^8 -22a,5 β -Spirosten-3 α -ol-7-one	-	S	Group freq, Band freq	Rosenkrantz	JACS	75 (1953)	4430
$C_{27}H_{40}O_4$	Δ^8 -22a,5 α -Spirosten-3 β -ol-11-one	-	Sol	Group freq	Djerassi	JACS	75 (1953)	3496

$C_{27}H_{40}O_4$	$\Delta^9(11)-22\alpha,5\alpha$ -Spirosten- β -ol-12-one	-	Sol	Band freq, Ident	So dheimer	JACS 75 (1953)	5930
$C_{27}H_{40}O_5$	$\Delta^9(11)-3\alpha$ -Acetoxy-12-ketocholeonic acid methyl ester	1700	Sol	Struct, Freq	Jones	JACS 71 (1949)	241
$C_{27}H_{40}O_5$	β -Dehydrohecololactone	-	Sol	Group freq	Rothman	JACS 76 (1954)	527
$C_{27}H_{40}O_5$	9,11-Dehydromannogenin	-	-	Group freq	Ricciuti	JACS 74 (1952)	4461
$C_{27}H_{40}O_5$	7 ξ ,8 ξ ,9 α ,11 α -Diepoxy-22 α ,5 β -spirostan-3 α -ol	-	Sol	Absence of C=O band	Lemin	JACS 76 (1954)	5672
$C_{27}H_{40}O_5$	9 α ,11 α -Epoxy-22 α ,5 β -spirostan-8 ξ -ol-3-one	-	Sol	Group freq	Lemin	JACS 76 (1954)	5672
$C_{27}H_{40}O_5$	9 α ,11 α -Epoxy-22 α -spirost-7-ene-3 ξ ,5 α -diol	-	Sol	Band freq	Djerassi	JCS - (1954)	2346
$C_{27}H_{40}O_5$	$\Delta^8(9)-22$ -Isoallospirostan-3 β ,11 α -diol-7-one	-	S	Group freq	Djerassi	JACS 74 (1952)	1712
$C_{27}H_{40}O_5$	Kammogenin	-	-	Group freq	Ricciuti	JACS 74 (1952)	4461
$C_{27}H_{40}O_5$	Methyl 3-acetoxy-11-keto- $\Delta^8(9)$ -cholenate	-	-	Band freq	Heymann	JACS 73 (1951)	5252
$C_{27}H_{40}O_5$	Methyl- β -acetoxy-11-keto- $\Delta^8(9)$ -cholenate	-	-	Band freq	Heymann	JACS 73 (1951)	5252
$C_{27}H_{40}O_5$	22 α ,5 α -Spirostan- β -ol-7,11-dione	-	Sol	Ident	Mancera	JACS 75 (1953)	4428
$C_{27}H_{40}O_5$	22 α ,5 α -Spirostan- β -ol-11,12-dione	-	Sol	Band freq	Djerassi	JACS 76 (1954)	5533
$C_{27}H_{40}O_5$	$\Delta^9(11)-22\alpha,5$ -Spirostene- β ,11-diol-12-one	-	Sol	Band freq	Djerassi	JACS 76 (1954)	5533

C ₂₇ H ₄₀ O ₆	7 α , 8 α , 9 α , 11 α -Diepoxy-22a-spirostane- β , 5 α -diol	Sol	-	Band freq	Djerassi	JCS	- (1954)	2346
C ₂₇ H ₄₀ O ₆	Hecogenoic acid	S	-	Band freq	James	JCS	- (1955)	637
C ₂₇ H ₄₀ O ₆	Methyl 3 α -acetoxy-11, 12-dike tocholanate	Sol	-	Group freq	Archer	JACS	76 (1954)	4915
C ₂₇ H ₄₀ O ₆	Methyl Δ^8 -3 α -acetoxy-7-keto-11 α -hydroxy-cholenate	S	-	Freq, Free OH band	Djerassi	JACS	74 (1952)	3321
C ₂₇ H ₄₀ O ₆	Δ^5 -Pregnen-21-ol- β , 20-dione 21-acetate β , 20-bisethylene ketal	S	-	Band freq	Bernstein	JACS	77 (1955)	2233
C ₂₇ H ₄₀ O ₆	Δ^5 -Pregnentriol- β , 16 α , 20 β -triacetate	-	8-14 μ 2.5-15 μ	Freq, Band freq Spec, Band freq Ident	Hirschmann Hirschmann Hirschmann	JACS JACS JOC	74 (1952) 74 (1952) 20 (1955)	539 5357 572
C ₂₇ H ₄₀ O ₆	Δ^5 -Pregnentriol- β , 20, 21-triacetate	Sol	-	Group freq	Jones	JACS	72 (1950)	956
C ₂₇ H ₄₀ O ₆	$\Delta^{17(20)}$ -Pregnene-3 α , 12 α , 20-triol triacetate	Sol Sol	- -	Group freq, Struct Band freq, Struct	Jones Vanderhaeghe	JACS JACS	74 (1952) 74 (1952)	2820 2810
C ₂₇ H ₄₀ O ₆	$\Delta^{17(20)}$ -Pregnentriol- β , 11 β , 20-triacetate	Sol	-	Band freq, Struct	Jones	JACS	74 (1952)	2820
C ₂₇ H ₄₀ O ₆	$\Delta^{17(20)}$ -Pregnentriol- β , 12 β , 20-triacetate	-	-	Assign	Jones	JACS	70 (1948)	2024
C ₂₇ H ₄₀ O ₆	$\Delta^{20(21)}$ -Pregnene-3 α , 12 α , 20-triol triacetate	Sol	-	Group freq, Group spec, Struct	Vanderhaeghe	JACS	74 (1952)	2810
C ₂₇ H ₄₀ O ₆	β , 16 α , 20 α -Triacetoxy- Δ^5 -pregnene	Sol	2.5-15 μ	Spec, Band freq Ident	Hirschmann Hirschmann	JACS JOC	74 (1952) 20 (1955)	5357 572
C ₂₇ H ₄₀ O ₇	Allopregnane- β , 6 β , 21-triol-20-one triacetate	Sol	-	Band freq	Romo	JACS	76 (1954)	5169

$C_{27}H_{40}O_7$	Allopregnane- β ,7,11 α - triol-20-one triacetate	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3505
$C_{27}H_{40}O_7$	Allopregnane- β ,11 α ,21- triol-20-one triacetate	-	Sol	Freq	Sondheimer	JACS	75 (1953)	2601
$C_{27}H_{40}O_7$	Δ^7 -Allopregnene-17 α ,21- diol-3,20-dione 21- acetate 3,20-bisethylene ketal	-	S	Band freq	Antomucci	JACS	76 (1954)	2956
$C_{27}H_{40}O_7$	Digitogenic acid	-	Sol	Band freq	Klass	JACS	77 (1955)	3829
$C_{27}H_{40}O_7$	Pregnane-3 α ,11 α ,21-triol- 20-one triacetate	-	Sol	Band freq	Sondheimer	JACS	75 (1953)	2601
$C_{27}H_{40}O_7$	Pregnane-3 α ,11 β ,17 α - triol-20-one triacetate	-	-	Group study	Oliveto	JACS	75 (1953)	5486
$C_{27}H_{40}O_7$	Δ^5 -Pregnene-17 α ,21-diol- 3,20-dione 21-acetate 3,20-bisethylene ketal	-	S	Band freq	Antomucci	JACS	76 (1954)	2956
$C_{27}H_{40}O_8$	Allopregnane- β ,11 α ,17 α , 21-tetrol-20-one-3,11, 21-triacetate	-	-	Band freq, Free OH indic	Romo	JACS	75 (1953)	1277
$C_{27}H_{40}O_8$	Allopregnane- β ,17 α ,20 β , 21-tetrol-11-one-3,20, -21-triacetate	770-3700	S	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{27}H_{40}O_8$	Δ^5 -Pregnene-11 β ,17 α ,21- triol-3,20-dione-21- acetate-3,20-bis- ethylene ketal	-	S S	Group freq Ident	Bernstein Allen	JACS JACS	75 (1953) 76 (1954)	4830 6116
$C_{27}H_{40}O_8$	Pregnane-3 α ,17 α ,20 α ,21- tetrol-11-one 3,20,21- triacetate	-	-	Ident	Soloway	JACS	76 (1954)	2941
$C_{27}H_{40}O_8$	3 α ,7 α ,12 α -Triacetoxo- etiocolanic acid, methyl ester	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{27}H_{40}O_8$		-	Sol	Group freq	Jones	JACS	72 (1950)	956

$C_{27}H_{40}O_8$	Ident	JACS	77 (1955)	Schneider	4184
$3\alpha,20\beta,21$ -Triacetoxy- 17α -hydroypregnan-11-one	-	-	-	-	-
$3\beta,6\beta,17\alpha$ -Triacetoxy-pregnan- $5\alpha,10,20$ -one	Sol	JCS	- (1954)	Amendolla	1226
Pregnane- $11\beta,17\alpha,21$ -triol- $3,20$ -dione- $5\alpha,6\alpha$ -oxide- 21 acetate- $3,20$ -bis-ethylene ketal	S	JACS	77 (1955)	Bernstein	2233
Pregnane- $11\beta,17\alpha,21$ -tetrol- $3,20$ -dione- $5\beta,6\beta$ -oxide- 21 -acetate- $3,20$ -bis-ethylene ketal	S	JACS	77 (1955)	Bernstein	2233
3α -Succinoxy- 7α -acetoxy- 12α -hydroxyetiocolanic acid, methyl ester	Sol	JACS	72 (1950)	Jones	956
Methyl $3\beta, (11), 19$ -triacetoxy- $1\beta, 5, 14$ -trihydroxy- 14β -etianate	-	JOC	19 (1954)	Flory	1174
$22a, 25a, 4$ -Bromospirostan- 3 -one	Sol	JACS	77 (1955)	Djerassi	4291
23 -Bromo- $22a, 5\alpha$ -spirostan- 3 -one	Sol Sol	JACS JACS	76 (1954) 77 (1955)	Herran Djerassi	5531 4291
$23E$ -Bromo- $11\beta, 12\beta$ -epoxy- $5\alpha, 22a$ -spirostan- 3β -ol	S Sol	JCS JCS	- (1954) - (1955)	Cornforth Dickson	907 447
$23a$ -Bromo- 3β -hydroxy- $5\alpha, 22a$ -spirostan- 12 -one	S, Sol	JCS	- (1955)	Dickson	447
$23a$ -Bromo- $3\beta, 12\beta$ -dihydroxy- $5\alpha, 22a$ -spirostan- 11 -one	S	JCS	- (1955)	Dickson	447
4 -Bromo- 3 -keto- 12 -acetoxy-cholanic acid methyl ester	Sol	JACS	72 (1950)	Jones	956

$C_{27}H_{41}BrO_5$	11 α -Bromo-12-keto-3 α -acetoxycholanic acid methyl ester	1500-1800	Sol	Group freq, Spec	Jones	JACS 74 (1952)	2828
$C_{27}H_{41}BrO_5$	11 β -Bromo-12-keto-3 α -acetoxycholanic acid methyl ester	1500-1800	Sol	Group freq, Spec	Jones	JACS 74 (1952)	2828
$C_{27}H_{41}Br_3O$	2 α ,2 β ,6 β -Tribromo- Δ^4 -cholesten-3-one	-	-	C=O shift	Fieser	JACS 77 (1955)	3305
$C_{27}H_{41}NO_3$	Dihydrojervine	-	S,Sol	Band freq	Wintersterner	JACS 76 (1954)	5609
$C_{27}H_{41}NO_7$	Digitogenic acid oxime	-	Sol	Band freq	Klass	JACS 77 (1955)	3829
$C_{27}H_{41}NO_8$	Cevinilic acid δ -lactone	-	Sol	Group freq	Kupchan	JACS 77 (1955)	683
$C_{27}H_{42}$	Anthracholestatriene	-	Sol	Band freq, Spec	Scheer	JACS 77 (1955)	3300
$C_{27}H_{42}$	Cholesta-1,4-dien-3-one	400-4000	Sol	Spec, Config, Absorp band, Extinction coeff	Cummins	JOS - (1957)	3847
$C_{27}H_{42}$	Neoergostatriene	720-1630	S,Sol	Band freq	Scheer	JACS 77 (1955)	3300
$C_{27}H_{42}D_4O$	Cholestanone-3-d ₄ -2,4	1350-1500	Sol	Spec, Table, Freq	Jones	JACS 74 (1952)	5662
$C_{27}H_{42}Br_2O$	2 α ,6 β -Dibromo- Δ^4 -cholesten-3-one	-	-	Group freq shift	Fieser	JACS 77 (1955)	3305
$C_{27}H_{42}Br_4O$	2 α ,2 β ,5 α ,6 β -Tetra-bromocholestan-3-one	-	-	Group freq shift	Fieser	JACS 77 (1955)	3305
$C_{27}H_{42}N_2O_9$	Methyl 3 α ,11-dihydroxy-9-nitrocholana te-3-acetate 11-nitrate	-	Sol	Band freq	Anagnostopoulos	JACS 76 (1954)	532
$C_{27}H_{42}O$	$\Delta^{1,4}$ -Cholestadienone-3	1580-3100	Sol	Group study, I	Jones	JACS 72 (1950)	86
		-	Sol	Group freq	Jones	JACS 72 (1950)	956
		1616-1716	Sol	Band study	Jones	JACS 74 (1952)	80

$C_{27}H_{42}O$	$\Delta^{2,4}$ -Cholestadiene-6-one	670-1390	Sol	Spec, Table	Jones	JACS	77 (1955)	651
$C_{27}H_{42}O$	$\Delta^{3,5}$ -Cholestadien-2-one	400-4000	S, Sol	Group freq	Tarpley	APS	9 (1955)	69
$C_{27}H_{42}O$	$\Delta^{3,5}$ -Cholestadienone-7	1700	Sol	Substitution, Spec	Cummins	JCS	- (1957)	3847
$C_{27}H_{42}O$	$\Delta^{4,6}$ -Cholestadienone-3	1580-3100	Sol	Band freq	Reich	JOC	16 (1951)	1753
		650-900	Sol	Band freq	Conca	JOC	18 (1953)	1104
		-	-	Absorp freq, Struct, Anal	Jones	JACS	71 (1949)	241
		1616-1716	Sol	Group study	Jones	JACS	72 (1950)	86
		700-1390	Sol	Spec	Henbest	JCS	- (1957)	997
		400-4000	Sol	IR discussed	Morcills	ARS	53B (1957)	145
		-	-	Assign	Jones	JACS	70 (1948)	2024
		600-900	Sol	Group position, I	Jones	JACS	72 (1950)	86
$C_{27}H_{42}O$	$\Delta^{7,14}$ -Cholestadiene-3-one	1580-3100	Sol	Band study	Jones	JACS	74 (1952)	80
$C_{27}H_{42}O$	Dihydroepineergosterol	720-1630	S, Sol	Table, Group freq	Jones	JACS	74 (1952)	5648
$C_{27}H_{42}O$	Dihydroergosterol	700-1390	Sol	Spec, Table	Jones	JACS	77 (1955)	651
		400-4000	Sol	Spec, Config, Band study, Extinction coeff.	Cummins	JCS	- (1957)	3847
		600-900	Sol	Spec	Henbest	JCS	- (1957)	997
$C_{27}H_{42}O$	$\Delta^{1,3,5(10)}$ -1-Methyl-17-(1-methylheptyl)-estra-1,3,5(10)-triene-3-one	1650-1800	Sol	Band freq	Fieser	JACS	75 (1953)	4404
$C_{27}H_{42}O_2$	Δ^4 -Cholestene-3,6-dione	720-1630	S, Sol	Band freq	Scheer	JACS	77 (1955)	3300
$C_{27}H_{42}O_2$	Δ^4 -Cholestene-3,24-dione	700-1400	S, Sol	Spec, Band freq	Scheer	JACS	77 (1955)	3300
$C_{27}H_{42}O_2$	$20\alpha, \Delta^5, 3$ -Deoxydiosgenin	1650-1800	Sol	Group study, Band study	Jones	JACS	72 (1950)	956
$C_{27}H_{42}O_2$		-	Sol	Group freq, Ident	Amendolla	JCS	- (1954)	1226
$C_{27}H_{42}O_2$		-	Sol	Band freq	Ercoli	JACS	75 (1953)	3284
$C_{27}H_{42}O_2$		2750-3100	Sol	Spec, C-H freq	Smith	AC	31 (1959)	1539

$C_{27}H_{42}O_2$	$20-\Delta^5-3$ -Deoxyyamogenin	3100-2750	Sol	Spec	Smith	AC	31 (1959)	1539
$C_{27}H_{42}O_2$	Δ^2 -22-Isoallospirostene	-	-	No C=O absorpt	Wendler	JACS	74 (1952)	4894
$C_{27}H_{42}O_2$	Δ^4 -22a,25a-Spirosten	-	Sol	Ident	Djerassi	JACS	77 (1955)	4291
$C_{27}H_{42}O_3$	Δ^7 -Cholestene-3,6-dione-5-ol	-	Sol	Band freq	Fieser	JACS	75 (1953)	4377
$C_{27}H_{42}O_3$	Cyclo h -diosgenin	788-3620	S,Sol	Table, Group freq, Ident	Callow	JCS	- (1955)	1966
$C_{27}H_{42}O_3$	$\Delta^9(11)$ -Dehydrotigogenin	-	-	Group indic, Freq	Hirschmann	JACS	75 (1953)	3252
$C_{27}H_{42}O_3$	20 α 3-Deoxy hecogenin	2750-3100	Sol	Spec	Smith	AC	31 (1959)	1539
$C_{27}H_{42}O_3$	Diosgenin	890-1500	Sol	Spec, Table, Group freq, I	Jones	JACS	75 (1953)	158
$C_{27}H_{42}O_3$	3 β -Hydroxy-C-nor-D-homo-5 α ,22a-spirost-17a-ene	-	-	Ident	Sato	JACS	75 (1953)	6067
$C_{27}H_{42}O_3$	3 β -Hydroxy-C-nor-D-homo-5 α ,22a-spirost-17a-ene	-	-	Band freq, Config Comparison	Ziegler	JACS	76 (1954)	3865
$C_{27}H_{42}O_3$	3 β -Hydroxy-5 α ,22a-spirost-11-ene	-	S	Group freq	Ziegler	JACS	77 (1955)	1223
$C_{27}H_{42}O_3$	20-Isosmilagenone	-	-	Compar	Elks	JCS	- (1954)	1739
$C_{27}H_{42}O_3$	22-Isospirostan-3-one	-	Sol	Band freq	Elks	JCS	- (1954)	1739
$C_{27}H_{42}O_3$	$\Delta^8(9)$ -22-Isospirosten-3 α -ol	-	Sol	Free OH band, No carbonyl bond	Elks	JCS	- (1954)	1739
$C_{27}H_{42}O_3$	3-Keto-20-isosarsasapogenone	-	-	Group freq, Struct	Wall	JACS	77 (1955)	1230
$C_{27}H_{42}O_3$	22-Isospirostan-3-one	-	Sol	Band freq	Djerassi	JACS	74 (1952)	422
$C_{27}H_{42}O_3$	$\Delta^8(9)$ -22-Isospirosten-3 α -ol	-	Sol	Free OH band, No carbonyl bond	Djerassi	JACS	74 (1952)	422
$C_{27}H_{42}O_3$	3-Keto-20-isosarsasapogenone	-	-	Group freq, Struct	Wall	JACS	77 (1955)	1230

$C_{27}H_{42}O_3$	Neodiosgenin	-	-	Sol	Band freq, Config Band freq	Ziegler Ziegler	JACS JACS	76 (1954) 77 (1955)	3865 1223
$C_{27}H_{42}O_3$	$8\alpha, 9\alpha$ -Oxidocholestane- β , 7-dione	-	-	Sol	Band freq	Fieser	JACS	75 (1953)	4719
$C_{27}H_{42}O_3$	$8\alpha, 14\alpha$ -Oxidocholestane- β , 7-dione	-	-	Sol	Band freq	Fieser	JACS	75 (1953)	4719
$C_{27}H_{42}O_3$	Pseudodiosgenin	660-5000	-	Sol	Spec, Group freq Band freq, Config.	Hayden Ziegler	AC JACS	26 (1954) 76 (1954)	550 3865
$C_{27}H_{42}O_3$	Sarsasapogenone- β	890-1340	-	Sol	Spec, Table, Group freq	Jones	JACS	75 (1953)	158
$C_{27}H_{42}O_3$	22a-Spirost-5-en- β -ol	2.5-3.5 μ	-	Sol	Group study	Kabasakalian	AC	31 (1959)	375
$C_{27}H_{42}O_3$	Tigogenone- β	-	890-1500	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{27}H_{42}O_3$	Yamogenin	890-1500	-	Sol	Spec, Table, Group freq, I	Jones	JACS	75 (1953)	158
$C_{27}H_{42}O_4$	$\Delta^9(11)$ - 3α -Acetoxycholenic acid, methyl ester	-	1580-3100	Sol	Spec, Group freq, I Ident	Jones Wall	JACS JACS	75 (1953) 77 (1955)	158 3086
$C_{27}H_{42}O_4$	Δ^5 - 3β -Acetoxycholenic acid, methyl ester	1580-3100	-	Sol	Assign Group study Group freq	Jones Jones Jones	JACS JACS JACS	70 (1948) 72 (1950) 72 (1950)	2024 86 956
$C_{27}H_{42}O_4$	Δ^5 - 3β -Acetoxycholenic acid, methyl ester	2.5-15 μ 700-1400	-	S, Sol	Spec, Band freq Band study, Ident	Hirschmann Jones	JACS JACS	74 (1952) 78 (1956)	5357 1152
$C_{27}H_{42}O_4$	Δ^{11} - 3α -Acetoxycholenic acid, methyl ester	1580-3100	-	Sol	Group study Group freq	Jones Jones	JACS JACS	72 (1950) 72 (1950)	86 956
$C_{27}H_{42}O_4$	Δ^{11} - 3β -Acetoxycholenic acid, methyl ester	2.5-15 μ 650-3100	-	Sol	Spec, Band freq Band freq, I	Hirschmann Henbest	JACS JCS	74 (1952) -	5357 800
$C_{27}H_{42}O_4$	Cyclo- ψ -hecogenin	785-3620	-	Sol	Table, Group freq	Jones Jones Callow	JACS JACS JCS	72 (1950) 72 (1950) -	86 956 1966

$C_{27}H_{42}O_4$	Cyclo 1 - μ -sisalagenin	868-3620	S, Sol	Table, Group freq	Callow	JCS -	(1955)	1966
$C_{27}H_{42}O_4$	13 5 -Hydroxy-12,13-seco-5 α ,22a-spirostan-12-oic acid 12,13-lactone	-	Sol	Group & Band freq, I	Rothman	JACS	76 (1954)	527
$C_{27}H_{42}O_4$	12 α -Hydroxy-5 α ,22a-spirostan-3-one	-	Sol	Group freq	Elks	JCS -	(1954)	1739
$C_{27}H_{42}O_4$	22-Isocallospirostan-3 β -ol-11-one	-	Sol	Freq, OH free bond Ident	Djerassi Sondheimer	JACS	74 (1952)	1712
$C_{27}H_{42}O_4$	-	-	Sol	Band freq, Ident	Djerassi	JACS	74 (1952)	2696
$C_{27}H_{42}O_4$	-	-	Sol	Band freq	Ziegler	JACS	76 (1954)	5533
$C_{27}H_{42}O_4$	11-Ketoneotigogenin	-	Sol	Band freq	Ziegler	JACS	77 (1955)	1223
$C_{27}H_{42}O_4$	Neohecogenin	-	Sol	Band freq	Ziegler	JACS	77 (1955)	1223
$C_{27}H_{42}O_4$	11-Oxocyclo- μ -tigogenin	784-3620	S, Sol	Table, Group freq, Iso	Callow	JCS -	(1955)	1966
$C_{27}H_{42}O_4$	11-Oxopseudotigogenin	-	S, Sol	Group freq, Ident	Dickson	JCS -	(1955)	443
$C_{27}H_{42}O_4$	Pennogenin	890-1340	Sol	Spec, Table, Group freq, I	Jones	JACS	75 (1953)	158
$C_{27}H_{42}O_4$	Pseudohecogenin	660-5000	S, Sol S	Spec, Group freq Band freq	Hayden Callow	AC JCS	26 (1954) - (1955)	550 1671
$C_{27}H_{42}O_4$	Pseudosisalagenin	-	S	Comparison, Freq	Callow	JCS -	(1955)	1671
$C_{27}H_{42}O_4$	6,7-Secocoprostan-3-one-6,7-dioic acid anhydride	-	Sol	Band freq	Fieser	JACS	75 (1953)	4386
$C_{27}H_{42}O_4$	Sisalagenin	-	S	Band study	Callow	JCS -	(1955)	1671
$C_{27}H_{42}O_4$	22a,5 α -Spirostan-3 β -ol-7-one	-	Sol	Group freq, Band freq	Mancera	JACS	75 (1953)	4428
$C_{27}H_{42}O_4$	22a,5 α -Spirostan-3 β -ol-11-one	-	Sol	Band freq, Free OH indic	Sondheimer	JACS	75 (1953)	1282
$C_{27}H_{42}O_4$	22a,5 α -8-Iso(α)-spirostan-3 β -ol-11-one	-	-	Ring conformation	Djerassi	JACS	75 (1953)	3496

$C_{27}H_{42}O_4$		Sol	Band freq	Djerassi	JACS	75 (1953)	3496
$C_{27}H_{42}O_4$	22a,5-14-Iso(β)-spirostan- 3β -ol-11-one	-			JACS	75 (1953)	3496
$C_{27}H_{42}O_4$	22a,5 α -8-Iso(α),14-iso(β)-spirostan- 3β -ol-11-one	Sol	Band freq	Djerassi	JACS	75 (1953)	3496
$C_{27}H_{42}O_4$	22a,5 β -Spirostan- 3α -ol-11-one	Sol	Band freq	Lemin	JACS	76 (1954)	5672
$C_{27}H_{42}O_4$	22a,5 α -Spirostan- 3β -ol-12-one	-	Group freq Table, Group freq	Kuder	JACS	74 (1952)	3201
		-	Ident	Ricciuti	JACS	74 (1952)	4461
		-	Group freq	Djerassi	JACS	75 (1953)	4885
		S,Sol	Band study	Turner	JACS	75 (1953)	4362
		-	Ident, Freq	Hirschmann	JACS	76 (1954)	4013
		S	Ident, Freq	Callow	JCS	- (1955)	1671
		-	Ident, Freq	Callow	JCS	- (1955)	1966
$C_{27}H_{42}O_4$	22a,5 β -Spirostan- 3α -ol-12-one	-	Group freq	Djerassi	JACS	75 (1953)	4885
$C_{27}H_{42}O_4$	22a-Spirost-5-ene-1 β , 3β -diol	Sol	Group study	Kabasakalian	AC	31 (1959)	375
$C_{27}H_{42}O_4$	Δ^4 -22a-Spirostene- 3β ,6 β -diol	S	Free OH	Romo	JOC	19 (1954)	1509
$C_{27}H_{42}O_5$	3α -Acetoxy-11 α ,21 α epoxycholanic acid, methyl ester	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{27}H_{42}O_5$	3β ,13 ξ -Dihydroxy-12,13-seco-5 α ,22a-spirostan-12-oic acid-12,13-lactone	Sol	Group & Band freq	Rothman	JACS	76 (1954)	527
$C_{27}H_{42}O_5$	3β -Hydroxy-5 α ,22a-C-norspirostan-11-oic acid	S,Sol	Group & Band freq	Wendler	JACS	77 (1955)	1632
$C_{27}H_{42}O_5$	Isallospirostan-2 α , 3β -diol-12-one	-	Group freq	Krider	JACS	74 (1952)	3201
		-	Band freq	Ricciuti	JACS	74 (1952)	4461

$C_{27}H_{42}O_5$	22-Isallospirostan- $3\beta, 11\alpha$ -diol-7-one	-	Sol	Group freq, Free OH band	Djerassi	JACS	74 (1952)	1712
$C_{27}H_{42}O_5$	22-Isallospirostan- $3\beta, 12$ -diol-11-one	-	-	Struct, Assign, Group freq	Djerassi	JOC	16 (1951)	303
$C_{27}H_{42}O_5$	22a, 5 α -14-Isospirostane- 2 $\alpha, 3\beta$ -diol-15-one	-	Sol	Band freq	Klass	JACS	77 (1955)	3829
$C_{27}H_{42}O_5$	6-Keto- 3α -acetoxy- allocholanolic acid methyl ester	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{27}H_{42}O_5$	6-Keto- 3α -acetoxycholanolic acid, methyl ester	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{27}H_{42}O_5$	6-Keto-12-acetoxycholanolic acid, methyl ester	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{27}H_{42}O_5$	11-Ketorockogenin	-	-	Ident	Rosenfeld	JACS	77 (1955)	4367
$C_{27}H_{42}O_5$		-	-	Ident	Wendler	JACS	77 (1955)	1632
$C_{27}H_{42}O_5$	20 α -Manogenin acetate	2750-3100	Sol	Spec, Freq	Smith	AC	31 (1959)	1539
$C_{27}H_{42}O_5$	20 β -Manogenin acetate	2750-3100	Sol	Spec, Freq	Smith	AC	31 (1959)	1539
$C_{27}H_{42}O_5$	Methyl 3α -acetoxy-11- ketocho lanate	1712	Sol	Absorp freq, Struct	Jones	JACS	71 (1949)	241
$C_{27}H_{42}O_5$		-	Sol	Band freq	Anagnostopoulos	JACS	76 (1954)	532
$C_{27}H_{42}O_5$		-	Sol	Group freq	Archer	JACS	76 (1954)	4915
$C_{27}H_{42}O_5$		-	-	Ident	Rosenfeld	JACS	77 (1955)	4367
$C_{27}H_{42}O_5$	Methyl- 3α -acetoxy-12- ketocho lanate	1700	Sol	Absorp freq, Struct, Anal	Jones	JACS	71 (1949)	241
$C_{27}H_{42}O_5$	Methyl- 3α -acetoxy-8,9- oxidocho lanate	-	-	Ident	Rosenfeld	JACS	77 (1955)	4367
$C_{27}H_{42}O_5$	Methyl- 3α -acetoxy-9 $\beta, 11\beta$ - oxidocho lanate	-	-	Freq	Heymann	JACS	73 (1951)	5252
$C_{27}H_{42}O_5$		-	-	Ester carbonyl absorp	Constantin	JACS	74 (1952)	3908
$C_{27}H_{42}O_5$	6,7-Seco- Δ^4 -cholestan-3- one-6,7-dioic acid	-	Sol	Group freq, Band freq	Fieser	JACS	75 (1953)	4386

$C_{27}H_{42}O_5$		S	Band freq, Free OH indic	Sondheimer	JACS	76 (1954)	5020
$C_{27}H_{42}O_5$	22a-Spirostan-5 α ,6 β -diol-3-one	-					
$C_{27}H_{42}O_5$	22a,25a-Spirostane-2 β ,3 β -diol-12-one	Sol	Freq	Djerassi	JACS	77 (1955)	4291
$C_{27}H_{42}O_6$	Allopregnane-3 β ,11 α ,20 β -triacetate	Sol	Freq	Stock	JACS	73 (1951)	3546
$C_{27}H_{42}O_6$	Allopregnane triol-3 α ,16,20-triacetate	Sol	Group freq Band study	Jones Jones	JACS JACS	72 (1950) 74 (1952)	956 80
$C_{27}H_{42}O_6$	Allopregnane triol-3 α ,16 α ,20 β -triacetate	-	Absorp max, Band freq	Hirschmann	JACS	74 (1952)	539
$C_{27}H_{42}O_6$	Allopregnane triol-3 β ,16 α ,20 β -triacetate	-	Ident Spec, Band freq	Hirschmann Hirschmann	JACS JACS	74 (1952) 74 (1952)	539 5357
$C_{27}H_{42}O_6$	Allopregnane-3 β ,20 β ,21-triol-3,20,21-triacetate	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{27}H_{42}O_6$	Methyl-3 α -acetoxy-9 α -hydroxy-11-ketocholanate	Sol	Band freq	Heymann	JACS	73 (1951)	5252
$C_{27}H_{42}O_6$	Methyl-3 β -acetoxy-9 α -hydroxy-11-ketocholanate	-	Freq	Heymann	JACS	73 (1951)	5252
$C_{27}H_{42}O_6$	Methyl-3 α -acetoxy-12 β -hydroxy-11-ketocholanate	Sol	Group freq	Archer	JACS	76 (1954)	4915
$C_{27}H_{42}O_6$	Pregnanetriol-3 α ,12 α ,20 β -triacetate	Sol	Table, Group freq	Jones	JACS	74 (1952)	5648
$C_{27}H_{42}O_6$	Pregnanetriol-3 α ,16,20-triacetate	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{27}H_{42}O_6$	22a,5 α ,2,3-Secospirostane-2,3-dioic acid	Sol	Band freq, Ident	Herran	JACS	76 (1954)	5531
$C_{27}H_{42}O_6$	2,3-Seco-22b-spirostane-2,3-dioic acid	Sol	Spec	Wall	JACS	75 (1953)	4437
$C_{27}H_{42}O_6$	3 β ,16 α ,20 α -Triacetoxy-allopregnane	Sol	Spec, Band freq, Group study	Hirschmann	JACS	74 (1952)	5357

$C_{27}H_{42}O$	Allopregnane- $3\beta,17\alpha,20\beta$, 21-tetrol 3,20,21- triacetate	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{27}H_{42}O$	Pregnane- $5\alpha,21$ -diol- $3,20$ - dione-21-acetate 3,20- bisethylene ketal	-	S	Band freq	Bernstein	JACS	77 (1955)	2233
$C_{27}H_{42}O$	Allopregnane- $3\beta,11\beta,17\alpha$, $20\beta,21$ -pentol 3,20,21- triacetate	770-3700	S	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
$C_{27}H_{42}O$	Pregnane- $5\alpha,11\beta,17\alpha$, 21-tetrol- $3,20$ -dione -21-acetate- $3,20$ - bisethylene ketal	-	S	Band freq	Bernstein	JACS	77 (1955)	2233
$C_{27}H_{43}BrO$	Δ^1 -2-Bromocholestenone -3	-	Sol	Group freq	Jones	JACS	72 (1950)	956
$C_{27}H_{43}BrO$	Δ^2 -2-Bromocholestenone -3	1641-1741	Sol Sol	Band study Table, Freq	Jones Jones	JACS JACS	74 (1952) 74 (1952)	80 5648
$C_{27}H_{43}BrO$	2 α -Bromocholest-1-en- 3 -one	400-4000	Sol	α -halogen substitution spec	Cummins	JCS	- (1957)	3847
$C_{27}H_{43}BrO$	2 α -Bromo- Δ^4 -cholesten -3 -one	- 400-4000	- Sol	Freq shift Substitution effect, Spec	Fieser Cummins	JACS JCS	77 (1955) - (1957)	3305 3847
$C_{27}H_{43}BrO$	4 α -Bromocholest-1-en- -3 -one	400-4000	Sol	Substitution effect	Cummins	JCS	- (1957)	3847
$C_{27}H_{43}BrO$	6 α -Bromocholest-4-en- -3 -one	- 400-4000	Sol,S Sol	Substitution effect, Freq Spec, Config. Extinction coeff	Bird Cummins	JCS JCS	- (1956) - (1957)	3675 3847
$C_{27}H_{43}BrO$	6 β -Bromocholest-4-en- 3 -one	- 400-4000	S,Sol Sol	Freq, Substitution effect Spec, Config, Extinction coeff.	Bird Cummins	JCS JCS	- (1956) - (1957)	3675 3847

$C_{27}H_{43}Br_3O$	$C_{27}H_{43}Br_3O$	$C_{27}H_{43}Br_3O$	$C_{27}H_{43}Br_3O$	$C_{27}H_{43}ClO$	$C_{27}H_{43}ClO$	$C_{27}H_{43}ClO$	$C_{27}H_{43}NO$	$C_{27}H_{43}NO$	$C_{27}H_{43}NO_2$	$C_{27}H_{43}NO_2$	$C_{27}H_{43}NO_3$	$C_{27}H_{43}NO_7$	$C_{27}H_{43}NO_8$		
2 α ,5 α ,6 β -Tribromo-cholestan-3-one	2 β ,5 α ,6 β -Tribromo-cholestan-3-one	4 α ,5 α ,6 β -Tribromo-cholestanone-3	4 β ,5 α ,6 β -Tribromo-cholestanone-3	Δ^1 -2-Chlorocholesten-3-one	Δ^4 -2 α -Chlorocholesten-3-one	6 β -Chloro- Δ^4 -cholesten-3-one	Pseudosolanidine	Solanidine	Isorubijervine	Rubijervine hydrate	Solasodine	Tetrahydrojervine	Pseudozygadenine	Zygadenine	Cevine
-	-	-	-	-	400-4000	-	2-14.5 μ	2-14.5 μ	-	-	-	2-13 μ	2-13 μ	1500-3700	-
-	-	-	-	Sol	Sol	-	S	-	Sol	Sol	S	Sol	Sol	S, Sol	-
Fieser	Fieser	Corey	Corey	Beereboom	Beereboom Cummins	Ginsburg	Pelletier	Pelletier Pelletier	Papineau Pelletier Klohs	Papineau	Uhle Uhle	Wintersteiner	Kupchan	Kupchan	Marion Marion
JACS 77 (1955) 3305	JACS 77 (1955) 3305	JACS 76 (1954) 175	JACS 76 (1954) 175	JOC 19 (1954) 1196	JOC 19 (1954) 1196 JCS - (1957) 3847	JACS 75 (1953) 5489	JACS 75 (1953) 4442	JACS 74 (1952) 4218 JACS 75 (1953) 4442	AC 24 (1952) 1918 JACS 74 (1952) 4218 JACS 75 (1953) 2133	AC 24 (1952) 1918	JACS 75 (1953) 2280 JACS 76 (1954) 4245	JACS 76 (1954) 5609	JACS 75 (1953) 1025	JACS 75 (1953) 1025	JACS 73 (1951) 305 JACS 74 (1952) 270
Freq shift	Freq shift	Group freq	Group freq	Band freq	Band freq Substitution effect	Ident	Spec	Ident Spec	Anal Ident Ident	Anal, for ester conc. in mixture	Ident Ident	Band freq	Spec	Ident, Spec	Group freq, Spec no C=O band

$C_{27}H_{43}NO_8$	Germinine	-	Ident	Barton	JCS	-	(1953)	424
		2-13 μ	Spec, Ident	Kupchan	JACS	75	(1953)	5519
		2-14.5 μ	Spec, Group indic	Pelletier	JACS	75	(1953)	3248
$C_{27}H_{43}NO_8$		3-14 μ	Freq, Struct	Fried	JACS	74	(1952)	3041
		-	Ident	Kupchan	JACS	75	(1953)	1025
		2-14.5 μ	Spec	Pelletier	JACS	75	(1953)	3248
		-	Ident	Kupchan	JACS	76	(1954)	5545
		-	Ident	Myers	JACS	77	(1955)	3348
$C_{27}H_{43}NO_8$	Isogerminine	2-14 μ	Freq, Struct	Fried	JACS	74	(1952)	3041
		2-14.5 μ	Spec	Pelletier	JACS	75	(1953)	3248
$C_{27}H_{43}NO_8$	Pseudogerminine	2-14.5 μ	Spec	Pelletier	JACS	75	(1953)	3248
	Protocevine	2-13 μ	Spec, Ident	Kupchan	JACS	75	(1953)	5519
$C_{27}H_{43}NO_8$	Veracevine	2-14.5 μ	Spec	Pelletier	JACS	75	(1953)	3248
	Isoveracevine	-	Group freq, Struct	Barton	JCS	-	(1953)	424
		2-14.5 μ	Group freq, Ident	Kupchan	JACS	75	(1953)	5519
$C_{27}H_{43}NO_9$	Protoverine	2-13 μ	Spec	Pelletier	JACS	75	(1953)	3248
		2-14.5 μ	Spec, Group freq	Klohs	JACS	74	(1952)	5107
$C_{27}H_{43}NO_9$	Isoprotoverine	-	Band study	Myers	JACS	74	(1952)	3198
		-	Group indic	Pelletier	JACS	75	(1953)	3248
$C_{27}H_{44}$	$\Delta^{2,4}$ -Cholestadiene	1650-1800	Group study	Jones	JACS	72	(1950)	956
		2.5-15 μ	Spec, Band freq	Hirschmann	JACS	74	(1952)	5357
$C_{27}H_{44}$	$\Delta^{2,5}$ -Cholestadiene	3.40-7.25 μ	Table, no OH band	Tsou	JACS	76	(1954)	6108
	$\Delta^{2,6}$ -Cholestadiene	650-3100	Band freq, I	Henbest	JCS	-	(1954)	800
$C_{27}H_{44}$	$\Delta^{3,5}$ -Cholestadiene	2-9 μ	Spec, Group freq	O'Connor	JACS	74	(1952)	5454
		650-900	Spec	Henbest	JCS	-	(1957)	997
$C_{27}H_{44}D_2O$	Cholestanone-7-d ₂ -6	1300-1500	Spec, Group freq	Jones	JACS	74	(1952)	5662

C ₂₇ H ₄₄ BrCl ₁₀	2 α -Chloro-2 β -bromo-cholestan-3-one	-	400-4000	Sol	Band freq	JOC	19 (1954)	1196
				Sol	Spec, Extinction coeff, Config.	JCS	- (1957)	3847
C ₂₇ H ₄₄ BrCl ₁₀	2 α -Chloro-4 α -bromo-cholestan-3-one	-	400-4000	Sol	Band freq	JOC	19 (1954)	1196
				Sol	Spec, Config, Extinction coeff.	JCS	- (1957)	3847
C ₂₇ H ₄₄ Br ₁₀	2 α -Iodo-4 α -bromo-cholestan-3-one	400-4000		Sol	Substitution effect, Spec	JCS	- (1957)	3847
				Sol	Group freq	JACS	72 (1950)	956
C ₂₇ H ₄₄ Br ₂ O	2,2-Dibromocholestanone-3	1685-1785		Sol	Band study	JACS	74 (1952)	80
				Sol	Group freq	JACS	74 (1952)	2828
				Sol	Table, Group freq	JACS	74 (1952)	5648
				Sol	Spec, Config, Extinction coeff	JCS	- (1957)	3847
				Sol	Group freq	JACS	72 (1950)	956
C ₂₇ H ₄₄ Br ₂ O	2,4-Dibromocholestanone-3	1706-1806		Sol	Band study	JACS	74 (1952)	80
				Sol	Group freq	JACS	74 (1952)	2828
				Sol	Freq, Shift	JCS	- (1954)	282
C ₂₇ H ₄₄ Br ₂ O	2 α ,4 α -Dibromo-cholestan-3-one	400-4000		Sol	Spec, Config, Extinction coeff	JCS	- (1957)	3847
				Sol	Group freq	JACS	76 (1954)	175
C ₂₇ H ₄₄ Br ₂ O	5 α ,6 β -Dibromo-cholestan-3	-		-	Group freq	JACS	74 (1952)	2828
				Sol	Group freq, Substitution effect	JACS	74 (1952)	2828
C ₂₇ H ₄₄ Cl ₁₀	2,2-Dichlorocholestan-3-one	-		Sol	Band freq	JACS	75 (1953)	3500
				Sol	Band freq	JOC	19 (1954)	1196
				S	Ident	JACS	77 (1955)	172
				Sol	Spec, Config, Extinction coeff.	JCS	- (1957)	3847
C ₂₇ H ₄₄ O	$\Delta^{5,7}$ -Cholestadienol-3 β	2-16 μ		Sol	Table, Group freq	JACS	74 (1952)	5648
				S	Spec, Group freq	JACS	75 (1953)	52
C ₂₇ H ₄₄ O	$\Delta^{6,8}$ -Cholestadienol-3 β	-		Sol	Table, Group freq	JACS	74 (1952)	5648

$C_{27}H_{44}O$	Δ^1 -Cholestene-3	1580-3100 - 744-1270 400-4000 650-900	Sol Sol Sol Sol	Group study Group freq Table Spec, Config. Extinction coeff. Spec	Jones Jones Jones Cummins Henbest	JACS JACS JACS JCS JCS	72 (1950) 72 (1950) 77 (1955) - (1957) - (1957)	86 956 651 3847 997
$C_{27}H_{44}O$	Δ^2 -Cholestene-1-one	3-15 μ 600-900	- Sol	Spec, Table, Spec	Striebel Henbest	HCA JCS	37 (1954) - (1957)	1094 997
$C_{27}H_{44}O$	Δ^4 -Cholestene-3	- 1580-3100 3-13 μ	- Sol S,Sol	Assign Group study Spec, Band freq, Struct Band freq, Ident Group freq Ident Ident Table Freq, Substitution effect	Jones Jones Josien Fieser Rubin Sondheimer Beereboom Jones Bird	JACS JACS JACS JACS JACS JACS JCS JCS	70 (1948) 72 (1950) 73 (1951) 75 (1953) 75 (1953) 75 (1953) 19 (1954) 77 (1955) - (1956)	2024 86 4445 4377 3513 5930 1196 651 3675
$C_{27}H_{44}O$	Δ^4 -Cholestene-6	400-4000 650-900 -	Sol Sol Sol	Spec, Config, Extinction coeff. Spec Spec	Cummins Henbest Morita	JCS JCS BCSJ	- (1957) - (1957) 31 (1958)	3847 997 379
$C_{27}H_{44}O$	Δ^4 -Cholestene-6	-	-	Band freq	Reich	JOC	16 (1951)	1753
$C_{27}H_{44}O$	Δ^5 -Cholestene-3	1671-1771 400-4000	Sol Sol	Band study Spec, Config. Extinction coeff.	Jones Cummins	JACS JCS	74 (1952) - (1957)	80 3847
$C_{27}H_{44}O$	Cholest-5-en-7-one	650-900	Sol	Spec	Henbest	JCS	- (1957)	997
$C_{27}H_{44}O$	$\Delta^{8:9}$ -Cholestene-3	700-1000	Sol	Spec, Band freq	Bladon	JCS	- (1951)	2402
$C_{27}H_{44}O$	Δ^1 -Coprosten-3-one	-	Sol	Group freq	Rubin	JACS	75 (1953)	3513
$C_{27}H_{44}O$	Isocholestane-6-one	- 3-13 μ	Sol S,Sol	Table, Group freq Band freq, Struct	Jones Josien	JACS JACS	74 (1952) 73 (1951)	5648 4445

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 A. No. 50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1041-1042-1043-1044-1045-1046-1047-1048-1049-1050-1051-1052-1053-1054-1055-1056-1057-1058-1059-1060-1061-1062-1063-1064-1065-1066-1067-1068-1069-1070-1071-1072-1073-1074-1075-1076-1077-1078-1079-1080-1081-1082-1083-1084-1085-1086-1087-1088-1089-1090-1091-1092-1093-1094-1095-1096-1097-1098-1099-1100-1101-1102-1103-1104-1105-1106-1107-1108-1109-1110-1111-1112-1113-1114-1115-1116-1117-1118-1119-1120-1121-1122-1123-1124-1125-1126-1127-1128-1129-1130-1131-1132-1133-1134-1135-1136-1137-1138-1139-1140-1141-1142-1143-1144-1145-1146-1147-1148-1149-1150-1151-1152-1153-1154-1155-1156-1157-1158-1159-1160-1161-1162-1163-1164-1165-1166-1167-1168-1169-1170-1171-1172-1173-1174-1175-1176-1177-1178-1179-1180-1181-1182-1183-1184-1185-1186-1187-1188-1189-1190-1191-1192-1193-1194-1195-1196-1197-1198-1199-1200-1201-1202-1203-1204-1205-1206-1207-1208-1209-1210-1211-1212-1213-1214-1215-1216-1217-1218-1219-1220-1221-1222-1223-1224-1225-1226-1227-1228-1229-1230-1231-1232-1233-1234-1235-1236-1237-1238-1239-1240-1241-1242-1243-1244-1245-1246-1247-1248-1249-1250-1251-1252-1253-1254-1255-1256-1257-1258-1259-1260-1261-1262-1263-1264-1265-1266-1267-1268-1269-1270-1271-1272-1273-1274-1275-1276-1277-1278-1279-1280-1281-1282-1283-1284-1285-1286-1287-1288-1289-1290-1291-1292-1293-1294-1295-1296-1297-1298-1299-1300-1301-1302-1303-1304-1305-1306-1307-1308-1309-1310-1311-1312-1313-1314-1315-1316-1317-1318-1319-1320-1321-1322-1323-1324-1325-1326-1327-1328-1329-1330-1331-1332-1333-1334-1335-1336-1337-1338-1339-1340-1341-1342-1343-1344-1345-1346-1347-1348-1349-1350-1351-1352-1353-1354-1355-1356-1357-1358-1359-1360-1361-1362-1363-1364-1365-1366-1367-1368-1369-1370-1371-1372-1373-1374-1375-1376-1377-1378-1379-1380-1381-1382-1383-1384-1385-1386-1387-1388-1389-1390-1391-1392-1393-1394-1395-1396-1397-1398-1399-1400-1401-1402-1403-1404-1405-1406-1407-1408-1409-1410-1411-1412-1413-1414-1415-1416-1417-1418-1419-1420-1421-1422-1423-1424-1425-1426-1427-1428-1429-1430-1431-1432-1433-1434-1435-1436-1437-1438-1439-1440-1441-1442-1443-1444-1445-1446-1447-1448-1449-1450-1451-1452-1453-1454-1455-1456-1457-1458-1459-1460-1461-1462-1463-1464-1465-1466-1467-1468-1469-1470-1471-1472-1473-1474-1475-1476-1477-1478-1479-1480-1481-1482-1483-1484-1485-1486-1487-1488-1489-1490-1491-1492-1493-1494-1495-1496-1497-1498-1499-1500-1501-1502-1503-1504-1505-1506-1507-1508-1509-1510-1511-1512-1513-1514-1515-1516-1517-1518-1519-1520-1521-1522-1523-1524-1525-1526-1527-1528-1529-1530-1531-1532-1533-1534-1535-1536-1537-1538-1539-1540-1541-1542-1543-1544-1545-1546-1547-1548-1549-1550-1551-1552-1553-1554-1555-1556-1557-1558-1559-1560-1561-1562-1563-1564-1565-1566-1567-1568-1569-1570-1571-1572-1573-1574-1575-1576-1577-1578-1579-1580-1581-1582-1583-1584-1585-1586-1587-1588-1589-1590-1591-1592-1593-1594-1595-1596-1597-1598-1599-1600-1601-1602-1603-1604-1605-1606-1607-1608-1609-1610-1611-1612-1613-1614-1615-1616-1617-1618-1619-1620-1621-1622-1623-1624-1625-1626-1627-1628-1629-1630-1631-1632-1633-1634-1635-1636-1637-1638-1639-1640-1641-1642-1643-1644-1645-1646-1647-1648-1649-1650-1651-1652-1653-1654-1655-1656-1657-1658-1659-1660-1661-1662-1663-1664-1665-1666-1667-1668-1669-1670-1671-1672-1673-1674-1675-1676-1677-1678-1679-1680-1681-1682-1683-1684-1685-1686-1687-1688-1689-1690-1691-1692-1693-1694-1695-1696-1697-1698-1699-1700-1701-1702-1703-1704-1705-1706-1707-1708-1709-1710-1711-1712-1713-1714-1715-1716-1717-1718-1719-1720-1721-1722-1723-1724-1725-1726-1727-1728-1729-1730-1731-1732-1733-1734-1735-1736-1737-1738-1739-1740-1741-1742-1743-1744-1745-1746-1747-1748-1749-1750-1751-1752-1753-1754-1755-1756-1757-1758-1759-1760-1761-1762-1763-1764-1765-1766-1767-1768-1769-1770-1771-1772-1773-1774-1775-1776-1777-1778-1779-1780-1781-1782-1783-1784-1785-1786-1787-1788-1789-1790-1791-1792-1793-1794-1795-1796-1797-1798-1799-1800-1801-1802-1803-1804-1805-1806-1807-1808-1809-1810-1811-1812-1813-1814-1815-1816-1817-1818-1819-1820-1821-1822-1823-1824-1825-1826-1827-1828-1829-1830-1831-1832-1833-1834-1835-1836-1837-1838-1839-1840-1841-1842-1843-1844-1845-1846-1847-1848-1849-1850-1851-1852-1853-1854-1855-1856-1857-1858-1859-1860-1861-1862-1863-1864-1865-1866-1867-1868-1869-1870-1871-1872-1873-1874-1875-1876-1877-1878-1879-1880-1881-1882-1883-1884-1885-1886-1887-1888-1889-1890-1891-1892-1893-1894-1895-1896-1897-1898-1899-1900-1901-1902-1903-1904-1905-1906-1907-1908-1909-1910-1911-1912-1913-1914-1915-1916-1917-1918-1919-1920-1921-1922-1923-1924-1925-1926-1927-1928-1929-1930-1931-1932-1933-1934-1935-1936-1937-1938-1939-1940-1941-1942-1943-1944-1945-1946-1947-1948-1949-1950-1951-1952-1953-1954-1955-1956-1957-1958-1959-1960-1961-1962-1963-1964-1965-1966-1967-1968-1969-1970-1971-1972-1973-1974-1975-1976-1977-1978-1979-1980-1981-1982-1983-1984-1985-1986-1987-1988-1989-1990-1991-1992-1993-1994-1995-1996-1997-1998-1999-2000-2001-2002-2003-2004-2005-2006-2007-2008-2009-2010-2011-2012-2013-2014-2015-2016-2017-2018-2019-2020-2021-2022-2023-2024-2025-2026-2027-2028-2029-2030-2031-2032-2033-2034-2035-2036-2037-2038-2039-2040-2041-2042-2043-2044-2045-2046-2047-2048-2049-2050-2051-2052-2053-2054-2055-2056-2057-2058-2059-2060-2061-2062-2063-2064-2065-2066-2067-2068-2069-2070-2071-2072-2073-2074-2075-2076-2077-2078-2079-2080-2081-2082-2083-2084-2085-2086-2087-2088-2089-2090-2091-2092-2093-2094-2095-2096-2097-2098-2099-2100-2101-2102-2103-2104-2105-2106-2107-2108-2109-2110-2111-2112-2113-2114-2115-2116-2117-2118-2119-2120-2121-2122-2123-2124-2125-2126-2127-2128-2129-2130-2131-2132-2133-2134-2135-2136-2137-2138-2139-2140-2141-2142-2143-2144-2145-2146-2147-2148-2149-2150-2151-2152-2153-2154-2155-2156-2157-2158-2159-2160-2161-2162-2163-2164-2165-2166-2167-2168-2169-2170-2171-2172-2173-2174-2175-2176-2177-2178-2179-2180-2181-2182-2183-2184-2185-2186-2187-2188-2189-2190-2191-2192-2193-2194-2195-2196-2197-2198-2199-2200-2201-2202-2203-2204-2205-2206-2207-2208-2209-2210-2211-2212-2213-2214-2215-2216-2217-2218-2219-2220-2221-2222-2223-2224-2225-2226-2227-2228-2229-2230-2231-2232-2233-2234-2235-2236-2237-2238-2239-2240-2241-2242-2243-2244-2245-2246-2247-2248-2249-2250-2251-2252-2253-2254-2255-2256-2257-2258-2259-2260-2261-2262-2263-2264-2265-2266-2267-2268-2269-2270-2271-2272-2273-2274-2275-2276-2277-2278-2279-2280-2281-2282-2283-2284-2285-2286-2287-2288-2289-2290-2291-2292-2293-2294-2295-2296-2297-2298-2299-2300-2301-2302-2303-2304-2305-2306-2307-2308-2309-2310-2311-2312-2313-2314-2315-2316-2317-2318-2319-2320-2321-2322-2323-2324-2325-2326-2327-2328-2329-2330-2331-2332-2333-2334-2335-2336-2337-2338-2339-2340-2341-2342-2343-2344-2345-2346-2347-2348-2349-2350-2351-2352-2353-2354-2355-2

$C_{27}H_{44}O$	A-Nor- β , β -1-bismorlanost-8-en- β -one	2.5-15 μ	Sol	Struct	Cole	JCS	-	(1959)	1212
$C_{27}H_{44}O$	Vitamin D ₃	700-1500	-	Spec Table, Group freq Group freq	Jones Jones Milas	CIC JACS JACS	2 74 77	(1950) (1952) (1955)	94 5648 4180
$C_{27}H_{44}O_2$	Cholestanedione- β , γ	-	Sol	Table, Freq	Jones	JACS	74	(1952)	5648
$C_{27}H_{44}O_2$	Δ^2 -Cholestenol-5 α -6-one	-	-	Band freq	Reich	JOC	16	(1951)	1753
$C_{27}H_{44}O_2$	Δ^3 -Cholesten-5 α -ol-2-one	600-900	Sol Sol	Group freq, Struct Spec	Conca Henbest	JOC JCS	18 -	(1953) (1957)	1104 997
$C_{27}H_{44}O_2$	Δ^4 -Cholesten- β -ol-6-one	-	S, Sol	Group freq	Turner	JACS	75	(1953)	4362
$C_{27}H_{44}O_2$	Δ^4 -Cholesten-4-ol- β -one	-	Sol	Band freq	Fieser	JACS	76	(1954)	1728
$C_{27}H_{44}O_2$	Δ^4 -Cholesten-6 α -ol- β -one	-	Sol	Band freq, Free OH	Sondheimier	JACS	75	(1953)	4712
$C_{27}H_{44}O_2$	Δ^4 -Cholesten-6 β -ol- β -one	-	Sol Sol Sol	Ident, Band freq Group freq Band freq, Free OH	Fieser Amendolla Romo	JACS JCS JOC	75 - 19	(1953) (1954) (1954)	4377 1226 1509
$C_{27}H_{44}O_2$	$\Delta^8(14)$ -Cholesten- β -ol-7-one	-	Sol	Band freq	Fieser	JACS	75	(1953)	4719
$C_{27}H_{44}O_2$	20 α , β -Deoxysmilagenin	3100-2750	Sol	Spec	Smith	AC	31	(1959)	1539
$C_{27}H_{44}O_2$	20 α , β -Deoxysarsasapogenin	2700-3100	Sol	Spec	Smith	AC	31	(1959)	1539
$C_{27}H_{44}O_2$	β -Desoxysarsasapogenin	890-1590	Sol Sol	Table, Spec, I Anal, Ident	Jones Wall	JACS JACS	75 77	(1953) (1955)	158 3086
$C_{27}H_{44}O_2$	β -Desoxy-20-isosarsasapogenin	-	-	No OH indic	Wall	JACS	77	(1955)	1230

$C_{27}H_{44}O_2$	3-Desoxypseudo-sarsasapogenin	-	Sol	Group freq, Struct	Wall	JACS	77 (1955)	1230
$C_{27}H_{44}O_2$	Desoxysmilagenin	-	Sol	Anal, Ident	Wall	JACS	77 (1955)	3086
$C_{27}H_{44}O_2$	20 α -3-Desoxytigogenin	2700-3100	Sol	Spec	Smith	AC	31 (1959)	1539
$C_{27}H_{44}O_2$	3-Desoxytigogenin	890-1500	Sol	Spec, Table, Group freq, I	Jones	JACS	75 (1953)	158
$C_{27}H_{44}O_2$	3-Desoxyneotigogenin	890-1500	Sol	Table, I	Jones	JACS	75 (1953)	158
$C_{27}H_{44}O_2$	2 α ,5 α -Epidioxy- Δ^3 -cholestane	650-3100	Sol	Band freq, I	Henbest	JCS	- (1954)	800
$C_{27}H_{44}O_2$	1,2 α -Epoxycholestan-3-one	3-15 μ	Sol	Spec, Freq, Table	Striebel	HCA	37 (1954)	1094
$C_{27}H_{44}O_2$	7-Ketocholesterol	-	S, Sol	Group freq	Turner	JACS	75 (1953)	4362
$C_{27}H_{44}O_2$	4 α ,5-Oxidocholestan-2-one	-	Sol	Group freq	Conca	JOC	18 (1953)	1104
$C_{27}H_{44}O_2$	22a,25a-Spirostane	-	Sol	Ident	Djerassi	JACS	77 (1955)	4291
$C_{27}H_{44}O_3$	Δ^4 -Cholestene-6/17-dicarboxylic acid anhydride	-	-	Group freq	Gates	JOC	20 (1955)	610
$C_{27}H_{44}O_3$	Cyclo- ψ -sarsasapogenin	869-3620	S, Sol	Table, Group freq	Callow	JCS	- (1955)	1966
$C_{27}H_{44}O_3$	20 α -3-Deoxyrockogenin	3100-2750	Sol	Spec	Smith	AC	31 (1959)	1539
$C_{27}H_{44}O_3$	3-Epi-sarsasapogenin	890-3500	Sol	Spec, Table, I, Group freq	Jones	JACS	75 (1953)	158
$C_{27}H_{44}O_3$	Ketone 104	-	Sol	Band freq	Fieser	JACS	75 (1953)	4395
		5-13 μ	Sol	Spec, Band freq, Group freq	Fieser	JACS	75 (1953)	4418

$C_{27}H_{44}O_3$	$8\alpha,14\alpha$ -Oxidocholestane- β -ol-7-one	-	-	Sol	Band freq	Fieser	JACS	75 (1953)	4719
$C_{27}H_{44}O_3$	Sarsasapogenin	890-1340	-	Sol	Table, I Spec, Iso Ident	Jones Wall Scheer	JACS	75 (1953) 76 (1954) 77 (1955)	158 2850 641
$C_{27}H_{44}O_3$	3β -Hydroxy-(25-27)-trisorlanast-8-en-24-oic acid	1500-3700	-	Sol	Band freq IR discussed	Wall Ziegler Morcillo	JACS ARS	77 (1955) 77 (1955) 53B (1957)	3086 1223 145
$C_{27}H_{44}O_3$	20-Isosarsasapogenin	2.5-15 μ	-	Sol	Freq	Cole	JCS	- (1959)	2005
$C_{27}H_{44}O_3$	Neosarsasapogenin	700-1400	-	Sol	Spec	Wall	JACS	77 (1955)	1230
$C_{27}H_{44}O_3$	Pseudosarsasapogenin	800-5000	-	Sol	Spec, Band freq	Ziegler	JACS	77 (1955)	1223
$C_{27}H_{44}O_3$	Smilagenin	2.5-15 μ	-	Sol	Spec, Group freq Group freq Spec	Hayden Scheer Wall	AC JACS JACS	26 (1954) 77 (1955) 77 (1955)	550 641 1230
$C_{27}H_{44}O_3$	Cyclo- μ -smilagenin	785-1365	-	S	Spec, Iso Ident	Wall Callow	JACS JCS	76 (1954) - (1955)	2850 1671
$C_{27}H_{44}O_3$	20-Isosmilagenin	2.5-15 μ	-	Sol	Ident	Djerassi	JACS	77 (1955)	4291
$C_{27}H_{44}O_3$	Neosmilagenin	700-1400	-	Sol	Ident	Scheer	JACS	77 (1955)	641
$C_{27}H_{44}O_3$	Pseudosmilagenin	660-5000	-	Sol	Ident	Wall	JACS	77 (1955)	3086
$C_{27}H_{44}O_3$	22a,25a,5 α -Spirostan- β -ol	2.5-15 μ	-	Sol	Band freq, Ident	Ziegler	JACS	77 (1955)	1223
$C_{27}H_{44}O_3$	5 $\alpha,22a$ -Spirostan- β -ol	785-1365	-	S	Table, Group freq, Iso	Callow	JCS	- (1955)	1966
$C_{27}H_{44}O_3$	20-Isosmilagenin	2.5-15 μ	-	Sol	Table, Group freq, Iso	Wall	JACS	77 (1955)	1230
$C_{27}H_{44}O_3$	Neosmilagenin	700-1400	-	Sol	Spec	Wall	JACS	77 (1955)	1223
$C_{27}H_{44}O_3$	Pseudosmilagenin	660-5000	-	Sol	Spec, Band freq	Ziegler	JACS	77 (1955)	1223
$C_{27}H_{44}O_3$	22a,25a,5 α -Spirostan- β -ol	660-5000	-	Sol	Spec, Group freq Band freq, Ident	Hayden Scheer	AC JACS	26 (1954) 77 (1955)	550 641
$C_{27}H_{44}O_3$	22a,25a,5 α -Spirostan- β -ol	-	-	Sol	Ident	Djerassi	JACS	77 (1955)	5291
$C_{27}H_{44}O_3$	5 $\alpha,22a$ -Spirostan- β -ol	2.5-3.5 μ	-	Sol	Group study	Kabasakalian	AC	31 (1959)	375

$C_{27}H_{44}O_3$	Tigogenin	-	-	Spec Physical properties, Group study	Krider Recciuti	JACS JACS	74 (1952) 74 (1952)	3201 4461
		890-1350	Sol	Spec, Table, Group freq, I	Jones	JACS	75 (1953)	158
		2750-3100	S Sol	Ident Spec, Struct	Callow Smith	JCS AC	- 31	(1955) 1671 (1959) 1539
$C_{27}H_{44}O_3$	Cyclo- ψ -tigogenin	787-3500	S	Table, Group freq	Callow	JCS	-	(1955) 1966
$C_{27}H_{44}O_3$	Cyclo- ψ -neotigogenin	868-3620	S, Sol	Table, Group freq	Callow	JCS	-	(1955) 1966
$C_{27}H_{44}O_3$	Neotigogenin	890-1340	Sol	Spec, Table, Group freq, I	Jones	JACS	75 (1953)	158
		-	S	Ident	Callow	JCS	-	(1955) 1671
		-	Sol	Band freq	Ziegler	JACS	77 (1955)	1223
$C_{27}H_{44}O_3$	Pseudotigogenin	660-5000	Sol S, Sol	Spec, Group freq Group freq, Band freq	Hayden Dickson	AC JCS	26 -	(1954) 550 (1955) 443
$C_{27}H_{44}O_3$	Pseudoneotigogenin	-	S	Freq	Callow	JCS	-	(1955) 1671
$C_{27}H_{44}O_4$	3 α -Acetoxycholanic acid methyl ester	700-1400	Sol Sol	Group bond study Band study, Ident	Jones Jones	JACS JACS	74 (1952) 78 (1956)	80 1152
$C_{27}H_{44}O_4$	Anhydrohecolyl alcohol	-	Sol	Group & Band freq	Rothman	JACS	76 (1954)	527
$C_{27}H_{44}O_4$	Cholegenin	-	-	Group freq	Mazur	JCS	-	(1954) 1223
$C_{27}H_{44}O_4$	25-Isocholegenin	-	-	Group & Band freq	Mazur	JCS	-	(1954) 1223
$C_{27}H_{44}O_4$	Δ^4 -Cholestene-6,7- dicarboxylic acid	-	-	Group freq	Gates	JOC	20 (1955)	610
$C_{27}H_{44}O_4$	3,5-Cyclocholestane-6,7- dicarboxylic acid	-	-	Group freq	Gates	JOC	20 (1955)	610
$C_{27}H_{44}O_4$	3 β , 12 α -Dihydroxy-5 α , 22a- spirostane	-	S	Group freq	Elks	JCS	-	(1954) 1739
$C_{27}H_{44}O_4$	Ketone 104 lactone	-	Sol	Band freq	Fieser	JACS	75 (1953)	4418

C ₂₇ H ₄₄ O ₄	-	S	Group freq	Elks	JCS	- (1954)	1739
$3\beta, 12\beta$ -Dihydroxy- $5\alpha, 22a$ -spirostane	-	-	Spec	Krider	JACS	74 (1952)	3201
Gitogenin	-	Sol	Free OH band, Ident	Herran	JACS	76 (1954)	5531
	-	Sol	Band freq	Klass	JACS	77 (1955)	3829
3β -Hydroxycholestane	-	-	Group freq	Gates	JOC	20 (1955)	610
-6,7-dicarboxylic acid-6,3-lactone							
Methyl 3β -acetoxy-allocholatanate	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
Rockogenin	-	-	Ident	Rothman	JACS	74 (1952)	4013
12-Epirockogenin	-	-	Ident	Hirschmann	JACS	76 (1954)	4013
22b-Spirostane- $2\epsilon, 3\beta$ -diol	830-1500	Sol	Spec, Struct	Wall	JACS	75 (1953)	4437
22a, 5α -Spirostane- $2\beta, 3\beta$ -diol	-	Sol	Free OH band only	Herran	JACS	76 (1954)	5531
	-	Sol	Band freq	Klass	JACS	77 (1955)	3829
22a, 5α -Spirostane- $3\beta, 6\beta$ -diol	-	Sol	Ident	Romo	JACS	76 (1954)	5169
22a, 5α -Spirostane- $3\beta, 11\alpha$ -diol	-	Sol	Free OH indic, Ident	Sondheimer	JACS	75 (1953)	1282
5 $\alpha, 22a$ -Spirostane- $3\beta, 11\beta$ -diol	-	S, Sol	Band freq, Ident	Dickson	JCS	- (1955)	443
22a, $25a$ -Spirostane- $2\beta, 3\beta$ -diol	-	-	Ident	Wall	JACS	75 (1953)	4437
	-	Sol	Ident	Djerassi	JACS	77 (1955)	4291
Digitogenin	-	Sol	Band freq	Klass	JACS	77 (1955)	3829
Neodigitogenin	-	Sol	Band freq	Klass	JACS	77 (1955)	3829
13 ξ -Hydroxy-12,13-seco-5 $\alpha, 22a$ -spirostan-12-oic acid	-	Sol	Group freq, Band freq, I	Rothman	JACS	76 (1954)	527

$C_{27}H_{44}O_5$	Methyl 3 α -acetoxy-11 β -hydroxy cholanoate	-	-	Spec, Group freq	Constantin	JACS	74 (1952)	3908
$C_{27}H_{44}O_5$	6,7-Secocoprostan-3-one-6,7-dioic acid	Sol	-	Group freq, Band freq	Fieser	JACS	75 (1953)	4386
$C_{27}H_{44}O_6$	Methyl-3 α -acetoxy-9 α ,11 β -dihydroxycholanoate	-	-	Freq	Heyman	JACS	73 (1951)	5252
$C_{27}H_{44}S$	7-Dehydrocholesteryl mercaptan	S	670-3700	Spec	Bernstein	JOC	16 (1951)	685
$C_{27}H_{45}D$	3-Deuteromethyl-A-norcholest-3(5)-ene	Sol	650-4000	Group freq, I, Spec	Barton	JCS	- (1954)	2715
$C_{27}H_{45}Br$	3 α -Bromocholest-5-ene	Sol	400-1400	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{45}Br$	3 β -Bromocholest-5-ene	Sol	400-1400	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{45}BrO$	2-Bromocholestanone-3	Sol	-	Group freq	Jones	JACS	72 (1950)	956
		Sol	1683-1783	Band study	Jones	JACS	74 (1952)	80
		Sol	-	Group freq, Band study	Jones	JACS	74 (1952)	2828
$C_{27}H_{45}BrO$	2 α -Bromocholestan-3-one	-	-	Config.	Corey	JACS	75 (1953)	4832
		-	-	Config, Struct	Jones	JACS	75 (1953)	4839
		Sol	-	Group freq	Cookson	JCS	- (1954)	282
		Sol	400-4000	Config, Spec, Extinction coefficient	Cummins	JCS	- (1957)	3847
$C_{27}H_{45}BrO$	2 β -Bromocholestan-3-one	-	-	Config, Struct	Jones	JACS	75 (1953)	4839
$C_{27}H_{45}BrO$	3 α -Bromocholestan-2-one	-	-	Group freq	Alt	JCS	- (1954)	4284
		Sol	400-4000	Spec, Config, Extinction coefficient	Cummins	JCS	- (1957)	3847
$C_{27}H_{45}BrO$	3-Bromocholestanone-6	Sol	-	Table, Group freq	Jones	JACS	74 (1952)	5648
$C_{27}H_{45}BrO$	4 α -Bromocholestan-3-one	Sol	400-4000	Spec, Config, Substitution effect	Cummins	JCS	- (1957)	3847
$C_{27}H_{45}BrO$	4 α -Bromocoprostanone	Sol	-	Group freq	Jones	JACS	72 (1950)	956
		Sol	1673-1773	Band study	Jones	JACS	74 (1952)	80
		Sol	-	Group freq, Band study	Jones	JACS	74 (1952)	2828
		Sol	400-4000	Spec, Extinction coefficient	Cummins	JCS	- (1957)	3847

C ₂₇ H ₄₅ BrO	4 β -Bromocoprostan-3-one	-	Config.	Jones	JACS	75 (1953)	4839
C ₂₇ H ₄₅ Cl	3 β -Chloro- Δ^5 -cholestene	Sol	Spec, Band freq Freq	Hirschmann Barton	JACS JCS	74 (1952) - (1956)	5357 331
C ₂₇ H ₄₅ Cl	3 α -Chlorocholestan-5-ene	Sol	Spec, Band freq Freq	Barton	JCS	- (1956)	331
C ₂₇ H ₄₅ ClO	2-Chlorocholestan-3-one	Sol S	Band freq Ident	Beereboom Fonken	JACS JACS	75 (1953) 77 (1955)	3500 172
C ₂₇ H ₄₅ ClO	2 α -Chlorocholestan-3-one	Sol	Spec, Config, Extinction coefficient	Cummins	JCS	- (1957)	3847
C ₂₇ H ₄₅ ClO	2 β -Chlorocholestan-3-one	Sol	Spec, Config, Extinction coefficient	Cummins	JCS	- (1957)	3847
C ₂₇ H ₄₅ ClO	3 α -Chlorocholestan-2-one	- Sol	Group freq Spec, Config, Extinction, Coefficient	Alt Cummins	JCS JCS	- (1954) - (1957)	4284 3847
C ₂₇ H ₄₅ ClO	3 α -Chlorocoprostan-6-one	Sol	Spec, Config, Extinction, Coefficient	Cummins	JCS	- (1957)	3847
C ₂₇ H ₄₅ ClO	3 β -Chlorocoprostan-6-one	Sol	Spec, Config, Extinction, Coefficient	Cummins	JCS	- (1957)	3847
C ₂₇ H ₄₅ ClO	5 α -Chlorocholestan-6-one	Sol	Spec, Config, Extinction, Coefficient	Cummins	JCS	- (1957)	3847
C ₂₇ H ₄₅ IO	2-Iodocholestanone-3	Sol	Band study	Jones	JACS	74 (1952)	80
C ₂₇ H ₄₅ IO	2 α -Iodocholestan-3-one	Sol	Group freq, Group band Ident	Jones Beereboom	JACS JACS	74 (1952) 75 (1953)	2828 3500
C ₂₇ H ₄₅ IO	3 α -Iodocholestan-2-one	Sol	Spec, Config, Extinction, coefficient	Cummins	JCS	- (1957)	3847
C ₂₇ H ₄₅ N	Solanidane	-	Spec, Config, Extinction, coefficient	Cummins	JCS	- (1957)	3847
C ₂₇ H ₄₅ NO	Solanidane-3 β -ol	-	Ident	Weisenborn	JACS	75 (1953)	259
		-	Ident	Weisenborn	JACS	75 (1953)	259

$C_{27}H_{45}NO_2$	Tomatidine	2-15 μ	S, Sol	Spec, Struct	Fontaine	JACS	73 (1951)	878
$C_{27}H_{45}NO_3$	Ketone 104 oxine	-	Sol	Band freq	Fieser	JACS	75 (1953)	4418
$C_{27}H_{45}NO_5$	22,26-Iminojervane- β , 16,17,23-tetrol-11-one	-	S	Band freq	Winstersteiner	JACS	76 (1954)	5609
$C_{27}H_{45}NO_8$	Cevinilol	-	Sol	Group study	Kupchan	JACS	77 (1955)	683
$C_{27}H_{45}NO_8$	Dihydrocevine isoorthoacetate	-	Sol	Group study	Barton	JCS	- (1954)	3950
$C_{27}H_{46}$	¹ Δ -Cholestene	650-3100	Sol	Band freq, I	Henbest	JCS	- (1954)	800
$C_{27}H_{46}$	² Δ -Cholestene	1580-3100 650-3100	Sol Sol	Group study, I Band freq, I	Jones Henbest	JACS JCS	72 (1950) - (1954)	86 800
$C_{27}H_{46}$	³ Δ -Cholestene	650-3100	Sol	Band freq, I	Henbest	JCS	- (1954)	800
$C_{27}H_{46}$	⁴ Δ -Cholestene	700-1000	Sol	Spec, Group freq	Bladon	JCS	- (1951)	2402
$C_{27}H_{46}$	⁵ Δ -Cholestene	1650-1800 700-1000	Sol Sol	Group study Spec, Band freq, Group freq	Jones Bladon	JACS JCS	72 (1950) - (1951)	956 2402
$C_{27}H_{46}$	^{8:9} Δ -Cholestene	2.5-15 μ - -	Sol Sol -	Spec, Band freq Table, Group freq Band freq, Struct	Hirschmann Jones Daus	JACS JACS JACS	74 (1952) 74 (1952) 75 (1953)	5357 5648 3840
$C_{27}H_{46}$	^{3:5} Δ -Cholestene	700-1000	Sol	Spec, Band freq, Group freq	Bladon	JCS	- (1951)	2402
$C_{27}H_{46}$	^{3:5} -Cyclocholestene	9-11 μ 650-4000 3-14 μ	Sol Sol Sol	Spec, Band freq Group freq, I Spec, Band study	Barton Barton Cole	JCS JCS JCS	- (1951) - (1954) - (1954)	1444 2715 3807
$C_{27}H_{46}$	³ -Methyl-A-norcholestene ⁻³⁽⁵⁾	650-4000	Sol	Group freq, I	Barton	JCS	- (1954)	2715

$C_{27}H_{46}BrCl$	2α -Bromo- 3β -chloro-cholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}BrCl$	2β -Bromo- 3α -chloro-cholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}BrCl$	3α -Bromo- 2β -chloro-cholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}BrCl$	3β -Bromo- 2α -chloro-cholestane	490-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}Br_2$	2α : 3β -Dibromocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}Br_2$	2β : 3α -Dibromocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}Br_2$	3α : 4β -Dibromocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}Br_2$	3β : 4α -Dibromocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}Br_2$	5β : 6α -Dibromocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}Cl_2$	2α : 3β -Dichlorocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}Cl_2$	2β : 3α -Dichlorocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}Cl_2$	5α : 6β -Dichlorocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}Cl_2$	5α : 6α -Dichlorocholestane - 3β -ol	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}Cl_2$	5α : 6β -Dichlorocholestane - 3β -ol	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{46}O$	Cholestan-1-one	3-15 μ	Sol	Spec, Freq table	Striebel	HCA	37 (1954)	1094
$C_{27}H_{46}O$	Cholestan-2-one	-	-	Group freq	Alt	JCS	- (1954)	4284
		400-4000	Sol	Spec, Substitution effect	Cummins	JCS	- (1957)	3847
$C_{27}H_{46}O$	Cholestanone-3	-	-	Assign	Jones	JACS	70 (1948)	2024
		700-1000	Sol	Spec, Band freq, Group freq	Bladon	JCS	- (1951)	2402

	1658-1768	Sol	Band study	Jones	JACS	74 (1952)	80
	-	Sol	Group freq, Band study	Jones	JACS	74 (1952)	2828
	1350-1800	Sol	Spec, Group freq	Jones	JACS	74 (1952)	5648
	1350-1500	Sol	Spec, Freq	Jones	JACS	74 (1952)	5662
	-	Sol	Group freq, Ident	Beereboom	JACS	75 (1953)	1718
	-	-	Ident	Corey	JACS	75 (1953)	4832
	-	-	Absorption study	Dauben	JACS	75 (1953)	5340
	757-1309	Sol	Table	Jones	JACS	77 (1955)	651
	950-1350	S,Sol	Pand study	Rosenkrantz	AC	28 (1956)	31
	400-4000	Sol	-halogen substitution effect, Spec	Cummins	JCS	- (1957)	3847
	-	Sol	Table, Group freq	Jones	JACS	74 (1952)	5648
$C_{27}H_{46}O$	-	-	Band freq	Reich	JOC	16 (1951)	1753
$C_{27}H_{46}O$	-	Sol	Band freq	Fieser	JACS	76 (1954)	1945
	-	Sol	Group freq	Jones	JACS	72 (1950)	956
	1660-1760	Sol	Band study	Jones	JACS	74 (1952)	80
	1350-1750	Sol	Table, Group freq	Jones	JACS	74 (1952)	5648
	1300-1500	Sol	Spec, Table, Freq	Jones	JACS	74 (1952)	5662
	650-3100	Sol	Band freq, I	Henbest	JCS	- (1954)	800
$C_{27}H_{46}O$	-	Sol	Band freq	Fieser	JACS	75 (1953)	4716
	-	-	Ident, Anal	Becker	JOC	20 (1955)	353
	-	-	Struct	Becker	JOC	20 (1955)	353
	2-16 μ	S	Spec, Group freq	Johnson	JACS	75 (1953)	52
	650-3100	Sol	Band freq	Henbest	JCS	- (1954)	800
	-	S,Sol	Group freq	James	JCS	- (1955)	1370
	1580-3100	Sol	Group study, I	Jones	JACS	72 (1950)	86
	-	S	Band freq	Idler	JACS	75 (1953)	1712
	2-16 μ	S	Spec, Group freq	Johnson	JACS	75 (1953)	52

$C_{27}H_{46}O$	$\Delta^8,9$ -Cholestenol- 3β	700-1000	Sol	Spec, Band freq, Group freq	Bladon	JCS	- (1951)	2402
$C_{27}H_{46}O$	$\Delta^8,14$ -Cholestenol- 3β	2700-3900 1580-3100 -	Sol Sol Sol	Spec, Assign Group study, I Group freq, Stereo study Band freq Spec, Group freq	Jones Jones Cole Idler Johnson	JACS JACS JACS JACS JACS	70 (1948) 72 (1950) 74 (1952)	2024 86 5571
$C_{27}H_{46}O$	Δ^{14} -Cholestenol- 3β	2700-3900 1580-3100 -	Sol Sol Sol	Spec, Assign Spec, Group study, I Group freq, Stereo study	Jones Jones Cole	JACS JACS JACS	70 (1948) 72 (1950) 74 (1952)	2024 86 5571
$C_{27}H_{46}O$	Cholesterol	2-16 μ 1.05 μ 6-15 μ 1450-3700 700-1400 1580-1400 2-15 μ 700-1000 800-1700 -	S Sol - S S S Sol Sol Sol Sol Sol	Spec, Group freq Spec Longitudinal dispersion Assign Temp effect on spec Spec, Struct Spec Group study, I Spec, Struct Spec, Band freq, Group freq Spec Group freq, Stereo study Band freq Spec, Table, Group freq Spec Purity Band freq, Ident Spec, Group freq Spec Spec Spec, hologen substitution Group study IR discussed	Johnson Baird Lepeschkin Jones Hainer Mann Jones Jones Fontain Bladon Blout Cole Hirschmann Jones Coates Fieser Idler Johnson Holman Behar Cummins Henbest Morcillo	JACS JOSA JPC JACS PR JCS CIC JACS JACS JCS JOSA JACS	75 (1953) 37 (1947) 51 (1947) 70 (1948) 75 (1949) - (1949) 2 (1950) 72 (1950) 73 (1951) - (1951) 42 (1952) 74 (1952)	52 754 875 2024 1320 2816 94 86 878 2402 966 5571

	650-1350	Sol	Generalisations, Discussions	Jones	JACS	80 (1958)	6121
	2.5-3.5 μ	Sol	Group study	Kabasakalian	AC	31 (1959)	375
	3550-3650	Sol	Intramolecular interaction	Oki	BCSJ	32 (1959)	306
$C_{27}H_{46}O$	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
	-	Sol	Band freq	Fieser	JACS	75 (1953)	4377
	3550-3650	Sol	Intramolecular interaction	Oki	BCSJ	32 (1959)	306
$C_{27}H_{46}O$	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
Δ^4 -Cholesterol- β	-	-	Assign	Jones	JACS	70 (1948)	2024
Coprostanone- β	-	Sol	Group freq, Group band	Jones	JACS	74 (1952)	2828
	-	Sol	Table, Group freq in steroids	Jones	JACS	74 (1952)	5648
	-	Sol	Group freq	Rubin	JACS	75 (1953)	3513
	-	Sol	Table	Jones	JACS	77 (1955)	651
	950-1350	S,Sol	Struct	Rosenkrantz	AC	28 (1956)	31
	400-4000	Sol	Spec, Config, Ext. coeff	Cummins	JCS	- (1957)	3847
$C_{27}H_{46}O$	400-4000	Sol	O-halogen substitution effect, Spec	Cummins	JCS	- (1957)	3847
$C_{27}H_{46}O$	2800-3100	Sol	Band study	Henbest	JCS	- (1957)	1459
$2\alpha:3\alpha$ -Epoxycholestane	2800-3100	Sol	Band study	Henbest	JCS	- (1957)	1459
$5\alpha:6\alpha$ -Epoxycholestane	2800-3100	Sol	Band study	Henbest	JCS	- (1957)	1459
$5\beta:6\beta$ -Epoxycholestane	-	-	Indic no C=O or OH	Beereboom	JACS	75 (1953)	3500
$2\beta,3\beta$ -Oxidocholestane	-	-	Indic no C=O or OH	Corey	JACS	75 (1953)	4832
	-	-	Indic no C=O or OH	Fieser	JACS	75 (1953)	4837
$C_{27}H_{46}O_2$	-	-	Assign	Jones	JACS	70 (1948)	2024
Cholesterol- β -one-6	-	Sol	Group freq	Jones	JACS	72 (1950)	956
	-	Sol	Group freq, Stereo study	Cole	JACS	74 (1952)	5571
	-	S,Sol	Group freq	Turner	JACS	75 (1953)	4362
	-	Sol	Band freq	Anagnostopolous	JACS	76 (1954)	532
$C_{27}H_{46}O_2$	-	Sol	Band freq	Anagnostopolous	JACS	76 (1954)	532

$C_{27}H_{46}O_2$	Cholestan-5 α -ol-2-one	Sol	Band freq	Conca	JOC	18 (1953)	1104
$C_{27}H_{46}O_2$	Cholestanol-5 α -6-one	-	Band freq	Reich	JOC	16 (1951)	1753
$C_{27}H_{46}O_2$	⁵ Δ -Cholestene-3 β ,4 α -diol	Sol	Band freq	Fieser	JACS	76 (1954)	1728
$C_{27}H_{46}O_2$	⁸ (14) Δ -Cholestene-3 β ,7 α -diol	S	Band freq	Fieser	JACS	75 (1953)	4404
$C_{27}H_{46}O_2$	Coprostan-27-oic acid	Sol	Freq, Iso	Cole	JCS	- (1959)	2005
$C_{27}H_{46}O_2$	Desoxo ketone 104	Sol	Band freq	Fieser	JACS	75 (1953)	4418
$C_{27}H_{46}O_2$	3 β ,26-Dihydroxy-5 α ,22a-furostane	S	Group freq	Elks	JCS	- (1954)	1739
$C_{27}H_{46}O_2$	16,22-Epoxycoprostan-3 β -ol	-	Group freq	Wall	JACS	77 (1955)	1230
$C_{27}H_{46}O_2$	3 β -Hydroxy-6,7 β -oxidocholestane	-	no indic of C=O or OH	Corey	JACS	76 (1954)	175
$C_{27}H_{46}O_2$	7-Ketocholestanol	-	Spec Group freq	Fresir Turner	JACS JACS	74 (1952) 75 (1953)	3309 4362
$C_{27}H_{46}O_2$	⁸ Δ -5-Methyl-19-nor-cholestenediol-3 β ,6	Sol	Table, Group freq in steroids	Jones	JACS	74 (1952)	5648
$C_{27}H_{46}O_2$	4,5-Secocholestan-3,5-dione	Sol	Band freq, Struct	Heard	JACS	73 (1951)	4036
$C_{27}H_{46}O_2$	4,5-Seco-3,5-oxidocholestan-3-ol	-	Band freq, Struct	Heard	JACS	73 (1951)	4036
$C_{27}H_{46}O_2$	δ -Tocopherol	-	Spec	Stern	JACS	69 (1947)	869
$C_{27}H_{46}O_3$	Cholestane-3 β ,5 α -diol-6-one	-	Band freq	Reich	JOC	16 (1951)	1753
$C_{27}H_{46}O_3$	Dihydrosarsasapogenin	S,Sol Sol	Spec Spec	Scheer Wall	JACS JACS	77 (1955) 77 (1955)	641 1230

$C_{27}H_{46}O_3$	Dihydro-20-iso-sarsapogenin	900-1300	Sol	Spec	Wall	JACS	77 (1955)	1230
$C_{27}H_{46}O_3$	Dihydropseudo-sarsapogenin	-	Sol	Free OH freq	Scheer	JACS	77 (1955)	641
$C_{27}H_{46}O_3$	Dihydrosmilagenin	800-1350	S, Sol	Free OH freq, Spec Compar Ident	Scheer Wall	JACS	77 (1955)	641
$C_{27}H_{46}O_3$	Dihydropseudo-smilagenin	-	Sol	Free OH freq	Wall	JACS	77 (1955)	1230 3086
$C_{27}H_{46}O_3$	Dihydropseudo-smilagenin	-	Sol	Free OH freq	Scheer	JACS	77 (1955)	641
$C_{27}H_{46}O_3$	8 α ,14 α -Oxidocholestane-3 β ,17 α -diol	-	Sol	Band freq	Fieser	JACS	75 (1953)	4719
$C_{27}H_{46}O_4$	2,3-Seco-5 α -Cholestane-2,3-dicarboxylic acid	-	-	Struct	Casu	GCI	90 (1960)	1147
$C_{27}H_{46}O_4$	2,3-Seco-5 β -cholestane-2,3-dicarboxylic acid	-	-	Struct	Casu	GCI	90 (1960)	1147
$C_{27}H_{46}O_5$	12,13-Seco-5 α ,22 α -spirostan-3 β ,12,13 ξ -triol	-	Sol	Band & Group freq	Rothman	JACS	76 (1954)	527
$C_{27}H_{46}O_8$	Glyceryl triacetyl ricinoleate	2-15 μ	L	Spec	Kendall	APS	7 (1953)	179
$C_{27}H_{46}S$	Cholesterylmercaptan	670-3700	S	Spec	Bernstein	JOC	16 (1951)	685
$C_{27}H_{47}DO$	Cholestanol-3-d ₁	-	-	Freq	Dauben	JACS	75 (1953)	1718
$C_{27}H_{47}DO$	Epicholestanol-3-d ₁	-	-	Freq	Dauben	JACS	75 (1953)	1718
$C_{27}H_{47}Br$	3 α -Bromocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}Br$	3 β -Bromocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}Br$	7 β -Bromocholestane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}Br$	3 α -Bromocoprostanol	400-1400	Sol	Freq	Barton	JCS	- (1956)	331

$C_{27}H_{47}Br$	3β -Bromocoprostanane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}BrO$	2α -Bromocholestan- 3α -ol	- 400-1400	- Sol	Band freq Freq	Fieser Barton	JACS JCS	75 (1953) - (1956)	4837 331
$C_{27}H_{47}BrO$	2α -Bromocholestan- 3β -ol	- 400-1400	- Sol	Group freq Band freq Freq	Corey Fieser Barton	JACS JACS JCS	75 (1953) 75 (1953) - (1956)	4832 4837 331
$C_{27}H_{47}BrO$	2β -Bromocholestan- 3α -ol	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}Cl$	3α -Chlorocholestanane	400-1400	Sol	Freq, Spec	Barton	JCS	- (1956)	331
$C_{27}H_{47}Cl$	3β -Chlorocholestanane	2.5-15 μ 400-1400	Sol Sol	Spec, Band freq Freq, Spec	Hirschmann Barton	JACS JCS	74 (1952) - (1956)	535 331
$C_{27}H_{47}Cl$	$7\alpha(7\beta)$ -Chlorocholestanane	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}Cl$	3α -Chlorocoprostanane	400-1400	Sol	Freq, Spec	Barton	JCS	- (1956)	331
$C_{27}H_{47}Cl$	3β -Chlorocoprostanane	400-1400	Sol	Freq, Spec	Barton	JCS	- (1956)	331
$C_{27}H_{47}ClO$	2α -Chlorocholestan- 3β -ol	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}ClO$	2β -Chlorocholestan- 3α -ol	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}ClO$	3α -Chlorocholestan- 2β -ol	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}ClO$	3β -Chlorocoprostan- 6β -ol	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}ClO$	6β -Chlorocholestan- 3β : 5α -diol	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
$C_{27}H_{47}Cl_3N_{10}O_{12}$	Streptothiazid trihydrochloride	-	-	Band freq	Pennington	JACS	75 (1953)	2261
$C_{27}H_{47}NO$	Cholestanone-6-oxime	-	Sol	Band freq	Fieser	JACS	76 (1954)	1945
$C_{27}H_{48}$	Cholestanane	700-1000 1350-1500	Sol Sol	Spec, Band freq Spec, Group freq in steroids	Bladon Jones	JCS JACS	- (1951) 75 (1952)	2402 5648

	-		Struct	Daus	JACS	75 (1953)	3840
	-	Sol	Band freq, I	Henbest	JCS	- (1954)	800
	-	-	Ident	Scheer	JACS	77 (1955)	1820
	950-1350	S,Sol	Band study	Rosenkrantz	AC	28 (1956)	31
	-	-	Ident	Scheer	JACS	77 (1955)	1820
Coprostane	2700-3100	Sol	Spec, Struct, Absorp.	Smith	AC	31 (1959)	1539
11-Phenylheneicosane	2-15 μ	L	Spec, Struct	Hawkes	SA	16 (1960)	633
Cholestanol	2750-3100	Sol	Spec, Struct, Absorp	Smith	AC	31 (1959)	1539
Cholestanol-2 α	-	-	Group freq	Barton	JCS	- (1953)	1027
	-	Sol	Band freq	Fieser	JACS	75 (1953)	4716
Cholestanol-2 β	-	-	Group freq	Barton	JCS	- (1953)	1027
	-	-	Ident	Corey	JACS	75 (1953)	4832
Cholestanol-3	700-1000	Sol	Spec, Band freq, Group freq	Bladon	JCS	- (1951)	2402
	2-12 μ	Sol	Spec, Ident	Woodward	JACS	74 (1952)	4223
Cholestanol-3 α	875-1185	Sol	Spec	Lieberman	JACS	70 (1948)	1427
	-	Sol	Group freq, Stereo study	Cole	JACS	74 (1952)	5571
	-	-	Group freq	Barton	JCS	- (1953)	1027
	-	Sol	Group freq, Struct	Rosenkrantz	JACS	75 (1953)	903
	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
	650-1350	Sol	Discussion, Generalisations	Jones	JACS	80 (1958)	6121
	-	Sol	Assign	Jones	JACS	70 (1948)	2024
Cholestanol-3 β	875-1185	Sol	Spec	Lieberman	JACS	70 (1948)	1427
	-	Sol	Group freq	Jones	JACS	72 (1950)	956
	-	Sol	Group freq, Stereo study	Cole	JACS	74 (1952)	5571
	-	-	Freq	Barton	JCS	- (1953)	1027
	-	-	Ident	Corey	JACS	75 (1953)	6234
	2-16 μ	S	Spec, Group freq	Johnson	JACS	75 (1953)	52
	2.5-13 μ	Sol	Group freq, Struct	Rosenkrantz	JACS	75 (1953)	903
	-	Sol	Band freq, I	Henbest	JCS	- (1954)	800
	770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237

$C_{27}H_{52}O_2$	2,4-Dimethyl-2-pentacosenoic acid	-	Sol	Band freq	Cason	JOC	19 (1954)	1836
$C_{27}H_{52}O_2$	2-Methyl-2-hexacosenoic acid	-	Sol	Band freq	Cason	JOC	19 (1954)	1836
$C_{27}H_{52}O_2$	C_{27} -Phthienoic acid	5.6-16 μ	Sol	Spec, Struct Band freq, Struct	Freeman Cason	JACS JOC	75 (1953) 19 (1954)	1859 1836
$C_{27}H_{56}$	n-Heptacosane	750-1150 700-1500	S S	Struct, Band study Freq, Assign	Snyder Snyder	JCP JMS	27 (1957) 4 (1960)	969 411
$C_{27}H_{56}Si$	Cyclopentamethylene-diundecylsilane	2-35 μ	L	Assign	Oshesky	JACS	79 (1957)	2057
<u>C₂₈ COMPOUNDS</u>								
$C_{28}H_{10}Br_2N_2O_4$	3,3'-Dibromo-1,2:2',1'-anthraquinoneazine	3-15 μ	S	Spec, Struct	Wyman	JACS	78 (1956)	4599
$C_{28}H_{10}Cl_2N_2O_4$	3,3'-Dichloro-1,2:2',1'-anthraquinoneazine	3-15 μ	S	Spec, Struct	Wyman	JACS	78 (1956)	4599
$C_{28}H_{12}Br_2N_2O_4$	3,3'-Dibromoindanthrone	3-8.5 μ	S	Struct	Wyman	JACS	78 (1956)	4599
$C_{28}H_{12}Cl_2N_2O_4$	3,3'-Dichloroindanthrone	3-8.5 μ	S	Struct	Wyman	JACS	78 (1956)	4599
$C_{28}H_{12}N_2O_2$	Flavanthrone	650-9000	S	Spec, Group freq	Durie	AJC	10 (1957)	429
$C_{28}H_{12}N_2O_4$	Anthraquinoneazine	5.9-8.5 μ	S	Spec, Struct, Band freq	Wyman	JACS	78 (1956)	4599
$C_{28}H_{12}N_2O_4$	1,2:2',1'-Anthraquinoneazine	3-15 μ	S	Spec, Struct	Wyman	JACS	78 (1956)	4599
$C_{28}H_{12}O_2$	Mesonaphthadanthrone	-	S	Band freq, Group freq	Hadzi	JACS	73 (1951)	5460
$C_{28}H_{14}N_2O_4$	Indanthrone	3-15 μ	S	Spec, Struct	Wyman	JACS	78 (1956)	4599

$C_{28}H_{14}O_2$	Helianthron	-	S	Band freq, Group freq	Hadzi	JACS	73 (1951)	5460
$C_{28}H_{14}O_4$	4,4'-Dihydroxyhellianthron	-	S	Group freq	Brown	JCS	(1955)	744
$C_{28}H_{16}O_8$	Tetrasalicylide	1700-1800	S,Sol	Group freq	Short	JCS	(1952)	206
$C_{28}H_{17}N_3O_4$	4',4''-Dihydrodiquinolino (2':3'-1;2)(3':2''-5;6)- isojulino-4',4''- dicarboxylic acid	-	-	Band freq	Braunholtz	JCS	(1955)	393
$C_{28}H_{17}N_3O_4$	Diquinolino(2':3'-1;2) (3':2''-5;6)julino-4',4''- dicarboxylic acid	-	-	Band freq, Group freq	Braunholtz	JCS	(1955)	393
$C_{28}H_{18}N_2O_4$	1,4-Bisbenzamido- anthraquinone	1633-3130	-	Group freq	Flett	JCS	(1948)	1441
$C_{28}H_{18}N_2O_4$	Bis-(p-phenylbenzoyl) furoxan	-	S,Sol	Group freq, I	Boyer	JACS	77 (1955)	4238
$C_{28}H_{18}N_4O_2$	Bis-(p-phenylbenzoyl) furoxan azine	-	S,Sol	Group freq, I	Boyer	JACS	77 (1955)	4238
$C_{28}H_{18}O_2$	Anthracene photozide	850-1300	-	Group freq	Nikitin	OS	4 (1958)	702
$C_{28}H_{18}O_8$	5,5'-DI-C-benzylelagic acid	5.0-6.15 μ	S	Struct	Stitt	JACS	81 (1959)	4615
$C_{28}H_{20}N_2O_3$	1,4-Bisbenzamidoanthron	1635-3200	S	Group freq	Flett	JCS	(1948)	1441
$C_{28}H_{20}N_2O_4$	1,4-Bisbenzamido- oxanthrone	1637-3250	S	Group freq	Flett	JCS	(1948)	1441
$C_{28}H_{20}O_2$	cis-Diphenyldibenzoyl- ethylene	6.03-14.60 μ	S Sol	Table, Spec Band freq, Ident	Kuhn Yates	JACS JACS	72 (1950) 76 (1954)	5058 5110
$C_{28}H_{20}O_2$	trans-Diphenyldibenzoyl ethylene	6.03-14.78 μ	S	Table, Spec	Kuhn	JACS	72 (1950)	5058
$C_{28}H_{20}O_2$	Diphenyl ketene (dimer)	600-1800	S,Sol	Spec	Armstrong	AJC	10 (1957)	34

$C_{28}H_{20}O_2$	4-Hydroxy-2,2,3,4-tetra-phenyl-3-butenic acid lactone	-	Sol	Group freq	Yates	JACS	76 (1954)	5110
$C_{28}H_{20}O_4$	Benzilide	4-8 μ	Sol	Spec, Struct	Wasserman	JACS	72 (1950)	5787
$C_{28}H_{20}O_8$	3,4,9,10-Tetraacetoxy- perylene	746-1764	S	Table	Calderbank	JCS	- (1954)	1205
$C_{28}H_{20}O_8Si$	Silicon tetrabenzoate	2-15 μ	Sol	Spec, Group freq	Lanning	JOC	19 (1954)	1171
$C_{28}H_{20}O_{12}P_2$	4,9-Dihydroxyperylene -3,10-quinone bis- boracetate	699-1715	S	Table	Calderbank	JCS	- (1954)	1285
$C_{28}H_{21}N$	Tetraphenylpyrrole	6600-6900	Sol	Spec, Band freq	Wulf	JACS	57 (1935)	1464
$C_{28}H_{22}BrN_5$	2-Bromethyl-4,6-bis- (diphenylamino)-S- triazine	2-15 μ	Sol	Assign	Reimschuessel	JACS	82 (1960)	3756
$C_{28}H_{22}N_2O_5S_2$	2-(p-Hydroxyphenyl)-1,4- naphthalene dibenzene sulfonamide	-	-	Group study	Adams	JACS	74 (1952)	5560
$C_{28}H_{22}N_2O_6S_3$	2-Benzene sulfonyl-1,4- naphthalene dibenzene- sulfonamide	-	-	Group study	Adams	JACS	74 (1952)	5560
$C_{28}H_{22}O$	Benzhydryl p-phenyl- styryl ketone	-	-	Band freq	Marvel	JOC	16 (1951)	741
$C_{28}H_{22}O_2$	2-Benzylidene-5-methoxy- 5-(p-biphenyl)-2,5- dihydro-3,4-benzisofuran	1050-1210	Sol	Spec, Band freq	Bergmann	JOC	15 (1950)	1023
$C_{28}H_{22}O_3$	Benzoin diphenyl acetate	-	S	Group freq	Curtin	JOC	19 (1954)	820
$C_{28}H_{22}O_3$	Didesyl ether	700-4000	S	Spec, Struct	Curtin	JOC	19 (1954)	820
$C_{28}H_{22}O_3$	6,12-Diphenyl-2,8-dimethyl- 6,12-epoxy-6H,12H-dibenzo [b,f][1,5] dioxcin	-	S	Band freq	Newman	JOC	19 (1954)	985

C ₂₈ H ₂₂ O ₃	2,5-Oxido-2,3,5,6-tetra-phenylloxane	700-4000	Sol	Spec, Struct	Curtin	JOC	19 (1954)	820
C ₂₈ H ₂₂ O ₅	Di-o-carboxybenzhydryl ether	600-4000	S	Spec	Curtin	JOC	19 (1954)	352
C ₂₈ H ₂₃ NO ₆	l-Rhizocarpic acid	650-3800	S,Sol	Spec	Frank	JACS	72 (1950)	4454
C ₂₈ H ₂₃ N ₂ O ₃ S ₂	2-(N-Anilino)-1,4-naphthalene dibenzene-sulfonamide	-	-	Group freq, Struct	Adams	JACS	75 (1953)	4642
C ₂₈ H ₂₃ N ₅	2-Methyl-4,6-bis-(di-phenylamino)-S-triazine	2-15 μ	Sol	Assign	Reinmschuessel	JACS	82 (1960)	7356
C ₂₈ H ₂₄	Cyclooctacosane-1,3,8,10,15,17,22,24-octayne	3-15 μ	S	Spec	Wolovsky	JACS	81 (1959)	4600
C ₂₈ H ₂₄	2,2'-Dibenzylstilbene	10-14 μ	Sol	Group freq	Bergmann	JACS	75 (1953)	4281
C ₂₈ H ₂₄ N ₂ O ₂ S ₂	1-Acetoxy-1,4,4a,9a-tetrahydro-9,10-anthraquinone dibenzene sulfonimide	-	-	Group freq	Adams	JACS	74 (1952)	2593
C ₂₈ H ₂₄ N ₂ O ₇	Usnic acid anhydrophenyl-hydrazone diacetate	-	Sol	Band freq	Barton	JCS	- (1953)	603
C ₂₈ H ₂₄ N ₂ O ₉ S	Benzene sulfonylapoterramycinonitrile	-	S	Band freq	Hochstein	JACS	75 (1953)	4455
C ₂₈ H ₂₄ N ₄	6-Benzeneazo-1,3,6-triphenyl-1,4,5,6-tetrahydropyridazine	770-5000	S	Spec	Curtin	JACS	72 (1950)	5238
C ₂₈ H ₂₄ O ₂	Q-Methoxy-sym-tetraphenyl-acetone	-	S	Group freq	Dean	JACS	76 (1954)	4988
C ₂₈ H ₂₄ O ₂	1-Methyl-2,2,4,4-tetra-phenyloxetanol	-	S,Sol	Group freq	Hoey	JACS	77 (1955)	391
C ₂₈ H ₂₄ O ₂	cis-1,2,3,4-Tetraphenyl-2-butene-1,4-diol	-	-	Group freq	Lutz	JOC	20 (1955)	218

$C_{28}H_{24}O_2$	trans-1,2,3,4-Tetraphenyl -2-butene-1,4-diol (low m.p. 185°)	-	-	Band freq	Lutz	JOC	20 (1955)	218
$C_{28}H_{24}O_2$	trans-1,2,3,4-Tetraphenyl -2-butene-1,4-diol (high m.p. 291-293°)	-	S	Band freq	Lutz	JOC	20 (1955)	218
$C_{28}H_{26}N_2O_4S_2$	1,4-Dihydro-2,3-dimethyl -9,10-anthracene dibenzene sulfonamide	-	-	Group freq	Adams	JACS	74 (1952)	2593
$C_{28}H_{26}N_2O_4S_2$	1,4,4a,9a-Tetrahydro-2,3- dimethyl-9,10-anthra- quinone dibenzene sulfonimide	-	-	Group freq	Adams	JACS	74 (1952)	2593
$C_{28}H_{26}N_2O_{10}S$	Benzenesulfonyl- tetramycinonitrile	-	-	Band freq	Hochstein	JACS	75 (1953)	5455
$C_{28}H_{28}N_2O_4S_2$	4,4'-Diphenylsulfonamido -2,2'-dimethylbibenzyl	-	-	Spec, Ident	Fuson*	JACS	75 (1953)	5744
$C_{28}H_{28}N_2O_4$	Acetonylpyrrole	6500-6900	Sol	Spec, Band freq	Wulf	JACS	57 (1935)	1464
$C_{28}H_{28}O$	Mesityl-1-benzyl-1-methyl -1,4-dihydro-2-naphthyl ketone	-	-	Ident	Fuson	JOC	17 (1952)	881
$C_{28}H_{28}OSi$	Triphenylsilylbutyl phenyl ether	-	-	Inductive effect	Josien	CPR	248 (1959)	826
$C_{28}H_{28}O_4$	Dibenzylidenedihydro- picROTOXINIDE	2-13 μ	Sol	Spec	Conroy	JACS	74 (1952)	491
$C_{28}H_{28}O_7P_2$	Tetra-benzyl pyrophosphate	-	-	Group freq Group freq	Bellamy Bell	JCS JACS	- (1952) 76 (1954)	1701 5185
$C_{28}H_{28}Si$	Tetra-p-tolylsilane	-	-	Ident Group freq	Brook Margoshes	JACS AC	76 (1954) 27 (1955)	2333 351

$C_{28}H_{29}N_2O_3S$	3,4-Dicarbaniilino-5,5-dimethyl-2-phenacetylaminomethylthiazolidine	800-3600	S	Spec	Davis	JOC	13 (1948)	682
$C_{28}H_{30}N_2O_4$	O-Benzoylyohimbine	-	-	Group freq	Huebner	JACS	77 (1955)	469
$C_{28}H_{30}N_4$	Octamethylporphin	670-4000 400-4000	S S	Spec, Assign, Group freq Spec, H bonding	Falk Mason	AJSR JCS	4A (1951) - (1958)	579 976
$C_{28}H_{30}O$	Mesityl-1-benzyl-1-methyl-1,2,3,4-tetrahydro-2-naphthyl ketone	-	-	Ident	Fuson	JOC	17 (1952)	881
$C_{28}H_{30}O_4$	3,3-Bis(2'-methyl-4'-hydroxy-5'-isopropylphenyl)phthalide	330-2000	S	Freq	Jakobsen	APS	14 (1960)	61
$C_{28}H_{30}O_6$	Desapogossypol hexamethyl ether	2-12 μ	Sol	Spec, Group freq, Struct	O'Connor	JACS	76 (1954)	2368
$C_{28}H_{32}N_2O_3$	1-Methyl-3-benzal-4-piperidone dimer acetate	-	S	Group freq	McElvain	JACS	77 (1955)	492
$C_{28}H_{32}N_4$	Octamethyl chlorin	400-4000	S	Spec, H bond	Mason	JCS	- (1958)	976
$C_{28}H_{32}O_4Si_4$	2,4,6,8-Tetramethyl tetraphenylcyclotetra-siloxane	2-16 μ	Sol	Spec	Young	JACS	70 (1948)	3758
$C_{28}H_{33}BrO_{17}$	Tetraacetylasperuloside monobromoacetoxylate	779-1776	S	Table, I	Briggs	JCS	- (1954)	4182
$C_{28}H_{34}$	1,7-Diphenyl-4-(3-phenyl-propyl)heptane	1.1-1.25 μ	L	Group study, Anal	Evans	AC	23 (1951)	1604
$C_{28}H_{34}O_4$	Δ^4 -Pregnene-20 β -ol-3,11-dione benzoate	-	-	Band freq	Constantin	JACS	75 (1953)	1716
$C_{28}H_{34}O_{14}S_2$	Diethyl di-o-acetyl di-o-p-tolylsulfonylmucate	2-16 μ	S	Spec, Group freq	Tipson	JOC	18 (1953)	952
$C_{28}H_{34}O_{15}$	Hesperidin	-	L	Group freq	Inglett	JOC	23 (1958)	93

$C_{28}H_{36}N_2O_7$	N-Acetyl-3-isoreserpine-diol diacetate	-	S	Group freq	MacPhillamy	JACS 77 (1955)	4355
$C_{28}H_{36}OSi$	Triphenylsilylhexyl butyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826
$C_{28}H_{36}OSi$	Triphenylsilylnonyl methyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826
$C_{28}H_{36}OSi$	Triphenylsilyloctyl ethyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826
$C_{28}H_{36}O_4$	^{1,3,5(10),6} 19-Nor- Δ 22-spirostetraen-3-ol acetate	-	Sol	Band freq	Sondheim	JACS 76 (1954)	2230
$C_{28}H_{36}O_5S$	11 α -Hydroxyprogesterone p-toluenesulfonate	-	Sol	Band freq	Rosenkrantz	JACS 76 (1954)	2227
$C_{28}H_{38}O$	Lumista-4,6,8(14),9(11), 22-pentaen-3-one	725-1660	Sol	Table, I	Bladon	JCS - (1955)	2176
$C_{28}H_{38}O_3$	21-Benzylidenepregnane- 3 α ,20 β -diol-11-one	-	-	Group study	Oliveto	JACS 76 (1954)	6111
$C_{28}H_{38}O_4$	^{5,7,9(10)} 3 β -Acetoxy- Δ 22-iso-19-norspirosta- triene	-	Sol Sol	Group freq Band freq	Mosetig Scheer	JOC 17 (1952) JACS 77 (1955)	764 3300
$C_{28}H_{38}O_5S$	Pregnan-11 α -ol-3,20-dione p-toluenesulfonate	-	Sol	Band freq	Rosenkrantz	JACS 76 (1954)	2227
$C_{28}H_{38}O_6$	3 β ,5 α ,22-Triacetoxybisnor- chola-7,9,20(22)-triene	-	S	Group freq	Bladon	JCS - (1953)	2916
$C_{28}H_{38}O_7$	3 β ,5 α ,22-Triacetoxy-9 α , 11 α -epoxybisnorchola- 7,20(22)-dione	-	S	Group freq	Bladon	JCS - (1953)	2916

Chemical Formula	Compound Name	Wavenumber Range	State	Identification	Reference	Year	Page
$C_{28}H_{38}O_{19}$	Cellobiose acetate	700-1500	S	Ident	White	AC 30 (1958)	506
$C_{28}H_{38}O_{19}$	α -Cellobiose octaacetate	8-15 μ	S	Spec	Kuhn	AC 22 (1950)	276
$C_{28}H_{38}O_{19}$	Gentiobiose acetate	700-1500	S	Ident	White	AC 30 (1958)	506
$C_{28}H_{38}O_{19}$	Isomaltose acetate	700-1500	S	Ident	White	AC 30 (1958)	506
$C_{28}H_{38}O_{19}$	Lactose octaacetate	8-15 μ	S	Spec	Kuhn	AC 22 (1950)	276
$C_{28}H_{38}O_{19}$	Maltose acetate	700-1500	S	Ident	White	AC 30 (1958)	506
$C_{28}H_{38}O_{19} \cdot 2H_2O$	Octaacetyl trehalose dihydrate	2-15 μ	S	Spec	Arcamone	GCI 87 (1957)	1499
$C_{28}H_{38}O_{19}$	Sucrose octaacetate	-	S	Ident	Lemlenx	JACS 75 (1953)	448
		700-1500	S	Ident	White	AC 30 (1958)	506
$C_{28}H_{39}NO_{18}$	Octaacetyl trehalosamine	2-15 μ	S	Spec	Arcamone	GCI 87 (1957)	1499
$C_{28}H_{40}$	Anthraergostapentaene	-	-	Group study	Nes	JACS 76 (1954)	3182
		1550-1650	Sol	Spec, Band freq	Scheer	JACS 77 (1955)	3300
$C_{28}H_{40}$	3,5-Cycloergosta-6,9(11),8(14),22-tetraene	-	Sol	Band freq, Group freq	Rees	JCS - (1954)	3422
$C_{28}H_{40}N_2O_9$	Antimycin A	2-12 μ	Sol	Spec	Tener	JACS 75 (1953)	1100
$C_{28}H_{40}O$	Ergosta-3,5,8(9),22-tetraen-7-one	-	Sol	Group freq	Elks	JCS - (1954)	463
$C_{28}H_{40}O$	Ergosta-4,6,8(9),22-tetraen-3-one	-	Sol	Group freq	Elks	JCS - (1954)	468
$C_{28}H_{40}O$	Ergosta-4,6,8(14),22-tetraen-3-one	-	Sol	Group freq	Elks	JCS - (1954)	468
$C_{28}H_{40}O$	Lumista-3,5,8(9),22-tetraen-7-one	685-1643	Sol	Group freq, I	Bladon	JCS - (1955)	2176
$C_{28}H_{40}O$	Lumista-4,6,8(9),22-tetraen-3-one	680-1655	Sol	Table, I	Bladon	JCS - (1955)	2176

$C_{28}H_{40}O$	Lumista-4,6,8(14),22-tetraen-3-one	695-1663	Sol	Table, I	Bladon	JCS - (1955)	2176
$C_{28}H_{40}O_2$	1,1-Bis-(2-hydroxy-3-t-butyl-5-methylphenyl) cyclohexane	2.35-3.05 μ	S, Sol	Spec, H bond	Coggeshall	JACS 72 (1950)	2836
$C_{28}H_{40}O_2$	3,5,3',5'-Tetra-t-butyl-diphenquinone	1600-1800	Sol	Group freq	Fuson	JACS 76 (1954)	2526
$C_{28}H_{40}O_3$	21-Benzylidenepregnane-3 α ,11 β ,20 β -triol	-	-	Group study	Oliveto	JACS 76 (1954)	6111
$C_{28}H_{40}O_3$	$\Delta^{12,18}$ -29,30-Bisnoroleadien-3 β -ol-11,20-dione	-	Sol	Band freq	Djerassi	JACS 76 (1954)	4085
$C_{28}H_{40}O_7$	3 β ,5 α ,22-Triacetoxibisnorchol-20(22)-en-11-one	-	S	Group freq	Bladon	JCS - (1954)	125
$C_{28}H_{40}O_8$	Digitogenin lactone triacetate	-	Sol	Band freq	Klass	JACS 77 (1955)	3829
$C_{28}H_{41}NO_7$	Norcerinone-C-ortho-acetate	-	-	Group freq	Kupchan	JACS 77 (1955)	683
$C_{28}H_{42}$	3,5-Cyclo- $\Delta^6,8,14,22$ ergostatriene	2-16 μ	-	Spec	Fieser	JACS 74 (1952)	5397
$C_{28}H_{42}O$	8:14 $\Delta^{2,4}$ -Ergostenone-3-d $_4$ -	-	Sol	Group freq	Jones	JACS 74 (1952)	5662
$C_{28}H_{42}O$	24(28)Dehydroergosterol	8-13 μ	Sol	Spec, Band freq	Brevik	JOC 19 (1954)	1734
$C_{28}H_{42}O$	Ergosta-4,7,22-trien-3-one	650-900	Sol	Spec	Henbest	JCS - (1957)	997
$C_{28}H_{42}O$	Lumista-4,7,22-trien-3-one	765-1674	Sol	Table, I	Bladon	JCS - (1955)	2176

$C_{28}H_{42}O$	S	Band freq	Trippett	JCS	(1955)	370
9(10)-Secoergosta-4,7,10(19),22-tetraen-3-one	-			JCS	(1955)	370
$C_{28}H_{42}O_2$	S, Sol	Group freq	Ambelang	JACS	75 (1953)	947
Di-(4-hydroxy-2-methyl-5-t-butylphenyl)-3-pentylmethane	2.5-3.4 μ					
$C_{28}H_{42}O_2$	Sol	Table, I	Bladon	JCS	(1955)	2176
8 β -Hydroxylumista-4,6,22-trien-3-one	675-1665					
$C_{28}H_{42}O_3$	-	Group study	Oliveto	JACS	76 (1954)	6111
21-Benzylpregnane-3 α ,11 β ,20 α -triol	-					
$C_{28}H_{42}O_3$	Sol	Band freq	Halsall	JCS	(1954)	2385
7,24-Dioxo-26,27-bisnorlanosta-8,11-dien-3 α -ol	-					
$C_{28}H_{42}O_3$	S	Ident	Bladon	JCS	(1955)	2176
5 α ,8 α -Epidioxy-3 β -hydroxylumista-6,9(11),22-triene	-					
$C_{28}H_{42}O_3$	Sol	Band freq, Ident	Halsall	JCS	(1954)	2385
3,7,24-Trioxo-26,27-bisnorlanost-8-ene	-					
$C_{28}H_{42}O_5$	-	Ident	Hirschmann	JACS	76 (1954)	4013
22a,5 α -C-Nor-D-homo-18-norspirostan-3 β -ol-17a-one acetate	-					
$C_{28}H_{42}O_7$	Sol	Group freq	Cameron	JCS	(1953)	3864
3 β ,22,22-Triacetoxylbisnorallocholan-11-one	-	Band freq	Page	JCS	(1955)	2017
$C_{28}H_{42}O_7$	Sol	Band freq	Barnes	JCS	(1953)	571
2 β ,8 β ,11 α -Triacetoxylananone	-					
$C_{28}H_{42}O_7$	Sol	Struct	Cole	JCS	(1959)	1212
3 β ,7 β ,11 α -Triacetoxyl-4,4,4-trimethyl-5 α -androstan-17-one	2.5-15 μ					
$C_{28}H_{43}NO_5$	-	Group study	Hirschmann	JACS	76 (1954)	4013
13 α -Cyano-22a,5 α -C-nor-D-homospirostane	-					
$C_{28}H_{43}O_4P$	S, Sol	H bond	Peppard	JINC	7 (1958)	231
Bis-[p-(1,1,3,3-Tetramethylbutyl)phenyl]phosphoric acid	500-4000					

$C_{28}H_{44}$	Anthraergostatriene	700-1400	Sol	Spec, Band freq	Scheer	JACS	77 (1955)	3300
$C_{28}H_{44}$	$3,5$ -Cyclo- Δ ^{8(14),22} -ergostadiene	2.7-15 μ	Sol	Spec, Struct, Group freq	Cahill	JOC	18 (1953)	720
$C_{28}H_{44}Br_2$	$2\alpha,4\alpha$ -Dibromoergost-9(11)-en-3-one	400-4000	Sol	Spec, Ext. Coefficient	Cummins	JCS	- (1957)	3847
$C_{28}H_{44}Br_2$	$2\alpha,4\alpha$ -Dibromoergosta-3,11-dione	400-4000	Sol	Spec, Substitution	Cummins	JCS	- (1957)	3847
$C_{28}H_{44}O$	$3,5$ -Cyclo- Δ ²² -ergostene-8(14)oxide	2.7-15 μ	Sol	Spec, Struct, Group freq	Cahill	JOC	18 (1953)	720
$C_{28}H_{44}O$	Δ ^{4,22} -Ergostadienone-3	-	Sol	Group freq	Jones	JACS	74 (1952)	5648
$C_{28}H_{44}O$	Δ ^{7,22} -Ergostadienone-3	-	Sol	Group freq	Jones	JACS	74 (1952)	5648
$C_{28}H_{44}O$	Ergosterol	650-1300 8-13 μ	S Sol	Spec Spec	Turnbull Breivek	CIL JOC	33 (1950) 19 (1954)	626 1734
$C_{28}H_{44}O$	Δ ^{8:14} -Ergosterol	-	S	Band freq	Idler	JACS	75 (1953)	1712
$C_{28}H_{44}O$	Lumisterol	1650-1800	Sol Sol	Group study Group freq	Jones Jones	JACS JACS	72 (1950) 74 (1952)	956 5648
$C_{28}H_{44}O$	Vitamin D ₂	- 700-1500 1650-1800	Sol - Sol Sol	Spec Spec Group study Group freq	Shellow Jones Jones Jones	PR CIC JACS JACS	45 (1934) 2 (1950) 72 (1950) 74 (1952)	126 94 956 5648
$C_{28}H_{44}O_2$	$3,5$ -Cycloergostane-8(14), 22-dioxide	2.7-15 μ	Sol	Spec, Struct, Group freq	Cahill	JOC	18 (1953)	720
$C_{28}H_{44}O_2$	4-Methyl- Δ ⁴ -cholestene-3,6-dione	-	Sol	Band freq	Fieser	JACS	75 (1953)	4386

$C_{28}H_{44}O_3$	S	Group freq	Elks	JCS	(1954)	463
$3\beta,5\alpha$ -Dihydroxyergosta-9(11),22-dien-7-one	-		Elks	JCS	(1954)	463
$C_{28}H_{44}O_3$	Sol	Band freq	Halsall	JCS	(1954)	2385
7,24-Di-oxo-26,27-bis-norlanost-8-en- 3α -ol						
$C_{28}H_{44}O_3$	Sol	Band freq, I	Henbest	JCS	(1954)	800
$5\alpha,8\alpha$ -Epidioxy- $\Delta^{6,22}$ -ergostadienol- 3β						
$C_{28}H_{44}O_3$	S	Group freq, Ident	Bladon	JCS	(1955)	2176
$5\beta,8\beta$ -Epidioxy- 3β -hydroxylumista-6,22-diene						
$C_{28}H_{44}O_3$	S	Group freq	Elks	JCS	(1954)	463
$9\alpha,11\alpha$ -Epoxyergosta-7,22-diene- $3\beta,5\alpha$ -diol						
$C_{28}H_{44}O_3$	Sol	Band freq	Fieser	JACS	75 (1953)	4066
$\Delta^{7,14,22}$ -Ergostatriene- $3\beta,5\alpha,6\alpha$ -triol						
$C_{28}H_{44}O_3$	Sol	Spec, Struct	Cole	JCS	(1956)	1007
Methyl- 3 -oxo-A-trisnor-lupan-28-oate						
$C_{28}H_{44}O_3$	Sol	Group freq	Jones	JACS	74 (1952)	5648
Δ^5 -27-Norcholestenol- 3β -one-25 acetate	S,Sol	Group freq	Tarpley	AFS	9 (1955)	69
$C_{28}H_{44}O_3$	Sol	Ident	Jones	JACS	78 (1956)	1152
Δ^5 -Nor-27-cholesten- 3β -ol-24-one acetate						
$C_{28}H_{44}O_3$	Sol	Ident	Jones	JACS	78 (1956)	1152
$C_{28}H_{44}O_4$	-	Band freq	Ryer	JACS	74 (1952)	4336
$3\beta,24$ -Diacetoxo- $\Delta^{17(20)}$ allocholene						
$C_{28}H_{44}O_4$	Sol	Band freq, I	Henbest	JCS	(1954)	800
$3\alpha,24$ -Diacetoxychol-11-ene						
$C_{28}H_{44}O_4$	S	Group freq	Henbest	JCS	(1952)	4894
$5\alpha,8\alpha$ -Epidioxy- 3β -hydroxy-12-keto-ergosta-9(11)-ene						

$C_{28}H_{44}O_2S_2$	Methyl- 3α -hydroxy-11,12-diketochoanate-12-trimethylene thioketal	-	Sol	Group freq	Archer	JACS 76 (1954)	4915
$C_{28}H_{44}O_5$	⁴ 6,7-Seco- Δ -cholesten-3-one-6,7-dioic acid, 7-monomethyl ester	-	Sol	Group freq, Band freq	Fieser	JACS 75 (1953)	4386
$C_{28}H_{44}O_6$	Bisnorallocholan- $3\beta,16\beta$,22-triol triacetate	-	Sol	Freq	Klass	JACS 77 (1955)	3829
$C_{28}H_{44}Si$	Diphenyl-n-hexadecylsilane	2-16 μ	Sol	Group freq	Kniseley	SA 15 (1959)	651
$C_{28}H_{45}BrO_2$	20α -Bromoergosta-3,11-dione	400-4000	Sol	Spec, Substitution effect	Cummins	JCS - (1957)	3847
$C_{28}H_{45}N$	3-Cyano- 5α -cholest-2-ene	-	-	Struct	Casu	GCI 90 (1960)	1147
$C_{28}H_{45}N$	3-Cyano- 5β -cholest-2-ene	-	-	Struct	Casu	GCI 90 (1960)	1147
$C_{28}H_{45}N$	3-Cyano- 5β -cholest-3-ene	-	-	Struct	Casu	GCI 90 (1960)	1147
$C_{28}H_{46}$	⁸⁽¹⁴⁾ 3,5-Cyclo- Δ -ergostene	2.7-15 μ	Sol	Spec, Struct, Group freq	Cahill	JOC 18 (1953)	720
$C_{28}H_{46}$	^{7,22} Δ -5-Isoergostadiene	1650-1800	Sol	Group study	Jones	JACS 72 (1950)	956
$C_{28}H_{46}Br_2O_2$	$20\alpha,4\alpha$ -Dibromo-1 β -hydroxyergostan-3-one	400-4000	Sol	Spec, Substitution effect	Cummins	JCS - (1957)	3847
$C_{28}H_{46}O$	Chalinersterol	-	S	Band freq	Idler	JACS 77 (1955)	4142
$C_{28}H_{46}O$	α -Dihydroergosterol	2.5-13 μ	Sol	Struct	Rosenkrantz	JACS 75 (1953)	903
$C_{28}H_{46}O$	γ -Dihydroergosterol	2.5-13 μ	Sol	Struct	Rosenkrantz	JACS 75 (1953)	903

$C_{28}H_{46}O$	$\Delta^{7,22}$ Δ^{-5} -isergostadienol -3α	-	Sol	Group freq	Cole	JACS	74 (1952)	5571
$C_{28}H_{46}O$	$\Delta^{7,22}$ Δ^{-} -Ergostadienol- 3β	-	-	Ident	Nes	JOC	18 (1953)	276
$C_{28}H_{46}O$	$\Delta^{8(14),22}$ Δ^{-} -Ergostadienol -3β	-	-	Group freq	Nes	JOC	18 (1953)	276
$C_{28}H_{46}O$	Δ^7 Δ^{-} -Ergostenone- 3	700-1000	Sol	Spec, Band freq	Bladon	JCS	- (1951)	2402
$C_{28}H_{46}O$	$\Delta^{8:14}$ Δ^{-} -Ergostenone- 3	-	Sol	Group freq	Jones	JACS	72 (1950)	956
		700-1000	Sol	Spec, Band freq	Bladon	JCS	- (1951)	2402
		-	Sol	Group freq	Jones	JACS	74 (1952)	5648
		-	Sol	Group study	Jones	JACS	74 (1952)	5662
$C_{28}H_{46}O$	Ergost-9(11)-en- 3 -one	400-4000	Sol	Spec, Substitution effect	Cummins	JCS	- (1957)	3847
$C_{28}H_{46}O$	Δ^{22} Δ^{-} -Ergostenone- 3	-	Sol	Group freq	Jones	JACS	72 (1950)	956
		-	Sol	Group freq	Jones	JACS	74 (1952)	5648
$C_{28}H_{46}O$	$\Delta^{5,7}$ Δ^{-} - 3 -Methoxycholesta- diene	640-3600	S	Spec, Ident	Bernstein	JACS	73 (1951)	846
$C_{28}H_{46}O$	24-Methylenecholesterol	-	S	Group freq	Idler	JACS	77 (1955)	4142
$C_{28}H_{46}O_2$	3β -Carboxy- Δ^5 -cholestene	-	S,Sol	Ident	Corey	JACS	75 (1953)	6234
$C_{28}H_{46}O_2$	Δ^5 Δ^{-} -Cholestenol- 3β -formate	-	Sol	Group freq	Jones	JACS	74 (1952)	5648
$C_{28}H_{46}O$	Ergosta- $3,11$ -dione	400-4000	Sol	Spec, Substitution effect	Cummins	JCS	- (1957)	3847
$C_{28}H_{46}O_2$	Ketoergostenol	-	Sol	Group freq	Turner	JACS	75 (1953)	4362

$C_{28}H_{46}O_2$	4-Methylcholestane -3,6-dione	Sol	-	Band freq, Iso	Fieser	JACS	75 (1953)	4386
$C_{28}H_{46}O_3$	3 α ,12 α -Dihydroxy-26,27 -bisanthranost-8-en- 24-one	Sol	-	Band freq	Halsall	JCS	- (1954)	2385
$C_{28}H_{46}O_3$	Ergosta-7,22-diene-3 β , 5 α ,11 β -triol	S	-	Group freq	Bladon	JCS	- (1953)	2921
$C_{28}H_{46}O_3$	Ergosta-9(11),22-diene 3 β ,5 α ,7 ξ -triol	S	-	Group freq	Elks	JCS	- (1954)	463
$C_{28}H_{46}O_3$	Sarsasapogenin methyl ether	Sol	-	Group freq	Page	JCS	- (1955)	2017
$C_{28}H_{46}O_4$	5 β -Hydroxy-6-keto- cholestane-3 β -carboxylic acid	S	-	Group freq	Roberts	JCS	- (1954)	3178
$C_{28}H_{46}O_5$	20 α -Markogenin acetate	Sol	2750-3100	Spec, Group freq	Smith	AC	31 (1959)	1539
$C_{28}H_{46}O_5$	20 β -Markogenin acetate	Sol	2750-3100	Spec, Struct	Smith	AC	31 (1959)	1539
$C_{28}H_{46}O_6$	Methyl hecolate	Sol	-	Group freq, Band freq	Rothman	JACS	76 (1954)	527
$C_{28}H_{47}BrO_2$	2 α -Bromo-11 β -hydroxy- ergostan-3-one	Sol	400-4000	Spec, Substitution effect	Cummins	JCS	- (1957)	3847
$C_{28}H_{47}BrO_2$	4 α -Bromo-11 β -hydroxy- ergostan-3-one	Sol	400-4000	Spec, Substitution effect	Cummins	JCS	- (1957)	3847
$C_{28}H_{48}$	⁷ Δ -Ergostene	Sol	700-1000	Spec, Band freq	Bladon	JCS	- (1951)	2402
$C_{28}H_{48}$	⁸⁽¹⁴⁾ Δ -Ergostene	Sol	1650-1800	Group study	Jones	JACS	72 (1950)	956
		Sol	700-1000	Spec, Band freq	Bladon	JCS	- (1951)	2402
		Sol	-	Group freq	Jones	JACS	74 (1952)	5648
$C_{28}H_{48}$	¹⁴ Δ -Ergostene	Sol	-	Group freq	Jones	JACS	74 (1952)	5648

C ₂₈ H ₄₈	Δ -Ergostene	1650-1800 680-1400 1350-1500	Sol Sol Sol	Group study Spec Spec, Group freq	.Jones Jones Jones	JACS 72 (1950) JACS 72 (1950) JACS 74 (1952)	956 5322 5648
C ₂₈ H ₄₈	²² Δ -5-isoergostene	1650-1800	Sol	Group study	Jones	JACS 72 (1950)	956
C ₂₈ H ₄₈	1-(n-Tetrahydronaphthyl) n-octadecane	5400-8900	Sol	Assign, Spec	Rose	JRNB 19 (1937)	143
C ₂₈ H ₄₈	Campesterol	10.0-10.75 μ	Sol	Anal	Johnson	AC 29 (1957)	468
C ₂₈ H ₄₈	i-Cholesteryl methyl ether	3-13 μ	S, Sol	Spec, Band freq, Struct	Josien	JACS 73 (1951)	4445
C ₂₈ H ₄₈	Ergosta-3-one	950-1350	S, Sol	Band freq	Rosenkrantz	AC 28 (1956)	31
C ₂₈ H ₄₈	α-Ergostenol	2.5-13 μ	Sol	Group freq, Struct	Rosenkrantz	JACS 75 (1953)	903
C ₂₈ H ₄₈	β-Ergostenol	2.5-13 μ	Sol	Group freq, Struct	Rosenkrantz	JACS 75 (1953)	903
C ₂₈ H ₄₈	γ-Ergostenol	2.5-13 μ	Sol	Group freq, Struct	Rosenkrantz	JACS 75 (1953)	903
C ₂₈ H ₄₈	⁷ Δ -5-isoergostenol-3α	1650-1800	Sol	Group study	Jones	JACS 72 (1950)	956
C ₂₈ H ₄₈	⁷ Δ -Ergostenol-3β	700-1000 2.5-15 μ	Sol Sol S	Spec, Band freq Spec, Band freq Band freq	Bladon Hirschmann Idler	JCS - (1951) JACS 74 (1952) JACS 75 (1953)	2402 5357 1712
C ₂₈ H ₄₈	⁸ Δ -Ergostenol-3β	- -	Sol Sol	Group freq Group freq	Cole Jones	JACS 74 (1952) JACS 74 (1952)	5571 5648
C ₂₈ H ₄₈	⁸⁽¹⁴⁾ Δ -Ergostenol-3β	700-1000 - - -	Sol Sol Sol -	Spec, Band freq Group freq Group freq Ident	Bladon Cole Jones Nes	JCS - (1951) JACS 74 (1952) JACS 74 (1952) JOC 18 (1953)	2402 5571 5648 276

$C_{28}H_{48}O$	¹⁴ Δ -Ergostenol- 3β	700-1000	Sol Sol Sol	Spec, Band freq Group freq Group freq	Bladon Cole Jones	JCS JACS JACS	- 74 (1952) 74 (1952)	2402 5571 5648
$C_{28}H_{48}O$	²² Δ -5-Isoergostenol- 3α	900-3700	Sol Sol	Group freq Spec, Group freq	Cole Jones	JACS JACS	74 (1952) 74 (1952)	5571 5648
$C_{28}H_{48}O$	⁵ 3β -Methoxy- Δ -cholestene	640-3600 3-13 μ	S S, Sol	Spec, Ident Spec, Band freq, Struct	Bernstein Josien	JACS JACS	73 (1951) 73 (1951)	846 4445
$C_{28}H_{48}O$	⁵ 4β -Methoxy- Δ -cholestene	2.5-15 μ	Sol Sol -	Spec, Band freq Group freq Group freq, Ident	Hirschmann Page Henbest	JACS JCS JCS	74 (1952) - (1955) - (1957)	5357 2017 1462
$C_{28}H_{48}O$	⁵ 4β -Methoxy- Δ -cholestene	- -	- -	Ident Ident	Evans Becker	JCS JOC	- (1953) 20 (1955)	540 353
$C_{28}H_{48}O$	⁴ 6β -Methoxy- Δ -cholestene	-	-	Ident	Becker	JOC	20 (1955)	353
$C_{28}H_{48}O_2$	2-Carbomethoxy-A-nor- cholestane	-	Sol	Group freq	Smith	JACS	76 (1954)	6119
$C_{28}H_{48}O_2$	11β -Hydroxyergostan- 3α - one	400-4000	Sol	Spec, Substitution effect	Cummins	JCS	- (1957)	3847
$C_{28}H_{48}O_2$	β -Tocopherol	6-10.5 μ	-	Spec	Stern	JACS	69 (1947)	869
$C_{28}H_{48}O_2$	γ -Tocopherol	6-10.5 μ	-	Spec	Stern	JACS	69 (1947)	869
$C_{28}H_{48}O_3$	$3\beta, 5\alpha$ -Dihydroxyergostan -11-one	-	S	Group freq	Bladon	JCS	- (1953)	2921
$C_{28}H_{48}O_3$	5α -Hydroxycholestane- 3β -carboxylic acid	-	S	Group freq	Roberts	JCS	- (1954)	3178
$C_{28}H_{48}O_3$	4β -Methoxycholestane- 5α - ol-2-one	-	Sol	Group freq	Conca	JOC	18 (1953)	1104
$C_{28}H_{48}O_3$	β -Tocopherylquinone	1600-1800	Sol	Group freq	Fuson	JACS	76 (1954)	2526

C ₂₉ H ₂₂ O	2-15 μ	S	Spec	Sonntag	JACS	75 (1953)	2283
1,3-Dihydro-1,3-diphenyl-2-ke to-2H-cyclopenta [1]phenanthrene	2-15 μ	S	Spec	Sonntag	JACS	75 (1953)	2283
C ₂₉ H ₂₂ O	2-15 μ	S	Spec, Group freq	Sonntag	JACS	75 (1953)	2283
2,3,4,5-Tetraphenylcyclopenta-2,4-dien-1-ol	2-15 μ	S	Spec, Group freq	Sonntag	JACS	75 (1953)	2283
C ₂₉ H ₂₂ O	2-15 μ	S	Spec, Group freq	Sonntag	JACS	75 (1953)	2283
2,3,4,5-Tetraphenylcyclopent-2-en-1-one	-	S	Spec, Group freq	Mueller	JACS	76 (1954)	4621
C ₂₉ H ₂₂ O	2-15 μ	Sol	Spec	Sonntag	JACS	75 (1953)	2283
2,3,4-Triphenyl-5-benzyl-furan	2-15 μ	Sol	Spec	Sonntag	JACS	75 (1953)	2283
C ₂₉ H ₂₂ O	-	Sol	Struct	Yates	JACS	76 (1954)	5110
4,5-Dihydroxy-2,3,4,5-tetraphenylcyclopent-2-enone	-	Sol	Struct	Yates	JACS	76 (1954)	5110
C ₂₉ H ₂₄	2-15 μ	Sol	Spec	Sonntag	JACS	75 (1953)	2283
Tetraphenylcyclopentene	2-15 μ	Sol	Spec	Sonntag	JACS	75 (1953)	2283
C ₂₉ H ₂₄ N ₂ O	3-11 μ	S	Ident	Allen	JOC	22 (1957)	1291
1,2-Dibenzoyl-1-phenyl-cyclopropane monophenylhydrazone	3-11 μ	S	Ident	Allen	JOC	22 (1957)	1291
C ₂₉ H ₂₄ O	-	-	Group study	Lutz	JACS	77 (1955)	366
1-Ethoxy-1,2,3-triphenylindene	-	-	Group study	Lutz	JACS	77 (1955)	366
C ₂₉ H ₂₄ O	2-15 μ	Sol	Spec, Group freq	Sonntag	JACS	75 (1953)	2283
2,3,4,5-Tetraphenyl-cyclopentanone-1	2-15 μ	Sol	Spec, Group freq	Sonntag	JACS	75 (1953)	2283
C ₂₉ H ₂₅ N ₂ O ₂ S ₂	-	-	Group freq, Struct	Adams	JACS	75 (1953)	4642
2-N-Methylanilino-1,4-naphthalene dibenzene-sulfonamide	-	-	Group freq, Struct	Adams	JACS	75 (1953)	4642
C ₂₉ H ₂₆ NB	-	S	H bond, Band freq	Muttall	JCS	- (1960)	4965
Pyridinium tetraphenylborate	-	S	H bond, Band freq	Muttall	JCS	- (1960)	4965
C ₂₉ H ₂₆ N ₂ O ₂ S ₂	-	-	Group study	Adams	JACS	74 (1952)	5557
Diethyl(1-benzene-sulfonimido-4-benzene-sulfonimido-1,2-dihydro-naphthylidene-2)-malonate	-	-	Group study	Adams	JACS	74 (1952)	5557
C ₂₉ H ₂₇ N ₃	687-3050	-	Table	Cromwell	JACS	71 (1949)	3337
1,5-Diphenyl-3-p-tolyl-4-benzylamino-2-pyrazoline	687-3050	-	Table	Cromwell	JACS	71 (1949)	3337

$C_{29}H_{28}N_2O_8S_2$	Diethyl 1,4-naphthalene dibenzenesulfonamido-2-malonate	-	-	Group study	Adams	JACS	74 (1952)	5557
$C_{29}H_{28}O$	Mesityl 1-p-isopropylphenyl -2-naphthyl ketone	-	-	Grignard reaction prod.	Fuson	JOC	16 (1951)	643
$C_{29}H_{30}OSi$	Triphenylsilylpentyl phenyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{29}H_{30}O_3$	p-Duoylphenyl duryl dike tone	-	-	Ident	Fuson	JACS	77 (1955)	3776
$C_{29}H_{31}NO \cdot 2H_2O$	N-Benzylnormarceine dihydrate	-	-	Group freq	Whaley	JOC	19 (1954)	666
$C_{29}H_{33}BrN_2O_4$	dl-Rubremetinium bromide	800-3700	Sol	Spec, Ident	Battersby	JCS	- (1953)	2463
$C_{29}H_{34}N_2O_6S$	Methyl recanescata O-tosylate	-	Sol	Comparison	Neuss	JACS	77 (1955)	4087
$C_{29}H_{34}N_2O_8S_2$	N,N'-Dicarbethoxymethyl-N,N'-dibenzenesulfonyl-diaminomesitylene	650-4000	S	Ident	Adams	JACS	70 (1948)	4204
$C_{29}H_{34}N_2O_4$	Cortisone 21-acetate-3-mono-2,4-dinitrophenyl-hydrazone	-	Sol	Group freq	Reich	JOC	18 (1953)	822
$C_{29}H_{34}O$	3,4-Diphenyl-2,5-dodecymethylenecyclopenta-2,4-dienone	2-15 μ	Sol	Group study	Allen	JOC	20 (1955)	306
$C_{29}H_{34}O$	Trimesityl vinyl alcohol	-	-	OH data Spec	Fuson Buswell	JACS JACS	68 (1946) 69 (1947)	389 770
$C_{29}H_{34}O_7$	Maleic anhydride adduct of 3 β ,20-diacetoxy-5,7,9(11),pregnatriene	-	-	Freq	Moffett	JACS	74 (1952)	2183
$C_{29}H_{34}O$	Maleic anhydride adduct of 3 β ,20-diacetoxy-9,11-oxido-5,7,20-pregnatriene	-	-	Freq	Moffett	JACS	74 (1952)	2183

C ₂₉ H ₃₄ O ₁₅	-	L	Freq	Inglett	JOC	23 (1958)	93
Pectolarin	-						
C ₂₉ H ₃₆ N ₂ O ₅	-	S	Band freq	Wintersterner	JACS	75 (1953)	4938
22,26-Imino-4,13,15,17 (17a)-jervatetraene-23-ol -3,11-dione N-acetate							
C ₂₉ H ₃₆ N ₂ O ₄	2-16 μ	S	Spec, Struct	Hayett	JACS	73 (1951)	2578
Isotetradecahydroemetine							
C ₂₉ H ₃₆ N ₂ O ₄	-	Sol	Group freq	Reich	JOC	18 (1953)	822
Desoxycorticosterone acetate 3-mono-2,4- dinitrophenylhydrazone							
C ₂₉ H ₃₆ O ₂	2.75-3.05 μ	S, Sol	Spec, H bond	Coggeshall	JACS	72 (1950)	2836
Bis-(2-hydroxy-3-t-butyl -5-methylphenyl) methane							
C ₂₉ H ₃₇ N ₃	2-12 μ	Sol	Spec	Woodward	JACS	74 (1952)	4223
dl-3-Keto-4-benzyl-16,17 -5,9(11) -dihydroxy-Δ ¹⁰ - epi-4-aza-D-homoandro- stadiene acetone							
C ₂₉ H ₃₈ N ₂ O ₂ S ₂	650-4000 650-3900	S -	Iso Spec, Iso	Adams Adams	JACS JACS	62 (1940) 70 (1948)	732 4204
N,N'-Dibutyl-N,N'- dibenzene sulfonyl- diaminomesitylene							
C ₂₉ H ₃₈ O ₅	-	-	Inductive effect	Josien	CPR	249 (1959)	826
Triphenylsilyldecyl methyl ether							
C ₂₉ H ₃₈ O ₅	-	-	Inductive effect	Josien	CPR	249 (1959)	826
Triphenylsilylheptyl butyl ether							
C ₂₉ H ₃₈ O ₅	-	-	Inductive effect	Josien	CPR	249 (1959)	826
Triphenylsilylnonyl ethyl ether							
C ₂₉ H ₃₈ O ₅	-	Sol	Group freq	Engel	JACS	76 (1954)	4909
Methyl-Δ ⁴ -3-keto-17α- methyl etienate-3-benzyl- thienol ether							
C ₂₉ H ₃₈ O ₄	-	-	Group freq	Hirschmann	JOC	20 (1955)	572
3β-Formoxy-16α-benzyl- 5 Δ ⁵ -pregnen-20-one							

$C_{29}H_{38}O_4$	Δ 3,5,7,9(11) -22-Isospiro- stateetraen-3-ol-3- acetate	-	-	Band freq	Yashin	JACS 73 (1951)	4654
$C_{29}H_{40}O_4$	1-Methyl-19-nor- Δ 22a-spirostateetraen-3- ol-acetate	-	Sol	Band freq	Sondheimer	JACS 76 (1954)	2230
$C_{29}H_{38}O_9$	Protokosin	2.96-13.77 μ	S	Table, Band freq	Birch	JCS - (1952)	3102
$C_{29}H_{40}N_2O_4 \cdot 2HBr \cdot 7H_2O$	Emetine hydrobromide heptahydrate	2-16 μ	S	Spec, Struct	Hazlett	JACS 73 (1951)	2578
$C_{29}H_{40}N_2O_4 \cdot 2C_2H_5O \cdot 2H_2O$	Emetine hydrogen oxalate monohydrate	2-16 μ	S	Spec, Struct	Hazlett	JACS 73 (1951)	2578
$C_{29}H_{40}N_2O_4 \cdot 2C_2H_5O \cdot 2H_2O$	Neometine hydrogen oxalate dihydrate	2-16 μ	S	Spec, Struct	Hazlett	JACS 73 (1951)	2578
$C_{29}H_{40}N_2O_4 \cdot 2C_2H_5O \cdot 3H_2O$	Emetine-IV hydrogen oxalate trihydrate	2-16 μ	S	Spec, Struct	Hazlett	JACS 73 (1951)	2578
$C_{29}H_{40}N_2O_4 \cdot 2C_2H_5O \cdot 5H_2O$	Isoemetine hydrogen oxalate pentahydrate	2-16 μ	S	Spec, Struct	Hazlett	JACS 73 (1951)	2578
$C_{29}H_{40}O_4$	3-Acetoxy- Δ 2,4,6 isopirostatriene	-	-	Band study	Dauben	JACS 75 (1953)	3235
$C_{29}H_{40}O_4$	3,5,7 Δ -22-Isopirostatrien -3-ol-3-acetate	-	-	Band freq	Yashin	JACS 73 (1951)	4654
$C_{29}H_{40}O_4$	1-Methyl-19-nor- Δ 22a-spirostateetraen-3-ol acetate	-	Sol	Band freq	Sondheimer	JACS 76 (1954)	2230

$C_{29}H_{42}Br_2O_5$	3β -Acetoxy-11 α ,23 β -dibromo-5 α ,22a-spirostan-12-one	882-1732 400-1400	Sol Sol	Group freq Group freq	Dickson Barton	JCS - (1955) JCS - (1956)	447 331
$C_{29}H_{42}Br_2O_5$	3β -Acetoxy-12 α ,23a-dibromo-5 α ,22a-spirostan-11-one	728-1753	Sol	Group freq	Dickson	JCS - (1955)	447
$C_{29}H_{42}Br_2O_5$	11 α ;23a-Dibromohecogenin acetate	400-4000	Sol	Spec	Cummins	JCS - (1957)	3847
$C_{29}H_{42}Br_2O_5$	11 α ;23b-Dibromohecogenin acetate	400-4000	Sol	Spec	Cummins	JCS - (1957)	3847
$C_{29}H_{42}Br_2O_5$	12 α ,23 β -Dibromo-11-oxo-5 α ,22a-spirostan- 3β -yl acetate	-	S	Group freq	Cornforth	JCS - (1954)	907
$C_{29}H_{42}Br_2O_5$	12 α ;23a-Dibromo-11-oxo-tigogenin acetate	400-4000	Sol	Spec, Ext. Coeff.	Cummins	JCS - (1957)	3847
$C_{29}H_{42}ClNO_4$	22,26-Imino- 3α -chloro-17(20)-jervene-11,23-dione N-acetate	-	S	Band freq	Iselin	JACS 76 (1954)	5616
$C_{29}H_{42}N_6O_9$	Amicetin	2.5-15.5 μ	S	Spec, Band freq, Struct	Himmon	JACS 75 (1953)	5864
$C_{29}H_{42}O_2$	Epineoergosterol acetate	720-1630	S,Sol	Band freq	Scheer	JACS 77 (1955)	3300
$C_{29}H_{42}O_2$	Neoergosterol acetate	720-1630	S,Sol	Band freq	Scheer	JACS 77 (1955)	3300
$C_{29}H_{42}O_3$	$3,5,7$ Δ -22a- 3 - $(\beta$ -Hydroxyethylmercapto)-spirostatriene	-	Sol	Group study	Djerassi	JACS 75 (1953)	3704
$C_{29}H_{42}O_4$	$7,9(11)$ Δ -22-Isoallospirostadien- 3β -ol acetate	-	-	Ident	Hirschmann	JACS 75 (1953)	3252
$C_{29}H_{42}O_4$	$3,5$ Δ -22a,25a-Spirostadiene- 3 -ol-acetate	-	Sol	Freq	Djerassi	JACS 77 (1955)	3826

C ₂₉ H ₄₂ O ₅	Band freq	JCS	- (1954)	2346
β -Acetoxy- Δ -spirostadien-5 α -ol	-	-	-	-
β -Acetoxy-5 α ,22a-spirost-9(11)-en-12-one	2.5-16 μ	JCS	- (1955)	447
⁴ 6 β -Acetoxy- Δ -22a-spirosten-3-one	-	JOC JACS	19 (1954) 76 (1954)	1509 5020
⁵ 20 α -Centrogenin acetate	2750-3100	AC	31 (1959)	1539
^{7,9(11)} Δ -22-Isospirosteradiene-3 β ,14-diol 3-acetate	-	JACS	75 (1953)	4404
⁴ Δ -22a-Spirosten-2 α -ol-3-one acetate	-	JACS	76 (1954)	5531
⁵ Δ -22a-Spirosten-3 β -ol-7-one acetate	-	JACS	75 (1953)	5930
⁸ Δ -22a,5 α -Spirosten-3 β -ol-7-one acetate	-	JACS	75 (1953)	4428
⁹⁽¹¹⁾ Δ -22a,5 β -Spirosten-3-ol-7-one acetate	-	JACS	75 (1953)	4430
β -Acetoxy-9 α ,11 α -epoxy-22a-spirost-7-en-5 α -ol	-	JCS	- (1954)	2346
7 ξ ,8 ξ ,9 α ,11 α -Diepoxy-22a,5 β -spirostan-3 α -ol acetate	-	JACS	76 (1954)	5642
22-Isoallospirostan-3 β -ol-7,11-dione acetate	-	JACS JACS	74 (1952) 74 (1952)	1712 2918

C ₂₉ H ₄₃ BrO ₆	-	S, Sol	Group freq	Dickson	JCS	- (1955)	443
3β-Acetoxy-23a-bromo-11β-hydroxy-5α,22a-spirostan-12-one	-	-	-	-	-	-	-
C ₂₉ H ₄₃ BrO ₇	-	Sol	Group freq	Jones	JACS	74 (1952)	2828
6-Bromo-7-keto-3α,12α-diacetoxycholanolic acid methyl ester	-	-	-	-	-	-	-
C ₂₉ H ₄₃ BrO ₇	-	Sol	Group freq	Jones	JACS	74 (1952)	2828
11-Bromo-12-keto-3α,7α-diacetoxycholanolic acid methyl ester	-	-	-	-	-	-	-
C ₂₉ H ₄₃ BrO ₇	-	-	Group freq	Corey	JACS	76 (1954)	175
Methyl 3α,12α-diacetoxy-6α-bromo-7-ketocholanate	-	-	-	-	-	-	-
C ₂₉ H ₄₃ BrO ₇	-	-	Group freq	Corey	JACS	76 (1954)	175
Methyl 3α,12α-diacetoxy-6β-bromo-7-ketocholanate	-	-	-	-	-	-	-
C ₂₉ H ₄₃ ClO ₅	400-4000	Sol	Spec	Cummins	JCS	- (1957)	3847
12ξ-Chloro-11-oxotigogenin acetate	-	S	Spec, Band freq	Wintersteiner	JACS	75 (1953)	4938
17a,22,26-Ni-trilo-jerv-5-ene-3β,17,23-triol-11-one 17-acetate	-	-	-	-	-	-	-
C ₂₉ H ₄₃ NO ₈	2-13 μ	Sol	Spec, Group freq, Struct	Kupchan	JACS	77 (1955)	686
Cevagenine C-orthoacetate	-	-	-	-	-	-	-
C ₂₉ H ₄₃ NO ₈	2-13 μ	Sol	Spec, Group freq	Kupchan	JACS	77 (1955)	686
Cevagenine D-orthoacetate	2-13 μ	Sol	Spec, Group freq, Struct	Kupchan	JACS	77 (1955)	686
Cevine Orthoacetate	-	-	-	-	-	-	-
C ₂₉ H ₄₃ NO ₈ ·CH ₃ OH	-	Sol	Struct, Group freq	Barton	JCS	- (1954)	2137
Cevine orthoacetate methenol	-	-	-	-	-	-	-
C ₂₉ H ₄₃ NO ₉	600-3600	S	Spec	Edward	CJC	32 (1954)	708
Dihydroanhydrolycoctonam	728-3560	S	Group freq, Assign	Dickson	JCS	- (1955)	447
3β-Acetoxy-23a-bromo-12α-chloro-5α,22a-spirostan-11β-ol	-	-	-	-	-	-	-

$C_{29}H_{44}Br_2O_4$	β -Acetoxy-17,17a-dibromo- C-nor-D-homo-5 α ,22a- spirostane	-	Sol	Group freq	Elks	JCS - (1954)	1739
$C_{29}H_{44}Br_2O_4$	Dibromosarsasapogenin Acetate	-	Sol	Struct	Ziegler	JACS 77 (1955)	1223
$C_{29}H_{44}Br_2O_4$	Dibromosmilagenin acetate	-	Sol	Ident	Ziegler	JACS 77 (1955)	1223
$C_{29}H_{44}Br_2O_5$	β -Acetoxy-11 α ,23a- dibromo-5 α ,22a- spirostan-12 α -ol	724-3620	Sol	Group freq, Assign	Dickson	JCS - (1955)	447
$C_{29}H_{44}Br_2O_5$	β -Acetoxy-11 α ,23a- dibromo-5 α ,22a-spirostan -12 β -ol	724-3620	Sol	Group freq, Assign	Dickson	JCS - (1955)	447
$C_{29}H_{44}Br_2O_5$	β -Acetoxy-12 α ,23a- dibromo-5 α ,22a-spirostan -11 β -ol	726-3620	Sol	Group freq, Assign	Dickson	JCS - (1955)	447
$C_{29}H_{44}Br_2O_5$	11 α ,23 ξ -Dibromo-12 α - hydroxy-5 α ,22a-spirostan -3 β -yl acetate	-	Sol	Group freq	Cornforth	JCS - (1954)	907
$C_{29}H_{44}Br_2O_5$	11 α ,23 ξ -Dibromo-12 β - hydroxy-5 α ,22a-spirostan -3 β -yl acetate	-	Sol	Group freq	Cornforth	JCS - (1954)	907
$C_{29}H_{44}Br_2O_5$	12 α ,23 ξ -Dibromo-11 β - hydroxy-5 α ,22a-spirostan -3 β -yl acetate	-	S	Group freq	Cornforth	JCS - (1954)	907
$C_{29}H_{44}ClNO_4$	22,26-Imino-3 α -chloro- jervane-11,23-dione N-acetate	-	S	Band freq	Iselin	JACS 76 (1954)	5616
$C_{29}H_{44}O$	6 β -Methoxy-3,5-cyclo- ergosta-7,9(11),22- triene	-	Sol	Band freq, Group freq	Rees	JCS - (1954)	3422
$C_{29}H_{44}O$	3-Methoxy-3,5,7,22-ergo- stataetraene	-	S	Band freq, Group freq	Page	JCS - (1955)	2017
$C_{29}H_{44}O$	3-Methoxy-3,5,7,22-ergo- stataetraene	-	S	Band freq, Group freq	Shepherd	JACS 77 (1955)	1212

$C_{29}H_{44}O_2$	Dihydroepineoergosterol acetate	720-1630	S, Sol	Band freq	Scheer	JACS 77 (1955)	3300
$C_{29}H_{44}O_2$	Dihydroepineoergosterol acetate	720-1630	S, Sol	Band freq	Scheer	JACS 77 (1955)	3300
$C_{29}H_{44}O_2$	Di-(4-hydroxy-2-methyl-5-t-butylphenyl)hexyl-methane	2.5-3.4 μ	S, Sol	Freq	Ambelang	JACS 75 (1953)	947
$C_{29}H_{44}O_2$	^{12, 18} Δ -30-Noroleadien-3 β -ol-11-one	-	Sol	Freq	Djerassi	JACS 76 (1954)	4085
$C_{29}H_{44}O_3$	7-Keto- Δ ^{5, 8(9)} -cholesteryl acetate	-	S	Band freq	Tsuda	JACS 77 (1955)	665
$C_{29}H_{44}O_3S$	⁴ Δ -22a-Spirosten-3-one ethylene hemithioetal	-	Sol	Ident	Djerassi	JACS 75 (1953)	3704
$C_{29}H_{44}O_4$	3 β -Acetoxy-C-nor-D-homo-5 α , 22a-spirost-17-ene	-	Sol	Group freq	Elks	JCS - (1954)	1739
$C_{29}H_{44}O_4$	3 β -Acetoxy-5 α , 22a- Δ ¹¹ -spirostene	-	Sol	Group freq, Ident Band freq, Ident	Elks Henbest	JCS - (1954) JCS - (1954)	1739 800
$C_{29}H_{44}O_4$	Disogenin acetate	2.5-15 μ 835-1060 700-1400 890-1500	Sol Sol Sol Sol	Spec, Band freq Spec, Freq Spec, Ident Spec, Group freq Ident Freq Reference for comparison	Hirschmann Wall Eddy Jones Sato Page Ziegler	JACS 74 (1952) AC 24 (1952) AC 25 (1953) JACS 75 (1953) JACS 75 (1953) JCS - (1955) JACS 77 (1955)	5357 1337 266 158 6067 2017 1223
$C_{29}H_{44}O_4$	Cyclo-Y-Diosgenin acetate	786-1732	Sol Sol	Group freq Freq	Callow Page	JCS - (1955) JCS - (1955)	1966 2017
$C_{29}H_{44}O_4$	20 α Δ ⁵ -Diosgenin acetate	2750-3100	Sol	Spec	Smith	AC 31 (1959)	1539

$C_{29}H_{44}O$	20β - Δ -Diosgenin acetate	2750-3100	Sol	Spec	Smith	AC	31 (1959)	1539
$C_{29}H_{44}O$	20-Isodiosgenin acetate	7-15 μ	Sol	Spec, Freq	Eddy	AC	27 (1955)	1067
$C_{29}H_{44}O$	Neodiosgenin acetate	-	Sol	Band freq	Ziegler	JACS	77 (1955)	1223
$C_{29}H_{44}O$	Δ -22-Isallospiro-stenol- β -acetate	-	Sol	Ident	Mancera	JCS	- (1952)	1021
$C_{29}H_{44}O$	1-Methyleno-11-hydroxy-14-methyl- (2,3-[9,8]-5,10-dimethyl-5,7-dioxaspiro[5.4]decane)-hexadecahydrochrysofluorene acetate	-	-	Band study	Hirschmann	JACS	74 (1952)	2693
$C_{29}H_{44}O$	Δ -22a,5 α -C-Nor-D-homospirosten- β -ol acetate	-	Sol	Group freq	Elks	JCS	- (1954)	17
$C_{29}H_{44}O$	Δ -22a,5 α -C-Nor-D-homospirosten- β -ol acetate	-	Sol	Band freq	Hirschmann	JACS	76 (1954)	4013
$C_{29}H_{44}O$	Δ -22a-5 α -Spirosten- β -ol acetate	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
$C_{29}H_{44}O$	Δ -22a-5 α -Spirosten- β -ol acetate	-	Sol	Band freq	Rosenkrantz	JACS	76 (1954)	2227
$C_{29}H_{44}O$	Δ -22a-5 α -Spirosten- β -ol acetate	-	-	Ident	Wendler	JACS	77 (1955)	1632
$C_{29}H_{44}O$	Yamogenin acetate	890-1350	Sol	Spec, Group freq	Jones	JACS	75 (1953)	158
$C_{29}H_{44}O$	20-Isoyamogenin acetate	7-15 μ	Sol	Spec, Freq	Eddy	AC	27 (1955)	1067
$C_{29}H_{44}O$	Δ -Yamogenin acetate	2750-3100	Sol	Spec, Struct	Smith	AC	31 (1959)	1539
$C_{29}H_{44}O$	Δ -Yamogenin acetate	2750-3100	Sol	Spec, Struct	Smith	AC	31 (1959)	1539
$C_{29}H_{44}O$	β -Acetoxy-11 α ,12 α -epoxy-5 α ,22a-spirostane	-	Sol	Group freq	Elks	JCS	- (1954)	1739
$C_{29}H_{44}O$	12 α -Acetoxy-5 α ,22a-Spirostan-3-one	-	Sol	Group freq	Elks	JCS	- (1954)	1739
$C_{29}H_{44}O$	Hecogenin acetate	800-1050	Sol	I, Band study Freq, Anal	Jones Wall	JACS AC	74 (1952) 24 (1952)	80 1337

$C_{29}H_{44}O_5$	Cyclo- ψ -Hecogenin acetate	700-1400 890-1340	Sol Sol	Spec, Ident Group freq, I Ident	Eddy Jones Kridler Callow Dickson Rosenfeld Cummins	AC JACS JACS JCS JCS JACS JCS	25 (1953) 75 (1953) 76 (1954) - (1955) - (1955) 77 (1955) - (1957)	266 158 2938 1671 447 4367 3847
$C_{29}H_{44}O_5$	20 α -Hecogenin acetate	2750-3100	Sol	Spec	Smith	AC	31 (1959)	1539
$C_{29}H_{44}O_5$	20 β -Hecogenin acetate	2750-3100	Sol	Spec, Struct	Smith	AC	31 (1959)	1539
$C_{29}H_{44}O_5$	20-Isohecogenin acetate	7-15 μ	Sol	Spec, Band freq	Eddy	AC	27 (1955)	1067
$C_{29}H_{44}O_5$	22-Isoallospirostan- 3 β -ol-11-one acetate	-	-	Spec, Ident	Romo	JACS	74 (1952)	2918
$C_{29}H_{44}O_5$	5 α ,22a-C-Norspirostan- 3 β -ol-11a-al-3-acetate	-	Sol	Freq	Wendler	JACS	77 (1955)	1632
$C_{29}H_{44}O_5$	9 α ,11 α -Oxido-5 α ,22 α - Spirostan-3 β -ol acetate	-	- Sol	Spec, Band freq Band freq	Constantin Rosenkrantz	JACS JACS	74 (1952) 76 (1954)	3908 2227
$C_{29}H_{44}O_5$	11-Oxotigogenin acetate	400-4000	- Sol	Ident Spec, Ext. Coeff., Config.	Callow Cummins	JCS JCS	- (1955) - (1957)	1966 3847
$C_{29}H_{44}O_5$	11-Oxocyclo- ψ -tigogenin acetate	784-1731	Sol	Group freq	Callow	JCS	- (1955)	1966
$C_{29}H_{44}O_5$	Pennogenin 3-monoacetate	890-1340	Sol	Group freq, I	Jones	JACS	75 (1953)	158
$C_{29}H_{44}O_5$	Sisalagenin acetate	-	S	Band freq	Callow	JCS	- (1955)	1671
$C_{29}H_{44}O_5$	Cyclo- ψ -Sisalagenin acetate	868-1735	S,Sol	Group freq	Callow	JCS	- (1955)	1966
$C_{29}H_{44}O_5$	22a,5 α -Spirostan-2 α - ol-3-one acetate	-	Sol	Band freq	Herran	JACS	76 (1954)	5531

$C_{29}H_{44}O_5$	22a, 5 α -Spirostan-2 β -ol- 3-one acetate	Sol	Band freq	Herran	JACS	76 (1954)	5531
$C_{29}H_{44}O_5$	22a, 5 α -Spirostan-3 β -ol- 11-one 3-acetate	Sol	Band freq, Ident	Djerassi	JACS	76 (1954)	5533
$C_{29}H_{44}O_5$	22a, 5 β -Spirostan-3 α -ol- 11-one acetate	Sol	Band freq	Rosenkrantz Lenin	JACS	75 (1953)	4430
$C_{29}H_{44}O_5$	22a, 5 β -Spirostan-3 α -ol- 12-one acetate	-	Band freq	Djerassi	JACS	75 (1953)	4885
$C_{29}H_{44}O_5$	20 α - Δ^5 -Yuccagenin acetate	Sol	Spec, Struct	Smith	AC	31 (1959)	5539
$C_{29}H_{44}O_5S_2$	Methyl 3 α -formoxy-11, 12- diketochoholanate-12- trimethylene thioketal	Sol	Group freq	Archer	JACS	76 (1954)	4915
$C_{29}H_{44}O_6$	2 β -Acetoxy-5 α , 22a-C- norspirostan-11a-oic acid	-	Freq	Wendler	JACS	77 (1955)	1632
$C_{29}H_{44}O_6$	Hecololactone 3-acetate	Sol	Spec, Band freq	Rothman	JACS	76 (1954)	527
$C_{29}H_{44}O_6$	8, 14 ξ -Oxido-22a-allo- spirostane-7 ξ -ol-3-one ethylene ketal	-	Ident	Bernstein	JOC	18 (1953)	1418
$C_{29}H_{44}O_6$	22a, 5 α -Spirostan-3 β , 12 β -diol-11-one 3- acetate	Sol	Band freq	Djerassi	JACS	76 (1954)	5533
$C_{29}H_{44}O_6$	22a-Spirostan-3-one- 5 α , 6 β -diol 6-monoacetate	Sol	Band freq	Sondheimmer	JACS	76 (1954)	5020
$C_{29}H_{44}O_7$	Methyl 3 α , 11 β -diacetoxy -12-ketochoholanate	-	Ident	Rosenfeld	JACS	77 (1955)	4367
$C_{29}H_{44}O_7$	Methyl 3 α , 12 α -diacetoxy 7-ketochoholanate	Sol	Freq, Struct, Anal Group freq	Jones Corey	JACS	71 (1949)	241
$C_{29}H_{44}O_7$	Methyl 3 α , 12 β -diacetoxy -11-ketochoholanate	-	Ident	Rosenfeld	JACS	77 (1955)	4367

C ₂₉ H ₄₄ O ₇	Methyl 3β,11E-diacetoxy 3α,9α-oxidocholanoate	-	-	Band freq	Heymann	JACS	73 (1951)	5252
C ₂₉ H ₄₅ O ₃	⁵ Δ ⁵ -Cholestenol-3β- acetate-d ₃	-	Sol	Band study	Jones	JACS	74 (1952)	5662
C ₂₉ H ₄₅ BrO ₃	7-Keto-8-bromocholesteryl acetate	-	Sol	Freq	Tsuda	JACS	77 (1955)	665
C ₂₉ H ₄₅ NO ₃	3β-Acetoxy-22-pieridino- bisorallochol-20(22)-en- 11-one	-	Sol	Group freq	Cameron	JCS	- (1953)	3864
C ₂₉ H ₄₅ NO ₃	Solanidane-3-one-18-ol acetate	-	-	Ident	Klohs	JACS	75 (1953)	2133
C ₂₉ H ₄₅ O ₄	22,26-Imino-17(20)- isojervene-3β,23-diol- 11-one N-acetate	-	S	Band freq	Wintersteiner	JACS	76 (1954)	5609
C ₂₉ H ₄₅ NO ₅	16,22,26-Nitrilojervane -3β,17,23-triol-11-one 17-acetate	-	S	Band freq	Wintersteiner	JACS	76 (1954)	5609
C ₂₉ H ₄₅ NO ₈	Cevinilol C-orthoacetate	-	-	Freq	Kupchan	JACS	77 (1955)	683
C ₂₉ H ₄₅ NO ₈	Zygacine	-	-	Ident	Kupchan	JACS	77 (1955)	755
C ₂₉ H ₄₅ NO ₉	Ceracine	2-13 μ	Sol	Spec	Kupchan	JACS	75 (1953)	5519
C ₂₉ H ₄₅ O	Norechinocystadienol	6.4-12 μ	Sol	Spec, Ident, Struct	Barton	JCS	- (1951)	257
C ₂₉ H ₄₆ Br ₂ O ₃	3β-Acetoxy-5α,7α-dibromo- cholestanone-6	-	-	Group freq	Corey	JACS	76 (1954)	175
C ₂₉ H ₄₆ Br ₂ O ₃	3β-Acetoxy-5α,7β-dibromo- cholestanone-6	-	-	Group freq	Corey	JACS	76 (1954)	175
C ₂₉ H ₄₆ O	28-Norolean-17-en-3-one	1350-1500 680-3700	Sol	Ident	Cole	JCS	- (1956)	1007
			Sol	Freq, I	Cole	JCS	- (1957)	1332

$C_{29}H_{46}O$	$\Delta^{4,22}$ -Stigmastadien- β -one	9.75-10.75 μ	Sol	Spec, Anal	Slomp	JACS	77 (1955)	1216
$C_{29}H_{46}OS$	7-Dehydrocholesteryl thioacetate	670-3700	S	Spec	Bernstein	JOC	16 (1951)	685
$C_{29}H_{46}OS_2$	Δ^4 -Cholestene- β ,6-dione β -monoethylene thioacetal	-	Sol	Band freq	Fieser	JACS	76 (1954)	1945
$C_{29}H_{46}O_2$	$\Delta^{3,5}$ -Cholestadienol- β -acetate	1580-3100	Sol	Group study, I Group freq	Jones Jones	JACS JACS	72 (1950) 72 (1950)	86 956
$C_{29}H_{46}O_2$	$\Delta^{5,7}$ -Cholestadienol- β -acetate	-	-	Assign	Jones	JACS	70 (1948)	2024
$C_{29}H_{46}O_2$	$\Delta^{6,8}$ -Cholestadienol- β -acetate	-	Sol	Group freq Table Spec	Jones Jones Henbest	JACS JACS JCS	74 (1952) 74 (1952) - (1957)	5648 5662 997
$C_{29}H_{46}O_2$	$\Delta^{8,24}$ -Cholestadienol- β -acetate	-	Sol	Freq	Jones	JACS	74 (1952)	5648
$C_{29}H_{46}O_2$	Δ^4 -Cholesten- β ol- β -one acetate	-	Sol	Band freq	Fieser	JACS	75 (1953)	4377
$C_{29}H_{46}O_2$	Isodehydrocholesterol acetate	-	Sol	Freq	Barton	JCS	- (1953)	1842
$C_{29}H_{46}O_2$	β -Methoxyergosta-7,22-dien-11-one	-	-	Group study	Henbest	JCS	- (1957)	1462
$C_{29}H_{46}O_2$	β -Methoxyergosta-8,22-dien-11-one	-	-	Group study	Henbest	JCS	- (1957)	1462
$C_{29}H_{46}O_2$	Methyl cholesta- β ,5-diene- β -carboxylate	-	Sol	Group freq	Roberts	JCS	- (1954)	3178

C ₂₉ H ₄₆ O ₂	Norechinocystenolone	-	Sol	Band freq	Djerassi	JACS	77 (1955)	3579
C ₂₉ H ₄₆ O ₂	²² Δ ²² -Sitostenedione-3,6	1700	Sol	Freq, Struct	Jones	JACS	71 (1949)	241
C ₂₉ H ₄₆ O ₃	⁸ 3β-Acetoxy-Δ ⁸ -cholesten-7-one	-	Sol	Band freq	Fieser	JACS	75 (1953)	4395
C ₂₉ H ₄₆ O ₃	⁸⁽¹⁴⁾ 3β-Acetoxy-Δ ⁸⁽¹⁴⁾ -cholesten-7-one	-	Sol	Band freq	Fieser	JACS	75 (1953)	4395
C ₂₉ H ₄₆ O ₃	⁴ 6α-Acetoxy-Δ ⁴ -cholesten-3-one	-	Sol	Band freq	Sondheimmer	JACS	75 (1953)	4712
C ₂₉ H ₄₆ O ₃	⁶ 6β-Acetoxycholest-4-en-3-one	-	Sol Sol	Group freq Band freq	Amendolla Homo	JCS JOC	- (1954) 19 (1954)	1226 1509
C ₂₉ H ₄₆ O ₃	⁴ Δ ⁴ -2-Carbomethoxy-cholestenone-3	1350-1500	Sol	Spec, Freq	Jones	JACS	74 (1952)	5648
C ₂₉ H ₄₆ O ₃	⁴ Δ ⁴ -4-Carbomethoxy-cholestenone-3	-	Sol	Spec, Table	Jones	JACS	74 (1952)	5648
C ₂₉ H ₄₆ O ₃	⁵ Δ ⁵ -Cholestene-3,4-dione 3-ethylene ketal	-	Sol	Band freq	Fieser	JACS	76 (1954)	1728
C ₂₉ H ₄₆ O ₃	⁴ Δ ⁴ -Cholesten-2α-ol-3-one acetate	-	Sol	Band freq	Fieser	JACS	75 (1953)	4716
C ₂₉ H ₄₆ O ₃	⁴ Δ ⁴ -Cholesten-4-ol-3-one acetate	-	Sol	Band freq	Fieser	JACS	76 (1954)	1728
C ₂₉ H ₄₆ O ₃	⁵ Δ ⁵ -Cholesten-3β-ol-4-one acetate	-	Sol	Band freq	Fieser	JACS	76 (1954)	1728

$C_{29}H_{46}O_3$	Δ^5 -Cholesten- 3β -ol-7-one acetate	650-1390 - 650-900	Sol S, Sol Sol	Spec Group freq Spec	Jones Tarpley Henbest	JACS APS JCS	77 (1955) 9 (1955) - (1957)	651 69 997
$C_{29}H_{46}O_3$	Δ^5 -Cholesten-4 α -ol-3-one acetate	-	Sol	Band freq	Fieser	JACS	76 (1954)	1728
$C_{29}H_{46}O_3$	Epimeric-6 α -acetoxy-4-cholesten-3-one	-	Sol	Freq, Spec	Moritz	BCSJ	31 (1958)	379
$C_{29}H_{46}O_3$	Epimeric-6 β -acetoxy-4-cholesten-3-one	-	Sol	Spec	Moritz	BCSJ	31 (1958)	379
$C_{29}H_{46}O_3$	15-Oxocholest-8(14)-en- 3β -yl acetate	1600-1750	Sol	Freq, Spec	Braude	JCS	- (1955)	3766
$C_{29}H_{46}O_4$	3β -Acetoxy-22-isoallo-spirostane	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
$C_{29}H_{46}O_4$	Cholestenol-5 α -dione-3,6-5-acetate	-	Sol	Band freq	Tarleton	JACS	75 (1953)	4423
$C_{29}H_{46}O_4$	Ketone 10 α enol acetate	-	Sol	Band freq	Fieser	JACS	75 (1953)	4418
$C_{29}H_{46}O_4$	Sarsasapogenin acetate	830-1020 835-1000 700-1400 890-1468 - - -	Sol Sol Sol Sol Sol Sol -	Spec Spec, Anal Spec, Ident I, Group freq Freq Ident IR	Rothman Wall Eddy Jones Page Ziegler Morcillo	JACS AC AC JACS JCS JACS ARS	74 (1952) 24 (1952) 25 (1953) 75 (1953) - (1955) 77 (1955) 53B (1957)	4013 1337 266 158 2017 1223 145
$C_{29}H_{46}O_4$	20 α -Sarsasapogenin acetate	2750-3100	Sol	Spec	Smith	AC	31 (1959)	1539
$C_{29}H_{46}O_4$	20 β -Sarsasapogenin acetate	2750-3100	Sol	Spec, Struct	Smith	AC	31 (1959)	1539
$C_{29}H_{46}O_4$	Cyclo- μ -Sarsasapogenin acetate	868-1732 -	S, Sol Sol	Group freq Freq	Callow Page	JCS JCS	- (1955) - (1955)	1966 2017
$C_{29}H_{46}O_4$	3 -Episarsasapogenin acetate	890-1340	Sol	Group freq	Jones	JACS	75 (1953)	158

$C_{29}H_{46}O_4$	20-Isosarsapogenin acetate	-	-	Band freq Group freq, Struct	Wall Wall	JACS JACS	76 (1954) 77 (1955)	2849 1230
$C_{29}H_{46}O_4$	Smilagenin acetate	835-1000 700-1400	Sol S	Spec Spec, Ident Ident Ident Ident Ident	Wall Eddy Callow Djerassi Wall Zeigler	AC AC JCS JACS JACS JACS	24 (1952) 25 (1953) - (1955) 77 (1955) 77 (1955) 77 (1955)	1337 266 1671 4291 3086 1223
$C_{29}H_{46}O_4$	20 α -Smilagenin acetate	2750-3100	Sol	Spec, Struct	Smith	AC	31 (1959)	1539
$C_{29}H_{46}O_4$	20 β -Smilagenin acetate	2750-3100	Sol	Spec, Struct	Smith	AC	31 (1959)	1539
$C_{29}H_{46}O_4$	Cyclo- ψ -Smilagenin acetate	785-1730	Sol Sol	Group freq Freq	Callow Page	JCS JCS	- (1955) - (1955)	1966 2017
$C_{29}H_{46}O_4$	20-isosmilagenin acetate	7-15 μ	- Sol	Band freq Spec, Band freq Band freq	Wall Eddy Wall	JACS AC JACS	76 (1954) 27 (1955) 77 (1955)	2849 1067 1230
$C_{29}H_{46}O_4$	22a,25a,5 α -Spirostan-3 α -ol acetate	-	Sol	Ident	Djerassi	JACS	77 (1955)	4291
$C_{29}H_{46}O_4$	22a,25a-Spirostan-4 α -ol acetate	-	Sol	Freq	Djerassi	JACS	77 (1955)	4291
$C_{29}H_{46}O_4$	Tigogenin acetate	800-1050 700-1400 890-1340	Sol Sol Sol	Band study Spec, Ident Group freq, I Ident Ident Freq Spec	Wall Eddy Jones Krider Callow Page Cummins	AC AC JACS JACS JCS JCS JCS	24 (1952) 25 (1953) 75 (1953) 76 (1954) - (1955) - (1955) - (1957)	1337 266 158 2938 1671 2017 3847
$C_{29}H_{46}O_4$	20 α -Tigogenin acetate	2750-3100	Sol	Spec	Smith	AC	31 (1959)	1539
$C_{29}H_{46}O_4$	20 β -Tigogenin acetate	2750-3100	Sol	Spec, Struct	Smith	AC	31 (1959)	1539
$C_{29}H_{46}O_4$	Cyclo- ψ -Tigogenin acetate	5-16 μ	Sol Sol	Spec, Group freq Freq	Callow Page	JCS JCS	- (1955) - (1955)	1966 2017
$C_{29}H_{46}O_4$	Cyclo- ψ -neotigogenin acetate	5-16 μ	Sol Sol	Spec Freq	Callow Page	JCS JCS	- (1955) - (1955)	1966 2017

$C_{29}H_{46}O_4$	20-isotigogenin acetate	7-15 μ	Sol	Spec, Band freq	Eddy	AC	27 (1955)	1067
$C_{29}H_{46}O_4$	neotigogenin acetate	-	S	Ident Freq	Callow Page	JCS	- (1955)	1966
$C_{29}H_{46}O_5$	12 α -Acetoxy-5 α ,22a-spirostan-3 β -ol	-	Sol	Group freq	Elks	JCS	- (1954)	1739
$C_{29}H_{46}O_5$	20 α -Chlorogenin acetate	2750-3100	Sol	Spec, Struct	Smith	AC	31 (1959)	1539
$C_{29}H_{46}O_5$	20 β -Chlorogenin acetate	2750-3100	Sol	Spec, Struct	Smith	AC	31 (1959)	1539
$C_{29}H_{46}O_5$	20 α -Gitogenin acetate	2750-3100	Sol	Spec	Smith	AC	31 (1959)	1539
$C_{29}H_{46}O_5$	20 β -Gitogenin acetate	2750-3100	Sol	Spec	Smith	AC	31 (1959)	1539
$C_{29}H_{46}O_5$	11 β -Hydroxy-5 α ,22a-spirostan-3 β -yl acetate	-	-	Group freq	Cornforth	JCS	- (1954)	907
$C_{29}H_{46}O_5$	22-Isallospirostan-3 β ,11 β -diol 3-acetate	-	-	Band study	Djerassi	JACS	74 (1952)	1712
$C_{29}H_{46}O_5$	25-Isocholeogenin-3-monoacetate	-	-	Band freq	Mazur	JCS	- (1954)	1223
$C_{29}H_{46}O_5$	3,4-Seco- Δ^5 -cholesten-7-one-3,4-dioic acid dimethyl ester	-	Sol	Band freq	Fieser	JACS	75 (1953)	4386
$C_{29}H_{46}O_5$	6,7-Seco- Δ^4 -cholesten-one-6,7-dioic acid dimethyl ester	-	Sol	Band freq	Fieser	JACS	75 (1953)	4386
$C_{29}H_{46}O_5$	22a,5 α -Spirostan-3 β ,11 α -diol 3-monoacetate	-	Sol	Band freq	Rosenkrantz	JACS	76 (1954)	2227
$C_{29}H_{47}BrO_3$	3 β -Acetoxy-5 α -bromo-cholestanone-6	-	-	Group freq	Corey	JACS	76 (1954)	175
$C_{29}H_{47}BrO_3$	3 β -Acetoxy-7 α -bromo-cholestanone-6	-	-	Group freq	Corey	JACS	76 (1954)	175

$C_{29}H_{47}BrO_3$	6 α -Bromo-7-oxocholestan-3 β -yl acetate	- 400-4000	Sol Sol	Freq Spec	Cookson Cummins	JCS JCS	- (1954) - (1957)	282 3847
$C_{29}H_{47}BrO_3$	6 β -Bromo-7-oxocholestan-3 β -yl acetate	- 400-4000	Sol Sol	Freq Spec	Cookson Cummins	JCS JCS	- (1954) - (1957)	282 3847
$C_{29}H_{47}NO_4$	6-Nitrocholesteryl acetate	-	Sol	Band freq	Anagnostopoulos	JACS	76 (1954)	532
$C_{29}H_{47}NO_4$	6-Nitroepicholesteryl acetate	-	Sol	Band freq	Anagnostopoulos	JACS	76 (1954)	532
$C_{29}H_{48}$	28-Norolean-13(18)-ene	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{29}H_{48}$	28-Norolean-17-ene	680-1350	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{29}H_{48}Cl_2O_2$	5 α ,6 β -Dichlorocholestan-3 β -yl acetate	400-1400	Sol	Group freq	Barton	JCS	- (1956)	331
$C_{29}H_{48}N_2O_6$	7,8-Dinitrocholestanyl acetate	-	Sol	Band freq	Anagnostopoulos	JACS	76 (1954)	532
$C_{29}H_{48}N_2O_7$	6 β -Nitrocholestane-3 α ,5 α -diol 3-acetate 5-nitrate	-	Sol	Band freq	Anagnostopoulos	JACS	76 (1954)	532
$C_{29}H_{48}N_2O_7$	6 β -Nitrocholestane-3 β ,5 α -diol 3-acetate 5-nitrate	-	Sol	Band freq	Anagnostopoulos	JACS	76 (1954)	532
$C_{29}H_{48}O$	3-Acetyl-5 α -cholest-2-ene	-	-	Struct	Casu	GCI	90 (1960)	1147
$C_{29}H_{48}O$	3-Acetyl-5 β -cholest-2-ene	-	-	Struct	Casu	GCI	90 (1960)	1147
$C_{29}H_{48}O$	Lup-20(29)-en-28-ol	3600-3650	Sol	Freq, Struct	Cole	JCS	- (1959)	1218
$C_{29}H_{48}O$	3O-Nor-19 α (H)-Taraxastan-20-one	-	Sol	Band freq	Ames	JCS	- (1954)	1905
$C_{29}H_{48}O$	Oleanol	11-13 μ 1350-3700 3600-3650	Sol Sol Sol	Spec, Struct Freq, I Struct	Barton Cole Cole	JCS JCS JCS	- (1951) - (1957) - (1959)	257 1332 1218

$C_{29}H_{48}O$	$\Delta^{5,24}(28)$ $\Delta^{-3\beta}$ -Stigmastadienol	- -	Sol Sol	Freq Freq	Cole Jones	JACS JACS	74 (1952) 74 (1952)	5571 5648
$C_{29}H_{48}O$	$\Delta^{7,22}$ Δ -Stigmastadienol- 3β	- -	Sol -	Freq Ident	Cole Hamilton	JACS JCS	74 (1952) - (1952)	5571 5051
	-	-	Sol	Freq	Jones	JACS	74 (1952)	5648
	-	-	S	Band freq	Idler	JACS	75 (1953)	1712
	2.5-13 μ	-	Sol	Freq, Struct	Rosenkrantz	JACS	75 (1953)	903
$C_{29}H_{48}O$	Δ^4 Δ -Stigmasterone- 3β	-	S, Sol	Group freq	Tarpley	APS	9 (1955)	69
$C_{29}H_{48}O$	5β -Stigmast-22-en- 3β -one	5.5-10.75 μ	Sol	Anal, Spec	Slomp	JACS	77 (1955)	1216
$C_{29}H_{48}O$	Δ^{22} Δ -Stigmaster- 3β -one	5.5-10.75 μ	Sol	Anal	Slomp	JACS	77 (1955)	1216
$C_{29}H_{48}O$	Stigmasterol	-	S	Band freq	Idler	JACS	75 (1953)	1712
	650-1750	-	S	Spec	Behr	AC	29 (1957)	1147
	2-15 μ	-	S, Sol	Spec, Anal	Johnson	AC	29 (1957)	468
$C_{29}H_{48}OS$	Cholesteryl thioacetate	670-3700	S	Spec	Bernstein	JOC	16 (1957)	685
$C_{29}H_{48}OS_2$	Cholestane- 3β ,6-dione 3β -monothylene thioacetal	-	Sol	Band freq	Fieser	JACS	76 (1954)	1945
$C_{29}H_{48}OS_2$	Δ^4 Δ -Cholestan- 20α -ol- 3β -one ethylenethioacetal	-	Sol	Band freq	Fieser	JACS	75 (1953)	4716
$C_{29}H_{48}OS_2$	Cholesteryl-S-methyl Xanthate	2-9 μ	-	Spec, Group freq	O'Connor	JACS	74 (1952)	5454
$C_{29}H_{48}O_2$	3α -Acetoxy- Δ^5 -cholestene	2.5-15 μ	Sol S	Spec, Band freq Group freq	Hirschmann Fieser	JACS JACS	74 (1952) 75 (1953)	5357 4377
$C_{29}H_{48}O_2$	3β -Acetoxy- Δ^1 -cholestene	-	Sol	Band freq, I	Henbest	JCS	- (1954)	800
$C_{29}H_{48}O_2$	3β -Acetoxy- Δ^4 -cholestene	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357

C ₂₉ H ₄₈ O ₂	3 β -Acetoxy- Δ^6 -cholestene	2.5-15 μ	Sol	Spec, Band freq	Hirschmann Henbest James	JCS	74 (1952)	5357
		650-3100	Sol	Band freq, I		JCS	- (1954)	800
		-	Sol	Group freq		JCS	- (1955)	1370
C ₂₉ H ₄₈ O ₂	3 β -Acetoxy- Δ^7 -cholestene	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
		-	-	Ident		JCS	- (1953)	361
C ₂₉ H ₄₈ O ₂	3 β -Acetoxy- $\Delta^{17(20)}$ -cholestene- Δ	-	-	-	Cardwell	JCS	- (1953)	361
		-	-	-	-	-	-	-
C ₂₉ H ₄₈ O ₂	Δ^2 -Cholesten-3-ol-acetate	700-1400	Sol	Spec, Ident	Jones	JACS	78 (1956)	1152
		-	-	Ident	Becker	JOC	20 (1955)	353
C ₂₉ H ₄₈ O ₂	Δ^5 -Cholesten-3 β -ol-acetate	-	-	Assign	Jones	JACS	70 (1948)	2024
		2-15 μ	Sol	Spec, Struct	Fontaine	JACS	73 (1951)	878
		25-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
		-	Sol	Freq	Jones	JACS	74 (1952)	5648
		-	Sol	Table	Jones	JACS	74 (1952)	5662
		825-1000	Sol	Spec, Anal	Wall	AC	24 (1952)	1337
		700-1400	Sol	Ident	Jones	JACS	78 (1956)	1152
		400-4000	Sol	Spec	Cummins	JCS	- (1957)	3847
		-	-	IR discussed	Morcillo	ARS	53B (1957)	145
		-	-	-	-	-	-	-
C ₂₉ H ₄₈ O ₂	$\Delta^{8(14)}$ -Cholestenol-3 β acetate	2.5-15 μ	Sol	Assign	Jones	JACS	70 (1948)	2024
		-	-	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
C ₂₉ H ₄₈ O ₂	Δ^{14} -Cholestenol-3 β acetate	1580-3100	Sol	Assign	Jones	JACS	70 (1948)	2024
		700-1400	Sol	Group study, I	Jones	JACS	72 (1950)	86
		-	Sol	Ident	Jones	JACS	78 (1956)	1152
C ₂₉ H ₄₈ O ₂	3,5-Cyclo-6 α -cholestanol acetate	3-12 μ	Sol	Spec	Wagner	JOC	17 (1952)	529
		-	-	-	-	-	-	-
C ₂₉ H ₄₈ O ₂	3,5-Cyclo-6 β -cholestanol acetate	3-12 μ	Sol	Spec	Wagner	JOC	17 (1952)	529
		-	-	-	-	-	-	-

$C_{29}H_{48}O_2$	β -Hydroxy-4,4-dimethyl- ⁸ (14)-15-keto- Δ -cholestene	-	-	Group freq	Woodward	JACS	76 (1954)	2852
$C_{29}H_{48}O_2$	β -Hydroxy- β -norlupan-20-one	1350-1500	Sol	Spec, Ident	Cole	JCS	- (1956)	1007
$C_{29}H_{48}O_2$	β -Methoxy-14-methyl-cholest-7-en-15-one	-	Sol	Freq	Page	JCS	- (1955)	2017
$C_{29}H_{48}O_2$	Sitostanediene-3,6	1700	Sol	Freq, Struct, Anal	Jones	JACS	71 (1949)	241
$C_{29}H_{48}O_2$	Ketone 104 ethylene thioetal	-	Sol	Band freq	Fieser	JACS	75 (1953)	4418
$C_{29}H_{48}O_3$	β -Acetoxycholestanone-6	-	Sol	Band freq	Anagnostopoulos Corey	JACS	76 (1954) 76 (1954)	532 175
$C_{29}H_{48}O_3$	β -Acetoxy- Δ - ⁶ cholestenol-5 α	650-3100	Sol	Band freq, I	Henbest	JCS	- (1954)	800
$C_{29}H_{48}O_3$	Cholestan-3 α -ol-6-one acetate	-	Sol	Band freq	Anagnostopoulos	JACS	76 (1954)	532
$C_{29}H_{48}O_3$	Cholestanol- β -one-7-acetate	400-4000	S, Sol Sol	Group freq Spec	Tarpley Cummins	APS JCS	9 (1955) - (1957)	69 3847
$C_{29}H_{48}O_3$	⁵ Δ -Cholestene-3,4-dione- β -dimethyl ketal	-	Sol	Band freq	Fieser	JACS	76 (1954)	1728
$C_{29}H_{48}O_3$	⁵ Δ -Cholester-4 α -ol- β -one ethylene ketal	-	Sol	Band freq	Fieser	JACS	76 (1954)	1728
$C_{29}H_{48}O_3$	14-Methyl- β -oxo-A-nor-coprostan-5 β -yl acetate	-	Sol	Band freq, Struct	Barton	JCS	- (1954)	903
$C_{29}H_{48}O_4$	Alcohol 104 acetate	-	Sol	Band freq	Fieser	JACS	75 (1953)	4418
$C_{29}H_{48}O_4$	Dimethyl Δ - ⁴ Cholestene-6,7-dicarboxylate	-	-	Group freq, Ident	Gates	JOC	20 (1955)	610

C ₂₉ H ₄₈ O	Dimethyl 3,5-Cyclocholestan-6,7-dicarboxylate	-	-	Group freq, Ident	Gates	JOC	20 (1955)	610
C ₂₉ H ₄₈ O	Methyl 5 α -hydroxy-6-ke tocholestan-3 β -carboxylate	-	Sol	Group freq	Roberts	JCS	- (1954)	3178
C ₂₉ H ₄₉ BrO ₂	2 β -Bromocholestan-3 β -ol acetate	-	-	Band study	Fieser	JACS	75 (1953)	1704
C ₂₉ H ₄₉ O ₁	3 β -Chlorostigmast-5-ene	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
C ₂₉ H ₄₉ O ₂	2 α -Chlorocholestan-3 β -ol acetate	-	-	Ident	Beereboom	JACS	75 (1953)	3500
C ₂₉ H ₄₉ O ₂	3 β -Chlorocoprostan-6 β -yl acetate	400-1400	Sol	Group freq	Barton	JCS	- (1956)	331
C ₂₉ H ₄₉ O ₃	3 β -Acetoxy-6 α -chlorocholestan-5 α -ol	-	Sol	Freq	Henbest	JCS	- (1958)	2633
C ₂₉ H ₄₉ O ₃	6 β -Chloro-5 α -hydroxycholestan-3 β -yl acetate	400-1400	Sol	Freq	Barton	JCS	- (1956)	331
C ₂₉ H ₄₉ FO ₃	3 β -Acetoxy-6 β -fluorocholestan-5 α -ol	-	Sol	Freq	Henbest	JCS	- (1958)	2633
C ₂₉ H ₄₉ NO ₈	Erythralosamine	-	-	Ident	Flynn	JACS	76 (1954)	3121
C ₂₉ H ₅₀ O	3 β -Acetylcholestan-3 β -ol	-	-	Freq	Corey	JACS	75 (1953)	6234
C ₂₉ H ₅₀ O	3 α -Sitosterol	10-13 μ	-	Spec, Band freq	Idler	JACS	75 (1953)	4325
C ₂₉ H ₅₀ O	β -Sitosterol	-	Sol	Freq	Cole	JACS	74 (1952)	5571
		-	Sol	Freq	Jones	JACS	74 (1952)	5648
		-	S	Band freq	Idler	JACS	75 (1953)	1712
		10.0-10.75 μ	Sol	Anal	Beher	AC	29 (1957)	1147
		650-1750	S	Spec	Johnson	AC	29 (1957)	468
		650-1350	Sol	Generalization	Jones	JACS	80 (1958)	6121
C ₂₉ H ₅₀ O	γ -Sitosterol	-	S	Band freq	Idler	JACS	75 (1953)	1712
		10.0-10.75 μ	Sol	Anal	Johnson	AC	29 (1957)	468

$C_{29}H_{50}O$	Δ^8 -Sitosterol	-	S	Band freq	Idler	JACS	75 (1953)	1712
$C_{29}H_{50}O$	Δ^7 -Stigmastenol	10-13 μ	Sol	Band freq	Idler	JACS	75 (1953)	4325
$C_{29}H_{50}O$	Δ^{22} -Stigmastenol- 3β	-	Sol	Freq	Cole	JACS	74 (1952)	5571
		-	Sol	Freq	Jones	JACS	74 (1952)	5648
		650-1350	Sol	Generalization	Jones	JACS	80 (1958)	6121
$C_{29}H_{50}O$	Δ^{22} -5-Isostigmastenol- 3α	-	Sol	Freq	Cole	JACS	74 (1952)	5571
		900-3700	Sol	Spec, Freq	Jones	JACS	74 (1952)	5648
$C_{29}H_{50}OS$	Cholestan- 3 -one ethylene hemithioacetal	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3704
$C_{29}H_{50}OS_2$	Cholestan- 2α -ol- 3 -one ethylene thioacetal	-	Sol	Band freq	Fieser	JACS	75 (1953)	4716
$C_{29}H_{50}O_2$	3β -Carbomethoxycholestane	-	Sol	Ident	Corey	JACS	75 (1953)	6234
$C_{29}H_{50}O_2$	Cholestanol- 2α acetate	-	-	Struct, Band study	Barton	JCS	- (1953)	1027
$C_{29}H_{50}O_2$	Cholestanol- 2β acetate	-	-	Struct	Barton	JCS	- (1953)	1027
$C_{29}H_{50}O_2$	Cholestan- 3α -ol acetate	-	-	Assign	Jones	JACS	70 (1948)	2024
		1155-1280	Sol	Band study, I	Jones	JACS	73 (1951)	3215
		1200-1280	Sol	Spec	Dauben	JACS	74 (1952)	5206
		-	-	Band study	Barton	JCS	- (1953)	1027
		770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237
		700-1400	Sol	Ident	Jones	JACS	78 (1956)	1152
$C_{29}H_{50}O_2$	Cholestan- 3β -ol acetate	-	-	Assign	Jones	JACS	70 (1948)	2024
		1150-1280	Sol	Band I	Jones	JACS	73 (1951)	3215
		1200-1280	Sol	Spec	Dauben	JACS	74 (1952)	5206
		2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
		-	Sol	Freq	Jones	JACS	74 (1952)	5648
		-	-	Band study	Barton	JCS	- (1953)	1027
		-	-	Ident	Cardwell	JCS	- (1953)	361
		-	Sol	Band freq, I	Henbest	JCS	- (1954)	800
		700-1400	Sol	Ident	Jones	JACS	78 (1956)	1152
		400-4000	Sol	Spec	Cummins	JCS	- (1957)	3847

$C_{29}H_{50}O_4$	Dimethyl 2, β -seco-cholestane-2, β -dioate	2-16 μ 1600-1800	- Sol	Spec Freq	Issidorides Fuson	JACS 73 (1951) 76 (1954)	5146 2526
$C_{29}H_{50}O_5$	Dimethyl β -hydroxycholestane-6, 7-dicarboxylate	-	Sol	Freq, Ident	Smith	JACS 76 (1954)	6119
$C_{29}H_{51}N$	β -Dimethylamino-cholest-5-ene	-	-	Band freq, Struct	Haworth	JCS - (1953)	1102
$C_{29}H_{51}N$	α -Dimethylamino-cholest-5-ene	2900-3100	Sol	Group freq	Hill	JCS - (1958)	760
$C_{29}H_{52}O$	Stigmastanol	625-5000	S	Ident, Spec	Idler	JACS 75 (1953)	1712
$C_{29}H_{52}O_2$	β , β -Dimethoxycholestane	660-1400	Sol	Spec, Band freq	Page	JCS - (1955)	2017
$C_{29}H_{52}O_3$	α -Tocopherylhidroquinone	2-12 μ	S	Spec	Rosenkrantz	JACS 72 (1950)	3304
$C_{29}H_{54}$	8-(9-Heptadecyl) [3,0,3,2] tricyclododecane	3.4-14.7 μ	Sol	Anal	Francis	AC 25 (1953)	1466
$C_{29}H_{55}NO_{10}$	X-o-Desosaminyl-dihydroerythronolide	-	-	Freq	Wiley	JACS 77 (1955)	3676
$C_{29}H_{58}$	11-(2,4-Dimethylcyclopentylmethyl)heneicosane	12.6-14.7 μ	Sol	Anal, Struct	Francis	AC 25 (1953)	1466
$C_{29}H_{58}$	11-(2,5-Dimethylcyclo-11-hexyl)heneicosane	1.1-1.25 μ	L	Anal	Evans	AC 23 (1951)	1604
$C_{29}H_{60}$	n-Nonacosane	5400-8900 750-1200 700-1500	Sol S S	Spec, Assign Struct Freq, Assign	Rose Snyder Snyder	JRNB 19 (1937) JCP 27 (1957) JMS 4 (1960)	143 969 411
$C_{29}H_{60}O$	d-n-Nonacosan-10-ol	-	-	Ident	Bentley	JCS - (1955)	596
$C_{29}H_{60}Si$	Cyclopentamethylene-didodecylsilane	2-35 μ	L	Assign	Oshesky	JACS 79 (1957)	2057

C ₃₀	COMPOUNDS	670-2000	S	Spec	Cannon	SA	4 (1951)	373
C ₃₀ H ₁₄	Dibenzcoronene	670-2000	S	Spec				
C ₃₀ H ₁₄ O ₂	Pyranthrone	6000	S	Band freq	Hadzi	JACS	73 (1951)	5460
		650-2000	S	Absorption	Akamatu	JCP	20 (1952)	1481
			S	Spec, Freq	Durie	AJC	10 (1957)	429
C ₃₀ H ₁₆ N ₂ O ₄	N,N'-Dimethylindanthrone	5.9-8.5 μ	S	Spec, Struct	Wyman	JACS	78 (1956)	4599
C ₃₀ H ₁₈ O ₃	9-Anthroic anhydride	-	-	Band freq	Greene	JACS	77 (1955)	3852
C ₃₀ H ₁₈ O ₃	9-Anthroic anhydride photomeride	-	-	Struct, Freq	Greene	JACS	77 (1955)	3852
C ₃₀ H ₁₈ O ₄	2,2'-Dimethyl-1,1'-dianthraquinoyl	650-2000	S	Spec, Freq	Durie	AJC	10 (1957)	429
C ₃₀ H ₂₀ Br ₂ O ₈	Dibromoerythroaphin-fb	666-1626	S	Table	Brown	JCS	- (1955)	954
C ₃₀ H ₂₀ Br ₂ O ₈	Dibromoerythroaphin-sl	667-1626	S	Table	Brown	JCS	- (1955)	954
C ₃₀ H ₂₀ O ₂	9-Anthraldehyde dimer	-	-	Group freq	Greene	JACS	77 (1955)	3852
C ₃₀ H ₂₀ O ₉	5,5'-Di-C-benzylelagic acid-4-monoacetate	5.0-6.15 μ	S	Struct	Still	JACS	81 (1959)	4615
C ₃₀ H ₂₂	1,2-Di-9'-anthranylethane	3-15 μ	S	Spec, Group freq	Roitt	JCS	- (1952)	2695
C ₃₀ H ₂₂	10,10'-dimethyl-9,9'-	3-15 μ	S	Spec, Group freq	Roitt	JCS	- (1952)	2695
C ₃₀ H ₂₂	1,3-Di-(2-xenyl)benzene	5-38 μ	S	Spec, Freq, Assign	Stewart	JRNB	60 (1958)	125
C ₃₀ H ₂₂	1-(2-xenyl)-3-(4-xenyl)benzene	5-38 μ	S	Spec, Freq, Assign	Stewart	JRNB	60 (1958)	125
C ₃₀ H ₂₂	1-(3-xenyl)-3-(4-xenyl)benzene	5-38 μ	S	Spec, Freq, Assign	Stewart	JRNB	60 (1958)	125
C ₃₀ H ₂₂ Br ₂ N ₂ O ₈	Diaminodibromoerythroaphin-fb	666-1631	S	Table	Brown	JCS	- (1955)	954

$C_{30}H_{22}Cl_2N_2O_8S_4$	N,N,N',N' -Tetrabenzene-sulfonyl-2,3-dichloro-p-phenylenediamine	680-1380	S	Band freq	Adams	JACS 74 (1952)	2608
$C_{30}H_{22}N_2O_2$	2-Phenyl-3-(1-phenyl-2-phthalimidooethyl)indole	-	S,Sol	Group freq	Noland	JACS 81 (1959)	1203
$C_{30}H_{22}N_2O_4$	1,4-Bis methylbenzamido-anthraquinone	1648-1663	-	Group freq	Flett	JCS - (1948)	1441
$C_{30}H_{22}N_4$	1,1',3',5'-Tetraphenyl-3,5'-bipyrazolyl	650-1600	S	Band freq	Finar	JCS - (1955)	1205
$C_{30}H_{22}N_4$	1,1',5',5'-Tetraphenyl-3,3'-bipyrazolyl	650-1600	S	Band freq	Finar	JCS - (1955)	1205
$C_{30}H_{22}O_2$	5-Benzylidene-4-hydroxy-2,3,4-triphenyl- Δ^2 -cyclopentenone	1600-1800	Sol	Group freq	Fuson	JACS 76 (1954)	2526
$C_{30}H_{22}O_2$	9-Methylanthracene photoxide	850-1300	-	Group freq	Nikitin	OS 4 (1958)	702
$C_{30}H_{22}O_4$	4,4'-Bis(benzoylacetyl)biphenyl	1500-3500	S	Freq, Assign, Struct	Martin	JACS 80 (1958)	4891
$C_{30}H_{22}O_4$	1,1,2,2-Tetrabenzoyl-ethane	1.5-2.5 μ	Sol	Freq, Assign	Martin	JACS 81 (1959)	130
$C_{30}H_{22}O_8$	3,3'-Di-o-methyl-5,5'-di-C-benzylelagic acid	5.0-6.15 μ	S	Struct	Stitt	JACS 81 (1959)	4615
$C_{30}H_{22}O_8$	Erythroaphin (su,fb,en,ce)	670-3500	S	Spec Ident of fb	Johnson Brown	JCS - (1951)	2633
$C_{30}H_{22}O_8$	cis-cis-Erythroaphin-fb	-	-	Ident Group freq, Struct Spec, Band freq	Brown Brown Brown	JCS - (1955)	954
		750-1350	S			JCS - (1955)	959
			S			JCS - (1955)	1144

$C_{30}H_{22}O_8$	cis-trans-Erythroaphin-s1	670-3500	S	Spec, Struct Ident	Johnson Brown	JCS	- (1951)	2633
		-	S	Group freq, Struct	Brown	JCS	- (1955)	954
		750-1350	S	Spec, Band freq	Brown	JCS	- (1955)	959
			S	Spec, Band freq	Brown	JCS	- (1955)	1144
$C_{30}H_{22}O_8$	trans-trans-Erythroaphin	750-1350	S	Spec, Band freq	Brown	JCS	- (1955)	1144
$C_{30}H_{22}O_9$	Hydroxyerythroaphin-fb	721-3226	S	Band freq, Table	Brown	JCS	- (1952)	4928
		-	S	Ident	MacDonald	JCS	- (1954)	2378
		-	-	Band freq, Ident	Brown	JCS	- (1955)	954
$C_{30}H_{22}O_9$	Hydroxyerythroaphin-sl	721-3226	S	Band freq, Ident	Brown	JCS	- (1955)	954
$C_{30}H_{22}O_{10}$	Dihydroxyerythroaphin-fb	699-3268	S	Band freq	Brown	JCS	- (1952)	4928
		-	S	Group study	MacDonald	JCS	- (1954)	2378
		700-3333	S	Table	Brown	JCS	- (1955)	954
$C_{30}H_{22}O_{11}$	Rhodaphin-be	-	S	Ident, Group study	MacDonald	JCS	- (1954)	2378
$C_{30}H_{24}N_2O_8S$	2,X-Bis(benzenesulfonyl)-p-phenylenedibenzene-sulfonamide	-	-	Ident	Adams	JACS	75 (1953)	3235
$C_{30}H_{24}N_2O_8 \cdot H_2O$	Diaminoerythroaphin-fb-hydrate	697-1629 697-3333	S S	Band freq Table	Brown Brown	JCS JCS	- (1952) - (1952)	4928 4928
$C_{30}H_{24}O$	1-Methyl-2,3,4,5-tetra-phenylcyclopenta-2,4-dien-1-ol	2-15 μ	Sol	Spec, Group freq	Sonntag	JACS	75 (1953)	2283
$C_{30}H_{24}OSi$	Di-2-biphenylsilanol	-	S	Group freq	Gilman	JOC	20 (1955)	862
$C_{30}H_{24}O_2$	Bis-9-hydroxy-methyl-anthracene	-	-	Ident	Greene	JACS	77 (1955)	3852
$C_{30}H_{26}N_2$	Diphenyl ketene-N-methyl-imine dimer	-	-	Band freq	Stevens	JACS	76 (1954)	4398
$C_{30}H_{26}N_2O_2$	1-threo-5-Benzylidene-amino-4-(p-benzylidene-aminophenyl)-2-phenyl-1,3-dioxane	-	-	Group freq	Edgerton	JOC	19 (1954)	593

$C_{30}H_{26}N_4O_4$	Utric acid phenylhydrazone anhydrophenylhydrazone	-	Sol	Group freq	Barton	JCS - (1953)	603
$C_{30}H_{26}OSi_2$	Pentaphenylhydroxydisilane	-	-	Group study	Gilman	JACS 75 (1953)	1250
$C_{30}H_{26}O_2$	Biphenylene (o-duroyl- phenyl)carbinol	-	-	Group freq	Fuson	JOC 19 (1954)	674
$C_{30}H_{26}O_4$	dl-1,6-Di-o-hydroxy- phenyl-3,4-diphenyl- hexane-1,6-dione	-	-	Group freq	Jack	JCS - (1954)	3684
$C_{30}H_{26}O_4$	meso-1,6-Di-o-hydroxy- phenyl-3,4-diphenyl- hexane-1,6-dione	-	-	Group freq	Jack	JCS - (1954)	3684
$C_{30}H_{26}O_4$	Flavpinacol	-	-	Group freq	Jack	JCS - (1954)	3684
$C_{30}H_{26}O_5$	Di-o-Carbomethoxy- benzhydryl ether	600-4000	Sol	Spec, Group freq	Curtin	JOC 19 (1954)	352
$C_{30}H_{28}$	Cyclo-di-(4,4'-dibenzyl- methane)	3-12 μ	Sol	Spec	Steinberg	JACS 74 (1952)	5388
$C_{30}H_{28}N_2O_4$	4,9-Dihydroxy-1,6- dipiperidinopyrylene- 3,10-quinone	752-3344	S	Table	Calderbank	JCS - (1954)	1285
$C_{30}H_{28}O$	p-t-Butylphenyl trityl ketone	-	-	Group freq, Ident	Fuson	JACS 77 (1955)	1138
$C_{30}H_{28}O_4$	Tetraanisylethylene	1000-1700	Sol	Band freq, Ident	Buckles	JACS 82 (1960)	2444
$C_{30}H_{28}O_5$	4'-Methoxy-2,2'- trianisylacetophenone	1000-1700	Sol	Band freq, Ident	Buckles	JACS 82 (1960)	2444
$C_{30}H_{29}NO_7$	2-Veratroyl-3,5-bis(3,4- dimethoxyphenyl)pyridine	-	-	Group freq	ElieI	JACS 75 (1953)	4291
$C_{30}H_{30}$	p,p'-Bis-(4-methylbenzyl) dibenzyl	3-12 μ	Sol	Spec	Steinberg	JACS 74 (1952)	5388

C ₃₀ H ₃₀ N ₀ O ₅ P	3-15 μ	S, L	Spec, Freq	Li	JACS	77 (1955)	3519
N-Dibenzylphosphoryl-dl-phenylalanine benzyl ester	3-15 μ	S, L	Spec, Freq	Li	JACS	77 (1955)	3519
C ₃₀ H ₃₀ O ₆	1000-1700	Sol	Band freq, Ident	Buckles	JACS	82 (1960)	2444
1,1,2,2-Tetraanisyl-1,2-ethanediol	1000-1700	Sol	Band freq, Ident	Buckles	JACS	82 (1960)	2444
C ₃₀ H ₃₀ O	2-12 μ	Sol	Spec, Struct, Group freq	O'Connor	JACS	76 (1954)	2368
C ₃₀ H ₃₀ O ₁₆	-	-	Ident	Lloyd	JCS	- (1955)	2163
C ₃₀ H ₃₀ OSi	-	-	Inductive effect	Josien	CFR	249 (1959)	826
C ₃₀ H ₃₀ O ₃	-	-	Group freq	Fuson	JACS	77 (1955)	3776
C ₃₀ H ₃₄ N ₀ S	2-16 μ	S	Spec, Struct	Van Tamelen	JACS	75 (1953)	2031
1-(p-Durocylphenyl)-3-duryl-1,3-propanedione	2-16 μ	S	Spec, Struct	Van Tamelen	JACS	75 (1953)	2031
C ₃₀ H ₃₄ N ₀ O ₁₀ S ₂	2-16 μ	S	Spec, Struct, Ident	Van Tamelen	JACS	75 (1953)	2031
α-Aminomethyl-δ-amino-valeric acid di-(p-hydroxyazobenzene-p-sulfonate)	2-16 μ	S	Spec, Struct	Van Tamelen	JACS	75 (1953)	2031
C ₃₀ H ₃₅ N ₀ O ₃	-	S	Group freq, I	Werbin	JACS	77 (1955)	4431
Isolysine di-(p-hydroxyazobenzene-p-sulfonate)	2-16 μ	S	Spec, Struct, Ident	Van Tamelen	JACS	75 (1953)	2031
C ₃₀ H ₃₅ N ₀	-	S	Group freq, I	Werbin	JACS	77 (1955)	4431
Dehydroepiandrosterone α-naphthylurethan	-	S	Group freq, I	Werbin	JACS	77 (1955)	4431
C ₃₀ H ₃₅ N ₀ S	-	S	Group freq, I	Werbin	JACS	77 (1955)	4431
Testosterone-α-naphthylurethan	-	S	Group freq, I	Werbin	JACS	77 (1955)	4431
C ₃₀ H ₃₆	3-15 μ	S	Spec	Wolovsky	JACS	81 (1959)	4600
Cyclotriacenta-1,3,11,13,21,23-hexayne	3-15 μ	S	Spec	Wolovsky	JACS	81 (1959)	4600
C ₃₀ H ₃₆ N ₀ O ₅	-	Sol	Ident	Neuss	JACS	77 (1955)	4087
Methyl reserpate- <i>o</i> -tosylate	-	Sol	Ident	Neuss	JACS	77 (1955)	4087
C ₃₀ H ₃₆ O ₅	-	S	Freq	Arth	JACS	77 (1955)	3834
d1-Ethylenedioxy-16-tosyloxy-14β-15,16-pregnadiene-11,20-dione	-	S	Freq	Arth	JACS	77 (1955)	3834
C ₃₀ H ₃₆ O ₇	-	S	Freq	Arth	JACS	77 (1955)	3834
d1-3-Ethylenedioxy-13 α -16-tosyloxypregna-5,16-diene-11,20-dione	-	S	Freq	Arth	JACS	77 (1955)	3834

$C_{30}H_{36}O_7S$	d1- β -Ethylene-dioxy-16-tosyloxy-5,16-pregnadiene-11,20-dione	-	S	Freq	Arth	JACS 77 (1955)	3834
$C_{30}H_{37}NO_3$	Etiocolan-17 β -ol- β -one- α -naphthylurethane	-	S	Group freq, I	Werbin	JACS 77 (1955)	4431
$C_{30}H_{38}O_6$	Allopregnane-11 α ,21-diol-3,20-dione-11-acetate	-	Sol	Freq	Sondheimer	JACS 75 (1953)	2601
$C_{30}H_{38}O_7$	β ,16-Diacetoxy- $\Delta^{14(15),20,22}$ bufatrienolide	1000-1900	Sol	Spec, Group freq	Jones	JACS 81 (1959)	5242
$C_{30}H_{38}O_8$	1,4-Diacetoxy-1,4-di-(2-acetoxy-3,4,6-trimethylphenyl)butane	-	-	Spec, Band freq, Struct	Smith	JACS 73 (1951)	3851
$C_{30}H_{38}O_{13}$	Pentaacetylglaucaurubol	-	-	Group study	Ham	JACS 76 (1954)	6066
$C_{30}H_{40}OSi$	Triphenylsilyldecyl ethyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826
$C_{30}H_{40}OSi$	Triphenylsilyloctyl butyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826
$C_{30}H_{40}OSi$	Triphenylsilylundecyl methyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826
$C_{30}H_{40}O_5S$	β -Benzylthio- Δ^5 -7-one-20 β -ol acetate	-	S	Group freq	Romo	JOC 17 (1952)	1413
$C_{30}H_{40}O_4$	16 α -Benzyloxy- Δ^5 -pregnenol- β -one-20 acetate	2.5-15 μ	Sol	Band freq, Group freq Spec, Band freq	Hirschmann Hirschmann	JACS 74 (1952) JACS 74 (1952)	539 5357
$C_{30}H_{40}O_4$	Δ^4 -Pregnene-16 α -benzyloxy- β ,20-dione-20-ethylene ketal	-	S	Band freq	Bernstein	JACS 76 (1954)	5674

C_3O_4	Pristimerin	- 2-12 μ	S, Sol Sol	Group freq, Spec, Struot	Nakanishi Nakanishi	JACS BCSJ	29 (1955) 77 (1956)	7 3169
$C_3H_4O_4$	Δ -Androster-11 α -ol-3, 17-dione-11-p-toluene- sulfonate-3,17-biethylene ketal	-	S	Group freq	Bernstein	JOC	19 (1954)	41
$C_3H_4O_7S$	2 β -4b-Dimethyl-1- β -(2- tosyloxyethyl)-2-acetyloxy- 7-ethylenedioxy-1,2,3,4, 4a α ,4b,5,6,7,8,10,10a β - dodecahydrophenanthrene- 4-one	-	-	Band freq	Johns	JACS	76 (1954)	5026
$C_3H_4N_2B_3$	B-Tributyl-N-triphenyl- borazole	-	Sol	Struct	Watanabe	SA	16 (1960)	78
$C_3H_4O_3$	3-1-Propylidene-A-nor-3 α , 3 β -bisanorlanosta-5,8- diene-7,11,12-trione	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
$C_3H_4O_3$	Lanosta-2,5,8-triene- 7,11,12-trione	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
$C_3H_4O_4$	3 β -Acetoxysterosta-5,8(9), 22-triene-7,11-dione	-	S	Group freq, I	Elks	JCS	- (1954)	451
$C_3H_4O_4$	Dumartierigenindione	-	Sol	Band freq	Djerassi	JACS	76 (1954)	2969
$C_3H_4O_4$	Δ -Pregnene-16 α -benzyloxy- 3 β -ol-20-one ethylene ketal	-	S	Band freq	Bernstein	JACS	76 (1954)	5674
$C_3H_4O_4$	Pristimerol	2-14 μ	S	Spec	Nakanishi	BCSJ	29 (1956)	7
$C_3H_4O_6$	Δ -22a,5 α -Spirosten-3 β - ol-7,11-dione-3- propionate	-	Sol	Band freq	Mancera	JACS	75 (1953)	4428

C ₃₀ H ₄₄ O ₃	Lanosta-5,8-diene-7,11,12-trione	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
C ₃₀ H ₄₄ O ₃	¹² Δ ¹² -19β-Oleanene-3,16-dion-28-al	-	Sol	Band freq	Djerassi	JACS 76 (1954)	4089
C ₃₀ H ₄₄ O ₄	³ β-Acetoxy-5α,8α-epidioxy-Δ ^{6,9(11),22} -ergostatriene	650-3100	Sol	Band freq, I	Henbest	JCS - (1954)	800
C ₃₀ H ₄₄ O ₄	³ β-Acetoxyergosta-5,22-diene-7,11-dione	-	S	Group freq	Elks	JCS - (1954)	451
C ₃₀ H ₄₄ O ₄	13-Carboxy-3β,19-dihydroxy-12-nor-11-oxotaraxast-18-ene lactone	-	Sol	Group freq, Struct	McKean	JCS - (1954)	1989
C ₃₀ H ₄₄ O ₄	7,15-Dioxoergosta-8(14),22-dien-3β-yl acetate	-	Sol	Group freq	Barton	JCS - (1954)	52
C ₃₀ H ₄₄ O ₄	³ β-Hydroxylanosta-5,8-diene-7,11,12-trione	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
C ₃₀ H ₄₄ O ₄	Novic acid	-	Sol	Group freq	Barton	JCS - (1953)	3111
C ₃₀ H ₄₄ O ₅	³ β-Acetoxy-5α-hydroxy-ergosta-8(9),22-diene-7,11-dione	-	S	Group freq	Elks	JCS - (1954)	451
C ₃₀ H ₄₄ O ₅	¹² Δ ¹² -19,30-Bisnoroleanene-11,18,20-trion-3β-ol acetate	-	Sol	Band freq	Djerassi	JACS 76 (1954)	4085
C ₃₀ H ₄₄ O ₅	⁸ Δ ⁸ -22-isoallospirosten-3β-ol-11-one propionate	-	S	Freq	Sondheimer	JACS 74 (1952)	2696
C ₃₀ H ₄₄ O ₅	9α,11α-Oxido-Δ ⁷ -22a,50ε-spiroster-3β-ol propionate	-	Sol	Band freq	Djerassi	JACS 75 (1953)	3496

$C_{30}H_{44}O_5$	⁸ Δ -22a,5 α -spirosten-3 β -ol-11-one propionate	-	Sol	Band freq	Djerassi	JACS 75 (1953)	3496
$C_{30}H_{44}O_6$	⁸ Δ -22a,5 α -spirostene-3 β -7-diol-11-one-3-propionate	-	Sol	Band freq	Mancera	JACS 75 (1953)	4428
$C_{30}H_{44}O_{16}$	Ethyl 1,1,3,3-tetra-carbethoxy-2,4-cyclo-butane dimalonate(α -form)	2-13 μ	S	Spec, Struct, Band freq	Reid	JACS 73 (1951)	1985
$C_{30}H_{44}O_{16}$	Ethyl 1,1,3,3-tetra-carbethoxy-2,4-cyclo-butane dimalonate(β -form)	2-13 μ	S	Spec, Struct, Band freq	Reid	JACS 73 (1951)	1985
$C_{30}H_{46}$	1-(p-Diphenyl)-n-octadecane	5400-8900	Sol	Spec, Assign	Rose	JRNB 19 (1937)	143
$C_{30}H_{46}BrO_7$	12 α -Bromo-11-keto-3 α -methylsuccinoxycholeanic acid methyl ester	-	Sol	Group freq	Jones	JACS 74 (1952)	2828
$C_{30}H_{46}Br_2O_3$	3 β -Acetoxy-22,23-dibromo-ergost-9-en-7-one	-	S	Group freq	Elks	JCS - (1954)	451
$C_{30}H_{46}Br_2O_3$	3 β -Acetoxy-22,23-Dibromo-9 α -ergost-7-en-11-one	-	Sol	Group freq	Elks	JCS - (1953)	2933
$C_{30}H_{46}Br_2O_3$	3 β -Acetoxy-22,23-dibromo-9 β -ergost-7-en-11-one	-	Sol	Group freq	Elks	JCS - (1953)	2933
$C_{30}H_{46}Br_2O_4$	22,23-Dibromo-7 α ,8 α -epoxy-11-oxo-9 β -ergostan-3 β -yl acetate	-	S	Group freq	Grigor	JCS - (1954)	2333
$C_{30}H_{46}Br_2O_4$	22,23-Dibromo-7 β ,8 β -epoxy-11-oxo-9 β -ergostan-3 β -yl acetate	-	S	Group freq	Grigor	JCS - (1954)	2333
$C_{30}H_{46}Br_2O_4$	22,23-Dibromo-7 β ,8 β -epoxy-11-oxo-9 β -ergostan-3 β -yl acetate	-	S	Group freq	Grigor	JCS - (1954)	2333
$C_{30}H_{46}Br_2O_4$	22,23-Dibromo-7 β ,8 β -epoxy-11-oxo-9 β -ergostan-3 β -yl acetate	-	S	Group freq	Grigor	JCS - (1954)	2333

$C_{30}H_{46}Cl_2O_3$	S	Group freq	Elks	JCS	(1953)	2933
3β -Acetoxy-22,23-dichloro-9 α ,11 α -epoxyergost-7-ene	-			JCS	-	2933
3β -Acetoxy-22,23-dichloro-9 β -ergost-7-en-11-one	Sol	Group freq	Elks	JCS	-	2933
Lanosta-5,8,11-trien-7-one	Sol	Struct	Cole	JCS	-	1212
Anhydroxoelemadienol	S	Band freq	Halsall	JCS	-	4139
4,4'-Dihydroxy-3,3',5,5'-tetra- <i>t</i> -butyldiphenylethane	Sol	Spec, Band freq	Bohn	JOC	22	458
$\Delta^{7,14,22}$ -Ergostatrienol-3 β -acetate	S,Sol	Group study	Fieser	JACS	75	4404
16 β -Hydroxy-20-isoeburico-7,9(11)-dien-21-oic acid lactone	Sol	Band freq, Ident	Bowers	JCS	-	3070
Lumisteryl acetate	Sol	Group freq	Jones	JACS	72	956
3,5,3',5'-Tetra- <i>t</i> -butyl-2,2'-dihydroxydibenzyl	Sol	Group freq	Jones	JACS	74	5648
Urs-12-en-3,11-dione	-	Group freq	Moore	JCS	-	243
Urs-12-en-3,11-dione	Sol	Group study, Group freq	Cole	JCS	-	1007
Di-(2-hydroxy-3,5-di- <i>t</i> -butyl-6-methylphenyl)disulphide	Sol	Freq, I	Cole	JCS	-	1332
Di-(4-hydroxy-2-methyl-5-H-octylphenyl)disulphide	Sol,S,L	Struct, Assign	Binder	JACS	81	3608
Di-(2-hydroxy-3-H-octyl-5-methylphenyl)disulphide	S,Sol,L	Struct, Assign	Binder	JACS	81	3608
Di-(2-hydroxy-3-H-octyl-5-methylphenyl)disulphide	S,Sol,L	Struct, Assign	Binder	JACS	81	3608

C ₃₀ H ₄₆ O ₅ ^S	-	Sol	-	Djerassi	JACS	75 (1953)	3704
Δ -22a-Spiroster-3-one-trimethylene hemithio-ketal	-	Sol	-	-	-	-	-
3 β -Acetoxy-5 α ,8 α -epidioxy- Δ - ergostadiene	650-3100	Sol	Band freq, I	Henbest	JCS	- (1954)	800
3 β -Acetoxy-5 β ,8 β -epidioxy-lumista-6,22-diene	-	S	Ident	Bladon	JCS	- (1955)	2176
3 β -Acetoxy-9 α ,11 α -epoxy-ergosta-7,22-dien-5 α -ol	-	Sol	Group freq	Bladon	JCS	- (1953)	2921
3 β -Acetoxy-7 β ,8 β -epoxy-9 β -ergost-22-en-11-one	-	Sol	Group freq	Henbest	JCS	- (1954)	728
3 β -Acetoxy-9 α ,11 α -epoxy-ergost-22-en-7-one	-	S	Ident, Group freq	Elks	JCS	- (1954)	451
3 β -Acetoxy-5 α -hydroxy-9 β -ergosta-7,22-dien-11-one	-	S	Group freq	Bladon	JCS	- (1953)	2921
7,11-Diketoeergost-5-en-3 β -yl acetate	-	Sol	Group freq	Barnes	JCS	- (1953)	1149
7,15-Dioxo-8 α ,14 β -ergost-22-en-3 β -yl acetate	-	Sol	Group freq, Band freq	Barton	JCS	- (1954)	52
7,15-Dioxo-8 β ,14 α -ergost-22-en-3 β -yl acetate	-	Sol	Group freq, Band freq	Barton	JCS	- (1954)	52
Dumortierigenin	-	Sol	Group freq, Struct	Djerassi	JACS	76 (1954)	2969
7 α ,8 α -Epoxy-15-oxo-14 ξ -ergost-22-en-3 β -yl acetate	-	Sol	Group freq	Barton	JCS	- (1954)	52
7 α -Hydroxy-15-oxoergosta-8(14),22-dien-3 β -yl acetate	-	Sol	Group freq, Struct	Barton	JCS	- (1954)	52

$C_{30}H_{46}O_4$	15 ξ -Hydroxy-7-oxoergosta-8(14),22-dien-3 β -yl acetate	-	Sol	Group freq	Barton	JCS - (1954)	52
$C_{30}H_{46}O_4$	8 α ,14 α -Oxide- Δ ²² -ergostene-3 β -ol-7-one acetate	-	Sol	Band freq	Fieser	JACS 75 (1953)	4404
$C_{30}H_{46}O_4$	Thurberogenin oxide	-	Sol	Band freq	Djerassi	JACS 77 (1955)	1200
$C_{30}H_{46}O_5$	3 β -Acetoxy-5 α -hydroxy-ergost-8(9)-ene-7,11-dione	-	S,Sol	Group freq	Elks	JCS - (1954)	451
$C_{30}H_{46}O_5$	19,30-Bisnoroleanane-11,16,20-trion-3 β -ol acetate	-	Sol	Band freq	Djerassi	JACS 76 (1954)	4085
$C_{30}H_{46}O_5$	8-Epi(α)-9-epi(β)-22-isallospirostan-3 β -ol-11-one propionate	-	S	Freq	Sondheim	JACS 74 (1952)	2696
$C_{30}H_{46}O_5$	3 β -Hydroxy-urs-12-ene-27:28-dioic acid	1500-3700	Sol	Freq	Cole	JCS - (1959)	2005
$C_{30}H_{46}O_5$	22a,5 α -8-Iso(α)-spirostan-3 β -ol-11-one-propionate	-	Sol	Band freq, Ident	Djerassi	JACS 75 (1953)	3496
$C_{30}H_{46}O_5$	22a-5 α -14-Iso(β)-spirostan-3 β -ol-11-one propionate	-	Sol	Band freq	Djerassi	JACS 75 (1953)	3496
$C_{30}H_{46}O_5S_2$	Methyl-3 α -acetoxy-11,12-diketocholanate-12-trimethylene thioetal	-	Sol	Group freq	Archer	JACS 76 (1954)	4915
$C_{30}H_{46}O_6$	Methyl-3 β -acetoxy-7,11-dioxo-25,26,27-trisnorlanostan-24-oate	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
$C_{30}H_{46}O_6$	Methyl-3 β -acetoxy-5 α ,22a-C-norspirostan-11a-oate	-	-	Band freq	Wendler	JACS 77 (1955)	1632

C ₃₀ H ₄₆ O ₈ S	5 α ,22 α -Spirostane-3 β ,11 α -diol-12-one-3-acetate-11-methanesulfonate	-	-	Band freq, Iso	Wendler	JACS	77 (1955)	1632
C ₃₀ H ₄₆ O ₈ S	5 α ,22 α -Spirostane-11 α ,12 β -diol-3-one-11-methanesulfonate 12-acetate	-	-	Band freq, Group freq	Wendler	JACS	77 (1955)	1632
C ₃₀ H ₄₇ O ₃ D ₃	²² Δ 5-5-Isoergosterol-3 α -acetate-d ₃	-	Sol	Group freq	Jones	JACS	74 (1952)	5662
C ₃₀ H ₄₇ BrO	2 α -Bromo- β -amyri-12-en-3-one	-	Sol	Group freq	Cookson	JCS	- (1954)	282
C ₃₀ H ₄₇ BrO ₂	2 α -Bromoallobetulone	400-4000	Sol	Spec, Ext. Coefficient	Cummins	JCS	- (1957)	3847
C ₃₀ H ₄₇ BrO ₃	12 α -Bromo-3 β ,13 β -dihydroxyoleanan-28-oic-13(28)-lactone	1350-1500	Sol	Group freq	Cole	JCS	- (1956)	1007
C ₃₀ H ₄₈	3-isopropylidene-A-nor-30,31-bisnorlanosta-7,9(11)-diene	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
C ₃₀ H ₄₈	² Δ 4-Methylene-3-deoxofriedelene	-	-	Freq	Corey	JACS	77 (1955)	3667
C ₃₀ H ₄₈	Ursa-2,12-diene	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
C ₃₀ H ₄₈	Ursa-9(11),12-diene	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
C ₃₀ H ₄₈ Br ₂ O ₃	3 β -Acetoxy-22,23-dibromo-9 α -ergostan-11-one	-	Sol	Group freq	Elks	JCS	- (1953)	2933
C ₃₀ H ₄₈ Br ₂ O ₃	3 β -Acetoxy-22,23-dibromo-9 β -ergostan-11 one	-	Sol	Group freq	Elks	JCS	- (1953)	2933
C ₃₀ H ₄₈ Cl ₂ O ₃	3 β -Acetoxy-22,23-dichloro-9 α -ergostan-11-one	-	Sol	Group freq	Elks	JCS	- (1953)	2933
C ₃₀ H ₄₈ Cl ₂ O ₃	3 β -Acetoxy-22,23-dichloro-9 β -ergostan-11-one	-	Sol	Group freq	Elks	JCS	- (1953)	2933

$C_{30}H_{48}O$	β -Amyr-12-en-3-one	-	Sol	Group freq	Cookson	JCS	-	(1954)	282
$C_{30}H_{48}O$	δ -Amyr-13(18)-en-3-one	-	-	Ident	Halsall	JCS	-	(1954)	1902
$C_{30}H_{48}O$	Cycloartenone	5-12 μ 2700-3100 2.5-15 μ	Sol Sol Sol	Spec, Band freq Band freq, Spec Struct	Barton Cole Cole	JCS JCS JCS	- - -	(1951) (1954) (1959)	1444 3810 1212
$C_{30}H_{48}O$	Heterolupenal	-	-	Group freq	Ames	JCS	-	(1954)	1905
$C_{30}H_{48}O$	Lup-20(29)-en-3-one	680-3700	Sol	Freq, I	Cole	JCS	-	(1957)	1332
$C_{30}H_{48}O$	β -Me thoxy-11(6-methyl-ergosta-6,8,22-triene	650-900	Sol	Spec	Henbest	JCS	-	(1957)	997
$C_{30}H_{48}O$	⁵ Δ -4-Methylfriedelene	-	-	Freq	Corey	JACS	77	(1955)	3667
$C_{30}H_{48}O$	Phyllanthone	-	Sol	Group freq	Cole	JCS	-	(1954)	3810
$C_{30}H_{48}O$	ψ -Taraxastenone	-	-	Ident	Halsall	JCS	-	(1954)	1902
$C_{30}H_{48}O$	Urs-12-en-3-one	1350-1500 1350-3700	Sol Sol	Group freq Freq, I	Cole Cole	JCS JCS	- -	(1956) (1957)	1007 1332
$C_{30}H_{48}O$	Urs-12-en-11-one	1350-1500 680-3700	Sol Sol	Spec, Group freq Freq, I	Cole Cole	JCS JCS	- -	(1956) (1957)	1007 1332
$C_{30}H_{48}O_2$	Allobetulone	400-4000	Sol	Spec, Ext. Coefficient	Cummins	JCS	-	(1957)	3847
$C_{30}H_{48}O_2$	Anhydroxoelenenol	-	Sol	Band freq	Halsall	JCS	-	(1953)	4139
$C_{30}H_{48}O_2$	^{7,22} Δ -Ergostadienol- β -acetate	-	-	Ident	Nes	JOC	18	(1953)	276
$C_{30}H_{48}O_2$	^{8(14),22} Δ -Ergostadienol β -acetate	-	-	Ident, Band freq	Nes	JOC	18	(1953)	276
$C_{30}H_{48}O_2$	Lanost-8-ene-3,7-dione	2.5-15 μ	Sol	Struct	Cole	JCS	-	(1959)	1212
$C_{30}H_{48}O$	β -Me thoxy-14-methylergosta-7,22-dien-15-one	-	Sol	Freq	Page	JCS	-	(1955)	2017

$C_{30}H_{48}O_2$	Olean-12-en-30-oic acid	1500-3700	Sol	Group study	Cole	JCS - (1959)	2005
$C_{30}H_{48}O_3$	β -Acetoxycergost-5-en-11-one	-	L	Group freq	Bladon	JCS - (1954)	125
$C_{30}H_{48}O_3$	β -Acetoxycergost-7-en-11-one	-	-	Struct	Bladon	JCS - (1953)	2921
$C_{30}H_{48}O_3$	β -Acetoxycergost-8(9)-en-7-one	-	S, Sol	Group freq	Elks	JCS - (1954)	451
$C_{30}H_{48}O_3$	β -Acetoxycergost-8(9)-en-11-one	-	S	Group freq	Bladon	JCS - (1953)	2921
$C_{30}H_{48}O_3$	β -Acetoxycergost-9(11)-en-7-one	-	S, Sol	Group freq, Ident	Elks	JCS - (1954)	451
$C_{30}H_{48}O_3$	β -Acetoxycergost-22-en-11-one	-	Sol	Group freq	Cameron	JCS - (1953)	3864
$C_{30}H_{48}O_3$	β -Acetoxycergost-22-en-11-one	-	-	Ident	Bladon	JCS - (1954)	125
$C_{30}H_{48}O_3$	β -Acetoxycergost-22-en-11-one	-	Sol	Group freq	Elks	JCS - (1953)	2933
$C_{30}H_{48}O_3$	β -Acetoxycergost-22-en-11-one	-	Sol	Group freq	Elks	JCS - (1953)	2933
$C_{30}H_{48}O_3$	β -Boswellic acid	1600-3700	Sol	Group freq, H bond	Cole	JCS - (1959)	1224
$C_{30}H_{48}O_3$	β -Boswellic acid	1500-3700	Sol	Group freq	Cole	JCS - (1959)	2005
$C_{30}H_{48}O_3$	$\Delta^7,14$ -Cholestadienyl cathylate	-	Sol	Group freq	Fieser	JACS 75 (1953)	4404
$C_{30}H_{48}O_3$	β ,13-Dihydroxy-16 α -oleanan-28-oic-13(28)-lactone	1350-1500	Sol	Group study	Cole	JCS - (1956)	1007
$C_{30}H_{48}O_3$	β ,13-Dihydroxyoleanan-28-oic-13(28)-lactone	1350-1500	Sol	Group study	Cole	JCS - (1956)	1007
$C_{30}H_{48}O_3$	β ,13-Dihydroxyursan-28-oic-13(28)-lactone	1350-1500	Sol	Group study	Cole	JCS - (1956)	1007
$C_{30}H_{48}O_3$	Gummosogenin	-	Sol	Band freq	Djerassi	JACS 76 (1954)	4089

$C_{30}H_{48}O_3$	β -Hydroxylanost-5-ene-7,11-dione	-	-	Ident	Djerassi	JACS	77 (1955)	3579
		2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
		3600-3650	Sol	Ident, Freq	Cole	JCS	- (1959)	1218
$C_{30}H_{48}O_3$	β -Hydroxylanost-8-ene-7,11-dione	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
		3600-3650	Sol	Ident, Freq	Cole	JCS	- (1959)	1218
$C_{30}H_{48}O_3$	β -Hydroxyurs-12-ene-28-oic acid	1350-1500	Sol	Group freq, Group study	Cole	JCS	- (1956)	1007
		1500-3700	Sol	Group study	Cole	JCS	- (1959)	2005
$C_{30}H_{48}O_3$	Ianostane-3,7,11-trione	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
$C_{30}H_{48}O_3$	Morolic acid	-	-	Ident, Struct	Barton	JCS	- (1951)	257
		1350-1500	Sol	Group freq, Ident	Cole	JCS	- (1956)	1007
		1500-3700	Sol	Group study	Cole	JCS	- (1959)	2005
$C_{30}H_{48}O_3$	α -Nor-2-Ketoeburic-8-enoic acid	-	S	Group freq	Holker	JCS	- (1953)	2414
$C_{30}H_{48}O_3$	Oleanolic acid	1350-1500	Sol	Group freq	Cole	JCS	- (1956)	1007
		1500-3700	Sol	Group study	Cole	JCS	- (1959)	2005
$C_{30}H_{48}O_3$	δ -Oleanolic acid	1500-3700	Sol	Group study	Cole	JCS	- (1959)	2005
$C_{30}H_{48}O_3$	Oleanolic acid lactone	-	Sol	Band freq	Djerassi	JACS	76 (1954)	2969
$C_{30}H_{48}O_3$	18-isoleanolic acid lactone	-	-	Ident	Djerassi	JACS	76 (1954)	5780
$C_{30}H_{48}O_3$	24-Oxo-26,27-bisnor-cycloartanyl acetate	-	-	Ident	Henry	JCS	- (1955)	1607
$C_{30}H_{48}O_3$	3-Oxolupan-28-oic acid	1500-3700	Sol	Group study	Cole	JCS	- (1959)	2005
$C_{30}H_{48}O_4$	β -Acetoxy-5 α ,8 α ,9 α ,11 α -diepoxyergostane	-	-	Group study	Clayton	JCS	- (1953)	2009
$C_{30}H_{48}O_4$	β -Acetoxy-5 α ,8 α -epidioxy-22	-	Sol	Band freq, I	Henbest	JCS	- (1954)	800

- Δ -ergostene

$C_{30}H_{48}O_8S$	5 α ,22a-Spirostane-3 β ,11 α - 12 β -triol-11-methane- sulfonate 12-acetate	-	S	Group freq	Wendler	JACS 77 (1955)	1632
$C_{30}H_{49}O$	α -Amyrene-27-d ₁	650-4000	Sol	Group freq, I	Barton	JCS - (1954)	2715
$C_{30}H_{49}O_3$	Ergostanol-3 β -acetate-d ₃	-	Sol	Group freq	Jones	JACS 74 (1952)	5662
$C_{30}H_{49}BrO$	2-Bromofriedelin	-	-	Group freq	Corey	JACS 77 (1955)	3667
$C_{30}H_{49}BrO$	4-Bromofriedelin	-	-	Freq	Corey	JACS 77 (1955)	3667
$C_{30}H_{49}BrO$	2 α -Bromolanost-8(9)- en-3-one	400-4000	Sol	Spec, Substitution	Cummins	JCS - (1957)	3847
$C_{30}H_{49}BrO$	2 β -Bromolanost-8(9)- en-3-one	400-4000	Sol	Spec, Substitution	Cummins	JCS - (1957)	3847
$C_{30}H_{49}BrO_3$	9 α -Bromo-11-oxoergostan- 3 β -yl acetate	400-4000	Sol	Spec, Substitution	Cummins	JCS - (1957)	3847
$C_{30}H_{49}BrO_3$	12 α -Bromo-11-oxoergostan -3 β -yl acetate	400-4000	Sol	Spec, Substitution	Cummins	JCS - (1957)	3847
$C_{30}H_{49}N_2O_3$	⁴ Δ -Cholestenol-3 β -6-one acetate semicarbazone	-	-	Band freq	Reich	JOC 16 (1951)	1753
$C_{30}H_{50}$	3 β -Allyl-5-cholestene	-	-	Ident	Baker	JACS 77 (1955)	3644
$C_{30}H_{50}$	α -Amyrene	650-4000 3-14 μ	Sol Sol	Group freq, I Spec	Barton Cole	JCS - (1954) JCS - (1954)	2715 3807
$C_{30}H_{50}$	Cycloartene	-	Sol	Group freq	Cole	JCS - (1954)	3810
$C_{30}H_{50}$	3-isopropylidene-A-nor- 30,31-bisnorlanost-8- ene	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
$C_{30}H_{50}$	Lanosta-7,9(11)- diene	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
$C_{30}H_{50}$	Lanosta-8,24-diene	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212

$C_{30}H_{50}$	α -Lupene	-	Sol	Ext. Coefficient, Freq	Barnard	JCS	-	(1950)	915
$C_{30}H_{50}$	Olean-13(18)-ene	-	-	Ident, Struct	Corey	JACS	77	(1955)	3668
$C_{30}H_{50}$	Olean-18-ene	680-3700	Sol	Freq, I	Cole	JCS	-	(1957)	1332
$C_{30}H_{50}$	Phyllanthane	650-4000 2700-3100	Sol Sol	Group freq, I Spec, Freq	Barton Cole	JCS JCS	- -	(1954) (1954)	2715 3810
$C_{30}H_{50}$	Squalene	600-1800 2-16 μ 2-16 μ	- L, Sol -	Spec Spec Spec, Group freq	Thompson Dauben Dauben	TFS JACS JACS	41 74 74	(1945) (1952) (1952)	246 4321 5204
$C_{30}H_{50}$	Squalene C^{14}	2-16 μ	-	Spec, Group freq	Dauben	JACS	74	(1952)	5204
$C_{30}H_{50}$	ψ -Taraxastene	-	S	Band freq	Ames	JCS	-	(1954)	1905
$C_{30}H_{50}$	19 α (H)-Taraxast-20(30)-ene	-	S	Ident, Band freq	Ames	JCS	-	(1954)	1905
$C_{30}H_{50}$	Urs-12-ene	680-3700	Sol	Freq, I	Cole	JCS	-	(1957)	1332
$C_{30}H_{50}Br_2$	2,2-Dibromolanostan-3-one	400-4000	Sol	Spec, Substitution	Cummins	JCS	-	(1957)	3847
$C_{30}H_{50}O$	δ -Amyr-13(18)-en-3-ol	-	-	Ident	Halsall	JCS	-	(1954)	1902
$C_{30}H_{50}O$	Cycloartenol	750-1500 950-3139	Sol Sol	Spec, Freq Spec, Freq, Group study	Cole Allsop	JCS JCS	- -	(1954) (1956)	3810 4868
$C_{30}H_{50}O$	9,19-Cyclo lanost-24-en-3 α -ol	950-3639	Sol	Spec, Freq, Group study	Allsop	JCS	-	(1956)	4868
$C_{30}H_{50}O$	13,27-Cyclourstan-3 β -ol	- 3600-3650	Sol Sol	Group freq Group freq, Ident	Cole Cole	JCS JCS	- -	(1954) (1959)	3810 1218
$C_{30}H_{50}O$	Euphol	-	-	Freq	Barbour	JCS	-	(1955)	2194
$C_{30}H_{50}O$	Lanosta-7,9(11)-dien-3 β -ol	2.5-15 μ 3600-3650	Sol Sol	Struct Group freq, Ident	Cole Cole	JCS JCS	- -	(1959) (1959)	1212 1218

$C_{30}H_{50}O$	Lanost-8-en-3-one	400-4000 2.5-15 μ	Sol Sol	Spec, Substitution Struct	Cummins Cole	JCS JCS	- -	(1957) (1959)	3847 1212
$C_{30}H_{50}O$	Lup-20(29)-en-3 α -ol	950-3639	Sol	Spec, Freq, Group study	Allsop	JCS	-	(1956)	4868
		680-3700	Sol	Freq, I	Cole	JCS	-	(1957)	1332
$C_{30}H_{50}O$	Lup-20(29)-en-3 β -ol	- 950-3639	Sol Sol	Ext. Coefficient, Freq Spec, Freq, Group study	Barnard Allsop	JCS JCS	- -	(1950) (1956)	915 4868
		680-3700	Sol	Freq, I	Cole	JCS	-	(1957)	1332
		3600-3650	Sol	Group freq, Ident	Cole	JCS	-	(1959)	1218
$C_{30}H_{50}O$	Lup-20(29)-en-28-ol	680-3700	Sol	Freq, I	Cole	JCS	-	(1957)	1332
$C_{30}H_{50}O$	3 β -Methoxy-14-methyl- ergosta-7,22-diene	-	Sol	Freq	Page	JCS	-	(1955)	2017
$C_{30}H_{50}O$	21-Noreburic-8-en-20-one	-	Sol	Group freq	Holker	JCS	-	(1953)	2422
$C_{30}H_{50}O$	Olean-12-en-3 α -ol	950-3639	Sol	Spec, Freq, Group study	Allsop	JCS	-	(1956)	4868
$C_{30}H_{50}O$	Olean-12-en-3 β -ol	950-3639	Sol	Spec, Freq, Group study	Allsop	JCS	-	(1956)	4868
		680-3700	Sol	Freq, I	Cole	JCS	-	(1957)	1332
$C_{30}H_{50}O$	Olean-18-en-3 β -ol	11-13 μ 680-3700	Sol Sol	Spec, Struct Freq, I	Barton Cole	JCS JCS	- -	(1951) (1957)	257 1332
		3600-3650	Sol	Group study	Cole	JCS	-	(1959)	1218
$C_{30}H_{50}O$	Stigmasteryl methyl ether	3-12 μ	S, Sol	Band freq, Struct	Josien	JACS	73	(1951)	4445
$C_{30}H_{50}O$	iso-Stigmasteryl methyl ether	3-12 μ	S, Sol	Band freq, Struct	Josien	JACS	73	(1951)	4445
$C_{30}H_{50}O$	ψ -Taraxasterol	-	Sol	Group freq, Band freq Ident	Ames	JCS	-	(1954)	1905
		-	-		Halsall	JCS	-	(1954)	1902
$C_{30}H_{50}O$	Ursan-11-one	1350-1500	Sol	Group freq	Cole	JCS	-	(1956)	1007

$C_{30}H_{50}O$	Urs-12-en- β -ol	950-3639	Sol	Spec, Freq, Group freq	Allsop	JCS	-	(1956)	4868
$C_{30}H_{50}O$	Urs-12-en- β -ol	3-14 μ 950-3639	Sol	Spec	Cole	JCS	-	(1954)	3807
$C_{30}H_{50}O$			Sol	Spec, Freq, Group study	Allsop	JCS	-	(1956)	4868
$C_{30}H_{50}O_2$	β -Acetoxysteroid-9(11)- ene	680-3700	Sol	Freq, I	Cole	JCS	-	(1957)	1332
$C_{30}H_{50}O_2$	Eburico-7,9(11)-diene- 16 α ,21-diol	-	L	Group freq	Crawshaw	JCS	-	(1954)	731
$C_{30}H_{50}O_2$	⁷ Δ -Ergosterol- β -acetate	2.5-15 μ	-	Ident	Bowers	JCS	-	(1954)	3070
$C_{30}H_{50}O_2$	⁸⁽¹⁴⁾ Δ -Ergosterol- β - acetate	-	Sol	Spec, Band freq	Hirschmann	JACS	74	(1952)	5357
$C_{30}H_{50}O_2$			Sol	Group freq	Jones	JACS	74	(1952)	5648
$C_{30}H_{50}O_2$			-	Ident	Nes	JOC	18	(1953)	276
$C_{30}H_{50}O_2$		2.5-13 μ	Sol	Group freq, Struct	Rosenkrantz	JACS	75	(1953)	903
$C_{30}H_{50}O_2$		-	Sol	Freq	Page	JCS	-	(1955)	2017
$C_{30}H_{50}O_2$	¹⁴ Δ -Ergosterol- β - acetate	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74	(1952)	5357
$C_{30}H_{50}O_2$			Sol	Group freq	Jones	JACS	74	(1952)	5648
$C_{30}H_{50}O_2$			-	Ident	Bladon	JCS	-	(1953)	2921
$C_{30}H_{50}O_2$		2.5-13 μ	Sol	Group freq, Struct	Rosenkrantz	JACS	75	(1953)	903
$C_{30}H_{50}O_2$		-	Sol	Freq	Page	JCS	-	(1955)	2017
$C_{30}H_{50}O_2$	¹⁴ Δ -Ergosterol- β - acetate	-	Sol	Group freq	Jones	JACS	74	(1952)	5648
$C_{30}H_{50}O_2$	²² Δ -5-isoergosterol- β - acetate	-	Sol	Group freq	Jones	JACS	74	(1952)	5648
$C_{30}H_{50}O_2$			Sol	Group freq	Jones	JACS	74	(1952)	5662
$C_{30}H_{50}O_2$	²² Δ -5 β -Ergoster- β -ol acetate	700-1400	Sol	Ident	Jones	JACS	78	(1956)	1112
$C_{30}H_{50}O_2$	Erythrodiol	-	-	Ident	Djerassi	JACS	76	(1954)	5780
$C_{30}H_{50}O_2$	β -Hydroxylanost-8-en- 7-one	2.5-15 μ 3600-3650	Sol	Struct	Cole	JCS	-	(1959)	1212
$C_{30}H_{50}O_2$			Sol	Group freq	Cole	JCS	-	(1959)	1218

$C_{30}H_{50}O_2$	3β -Hydroxyoleanan-12-one	1350-1500 3600-3650	Sol Sol	Spec, Group freq Group freq, Ident	Cole Cole	JCS JCS	- -	(1956) (1959)	1007 1218
$C_{30}H_{50}O_2$	20 α -Hydroxy-21-oxotaraxastane	-	Sol	Band freq	Ames	JCS	-	(1954)	1905
$C_{30}H_{50}O_2$	19-Keto-18(α)-oleanan-2 β -ol	-	Sol	Group freq	Ames	JCS	-	(1952)	2868
$C_{30}H_{50}O_2$	Lup-20(29)-ene-3 β ,28 diol	680-3700 3600-3650	Sol Sol	Freq, I Group freq, Ident	Cole Cole	JCS JCS	- -	(1957) (1959)	1332 1218
$C_{30}H_{50}O_2$	Urs-12-ene-3 α ,24-diol	1600-3700	Sol	Group freq, H bond	Cole	JCS	-	(1959)	1224
$C_{30}H_{50}O_2$	Urs-12-ene-3 β ,24 diol	1600-3700	Sol	Group freq, H bond	Cole	JCS	-	(1959)	1224
$C_{30}H_{50}O_2$	Urs-12-ene-3 β ,28-diol	3600-3650	Sol	Struct	Cole	JCS	-	(1959)	1218
$C_{30}H_{50}O_3$	3β -Acetoxy-9 β ,11 β -epoxyergostane	-	Sol	Ident	Herbest	JCS	-	(1955)	2477
$C_{30}H_{50}O_3$	3β -Acetoxyergostan-7-one	-	S,Sol	Group freq	Elks	JCS	-	(1954)	451
$C_{30}H_{50}O_3$	3β -Acetoxy-8 α -ergostan-11-one	-	Sol	Group freq	Bladon	JCS	-	(1953)	2921
$C_{30}H_{50}O_3$	3β -Acetoxy-9 α -ergostan-11-one	-	Sol	Group freq	Elks	JCS	-	(1953)	2933
$C_{30}H_{50}O_3$	3β -Acetoxy-9 β -ergostan-11-one	-	Sol	Group freq Group freq	Bladon Elks	JCS JCS	- -	(1953) (1953)	2921 2933
$C_{30}H_{50}O_3$	3β -Acetoxyergost-14-en-5 α -ol	-	Sol	Group freq	Bladon	JCS	-	(1954)	736
$C_{30}H_{50}O_3$	3β -Acetoxylumist-7-en-5 β -ol	-	S	Group freq	Bladon	JCS	-	(1955)	2176
$C_{30}H_{50}O_3$	3β -Acetoxy-9 β -lumist-7-en-5 α -ol	-	S	Group freq	Bladon	JCS	-	(1955)	2176
$C_{30}H_{50}O_3$	3β -Hydroxylanostane-7,11-dione	2.5-15 μ 3600-3650	Sol Sol	Struct Group freq, Ident	Cole Cole	JCS JCS	- -	(1959) (1959)	1212 1218

$C_{30}H_{50}O_3$	Longispinogenin	-	Sol	Ident Ident	Djerassi Djerassi	JACS JACS	76 (1954) 77 (1955)	4089 3579
$C_{30}H_{50}O_3$	11-Oxoergostan- β -yl acetate	400-4000	Sol	Spec, Substitution	Cummins	JCS	- (1957)	3847
$C_{30}H_{50}O_3$	15-Oxoergostan- β -yl acetate	-	Sol	Group freq	Barton	JCS	- (1954)	52
$C_{30}H_{50}O_4$	β -Acetoxy-5 α -hydroxy- ergostan-11-one	-	S	Group freq	Bladon	JCS	- (1953)	2921
$C_{30}H_{50}O_4$	β -Acetoxy-5 α -hydroxy- 9 β -ergostan-11-one	-	S	Group freq	Bladon	JCS	- (1953)	2921
$C_{30}H_{50}O_4$	β -Acetoxy-9 α -hydroxy- ergostan-11-one	-	S	Group freq Group freq	Barton Crawshaw	JCS JCS	- (1954) - (1954)	747 731
$C_{30}H_{50}O_6$	Lithocholanyl alcohol dicaethylate	-	-	Band study	Fieser	JACS	74 (1952)	3309
$C_{30}H_{51}D$	Lanost-7-ene-19-d ₁	650-4000	Sol	Group freq, I	Barton	JCS	- (1954)	2715
$C_{30}H_{51}D$	Lanost-8-ene-19-d ₁	650-4000	Sol	Group freq, I	Barton	JCS	- (1954)	2715
$C_{30}H_{51}BrO$	2 α -Bromolanostan- β - one	400-4000	Sol	Spec, Substitution	Cummins	JCS	- (1957)	3847
$C_{30}H_{51}BrO$	2 β -Bromolanostan- β - one	400-4000	Sol	Spec, Substitution	Cummins	JCS	- (1957)	3847
$C_{30}H_{51}BrO_3$	β -Acetoxy-9 α -bromo- ergostan-11 β -ol	-	Sol	Freq	Henbest	JCS	- (1955)	2477
$C_{30}H_{51}N$	β -Isopropylideneamino- cholest-5-ene	-	-	Group freq	Haworth	JCS	- (1955)	986
$C_{30}H_{51}N$	β -Isopropylideneamino- cholest-5-ene	-	-	Group freq	Haworth	JCS	- (1955)	986
$C_{30}H_{52}$	Cycloartane	650-4000 750-1500	Sol Sol	Group freq, I Spec	Barton Cole	JCS JCS	- (1954) - (1954)	2715 3810

$C_{30}H_{52}$	Euphene	-	Sol	Ident	Barton	JCS	- (1955)	876
$C_{30}H_{52}$	Lanost-8-ene	-	Sol	Ident	Holker	JCS	(1953)	2422
		-	Sol	Ident	Barton	JCS	(1955)	876
		2.5-15 μ	Sol	Struct	Cole	JCS	(1959)	1212
$C_{30}H_{52}$	Lanost-9(11)-ene	650-4000	Sol	Group freq, I	Barton	JCS	(1954)	2715
$C_{30}H_{52}$	19 α (H)-Paraxastane	-	S	Band freq, Ident	Ames	JCS	(1954)	1905
$C_{30}H_{52}O$	Artenol	9-11 μ	Sol	Spec	Barton	JCS	(1951)	1444
$C_{30}H_{52}O$	Cycloartanol	2700-3100	Sol	Spec, Band freq	Cole	JCS	(1954)	3810
$C_{30}H_{52}O$	Friedelan-3 α -ol	3600-3650	Sol	Struct	Cole	JCS	(1959)	1218
$C_{30}H_{52}O$	Friedelan-3 β -ol	3600-3650	Sol	Struct	Cole	JCS	(1959)	1218
$C_{30}H_{52}O$	Lanostan-3-one	400-4000	Sol	Spec, Substitution	Cummins	JCS	(1957)	3847
$C_{30}H_{52}O$	Lanost-8-en-3 α -ol	950-3639	Sol	Spec, Freq, Group study	Allsop	JCS	(1956)	4868
$C_{30}H_{52}O$	Lanost-8-en-3 β -ol	950-3639	Sol	Spec, Freq, Group study	Allsop	JCS	(1956)	4868
		2.5-15 μ	Sol	Struct	Cole	JCS	(1959)	1212
		3600-3650	Sol	Group freq, Ident	Cole	JCS	(1959)	1218
$C_{30}H_{52}O$	Lanost-9(11)-en-3 β -ol	2.5-15 μ	Sol	Struct	Cole	JCS	(1959)	1212
		3600-3650	Sol	Group freq, Ident	Cole	JCS	(1959)	1218
$C_{30}H_{52}O$	Lupan-3 β -ol	3600-3650	Sol	Group freq, Ident	Cole	JCS	(1959)	1218
$C_{30}H_{52}O_2$	Ergostan-3 β -ol-ace tate	-	Sol	Group freq	Jones	JACS	72 (1950)	956
		1180-1300	Sol	Band study, I	Jones	JACS	73 (1951)	3215
		-	Sol	Band freq	Cole	JCS	(1952)	4969
		1682-1782	Sol	I, Ext. Coefficient, Band study	Jones	JACS	74 (1952)	5648
		-	Sol	Group freq	Jones	JACS	74 (1952)	5662
		-	Sol	Group study	Jones	JACS	74 (1952)	80
		2.5-13 μ	Sol	Group freq, Struct	Rosenkrantz	JACS	75 (1953)	903
		-	Sol	Group freq	Page	JCS	(1955)	2017
		770-3700	Sol	Freq, I	Rosenkrantz	JACS	77 (1955)	2237

	700-1400	Sol	Band study, Ident	Jones	JACS	78 (1956)	1152
$C_{30}H_{52}O_2$	-	-	Band study	Barton	JCS	- (1953)	1027
$C_{30}H_{52}O_2$	1180-1300	Sol	Group freq	Jones	JACS	72 (1950)	956
	-	Sol	Band study, I	Jones	JACS	73 (1951)	3215
	1686-1786	Sol	Group freq, Band freq	Cole	JCS	- (1952)	4969
		Sol	I, Ext. Coefficient, Band study	Jones	JACS	74 (1952)	80
$C_{30}H_{52}O_3$	-	-	Band freq	Barton	JCS	- (1953)	1027
$C_{30}H_{52}O_3$	-	-	Group freq	Bladon	JCS	- (1954)	736
$C_{30}H_{52}O_3$	-	Sol	Group freq	Djerassi	JACS	76 (1954)	2969
$C_{30}H_{52}O_4$	-	-	Group freq	Bladon	JCS	- (1954)	736
$C_{30}H_{52}O_4$	-	S	Group freq	Bladon	JCS	- (1955)	2176
$C_{30}H_{52}O_4$	-	-	Group freq	Djerassi	JACS	77 (1955)	1200
$C_{30}H_{53}D$	650-4000	Sol	Group freq, I	Barton	JCS	- (1954)	2715
$C_{30}H_{54}$	650-4000	Sol	Group freq, I	Barton	JCS	- (1954)	2715
$C_{30}H_{54}$	-	-	Ident	Baker	JACS	77 (1955)	3644
$C_{30}H_{58}O_4$	2-16 μ	Sol	Spec	Stahl	JACS	74 (1952)	5487
$C_{30}H_{60}O_2$	2-15 μ	S	Spec, Qual anal	Meiklejohn	AC	29 (1957)	329
$C_{30}H_{62}$	10.0-10.75 μ 650-800 700-1500	Sol L,S S	Quan. Anal Band freq Freq, Assign	Johnson Martin Snyder	AC SA JMS	29 (1957) 12 (1958) 4 (1960)	468 12 411
$C_{30}H_{64}Si$	2-16 μ	Sol	Group freq	Kniseley	SA	15 (1959)	651

$C_{30}H_{78}O_4Si_8$	Hexadecamethyl-3,10,17,24-tetraoxa-2,4,9,11,16,18,23,25-Octasilahexacosane	-	-	Group freq	Sommer	JACS 77 (1955)	2482
<u>C_{31} COMPOUNDS</u>							
$C_{31}H_{24}O_4$	4-Acetoxy-5-hydroxy-2,3,4,5-tetraphenylcyclopent-2-enone	-	Sol	Freq, Struct	Yates	JACS 76 (1954)	5110
$C_{31}H_{24}O_4$	1,1,3,3-Tetrabenzoylpropane	2.5-6.5 μ	Sol	Freq, Assign	Martin	JACS 81 (1959)	130
$C_{31}H_{25}N$	p-Triityldiphenylamine	2.9 μ	-	Ident	Craig	JACS 71 (1949)	2250
$C_{31}H_{28}O$	p-(t-Butyl)- α,β,β -triphenylacrylophenone	-	-	Group freq	Fuson	JACS 77 (1955)	994
$C_{31}H_{30}O$	p-t-Amylphenyl trityl ketone	-	-	Group freq, Ident	Fuson	JACS 77 (1955)	1138
$C_{31}H_{34}OSi$	Triphenylsilylheptyl phenyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826
$C_{31}H_{36}N_2O_7 \cdot HCl$	O-3,4,5-Trimeethoxybenzocycornanthine hydrochloride	-	-	Freq	Huebner	JACS 77 (1955)	469
$C_{31}H_{38}O_{10}$	5,7,9(11) Δ -Pregna triene-17 α ,21-diol-3,20-dione 21-acetate 3,20-bisethylene ketal maleic anhydride adduct	-	S	Freq	Antomucci	JACS 76 (1954)	2956
$C_{31}H_{38}O_{11}$	Methylpolyacetylglucosiduronate of 1,3,5 Δ -estra triene-ol-17-one	650-3700	S	Spec, Assign	Smakula	JACS 81 (1959)	1708

C ₃₁ H ₄₀ Br ₂ N ₄ O ₇	Methyl-3,11-dike to-4, 12 α -dibromochololate-3- (2,4-dinitrophenyl- hydrazone)	-	Spec, Ident	McGuckin	JACS	74 (1952)	3951
C ₃₁ H ₄₀ N ₄ O ₈	⁵ 3 β ,21-Diacetoxy- Δ - pregnen-20-one 2,4- dinitrophenylhydrazone	Sol	Group freq, Ident	Reich	JOC	19 (1954)	1041
C ₃₁ H ₄₀ O ₄	3 β -Benzoxy-20-hydroxy- ⁵ Δ -cholenic acid lactone	Sol	Spec, Freq	Jones	JACS	81 (1959)	5242
C ₃₁ H ₄₀ O ₄	⁵ Δ -20-(spiro-2-oxa-3- oxocyclopentano)-pregnenol -3 β -benzoate	Sol	Group freq	Jones	JACS	72 (1950)	956
C ₃₁ H ₄₀ O ₅	3 β -Benzoyloxy-4:4:14- trimethyl-5 α -pregnane 7:11;20-trione	Sol	Struct	Cole	JCS	- (1959)	1212
C ₃₁ H ₄₀ O ₈	Dimethyl ester of maleic anhydride adduct of 3 β , 20-diacetoxy-5,7,9(11), 20-pregnatetrane	-	Freq	Moffett	JACS	74 (1952)	2183
C ₃₁ H ₄₀ O ₉	Dimethyl ester of maleic anhydride adduct of 3 β , 20-diacetoxy-9,11-oxido- 5,7,20-pregnatriene	-	Freq	Moffett	JACS	74 (1952)	2183
C ₃₁ H ₄₀ O ₁₁	Methyl polyacetyl- glucosiduronate of ^{3,5} Δ ,3,3-estratriene -3,17 β -diol	S	Spec, Assign	Smakula	JACS	81 (1959)	1708
C ₃₁ H ₄₂ OSi	Triphenylsilylonyl butyl ether	-	Inductive effect	Josien	CPR	249 (1959)	826

$C_{31}H_{42}OSi$	Triphenylsilylundecyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
$C_{31}H_{42}O_5$	3,5,7,20(22)- Δ^3 -26-Diacetoxy-furostetraene	-	-	Group study	Dauben	JACS	75 (1953)	3255
$C_{31}H_{42}O_6S$	2 β ,4b-Dimethyl-1- β -(2-tosyloxyethyl)-2-methylallyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4-one	-	-	Band freq	Hohns	JACS	76 (1954)	5026
$C_{31}H_{42}O_{12}$	Onabagenin tetraacetate	-	-	Struct	Florey	JOC	19 (1954)	1174
$C_{31}H_{44}O_4S$	$\Delta^{3,5,7}$ -22a-3-(β -Acetoxyethylmercapto)-spirostatriene	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3704
$C_{31}H_{44}O_5$	Methyl 3,12:19-trioxoolean-13(18)-en-28-oate	1350-1500	Sol	Freq	Cole	JCS	- (1956)	1007
$C_{31}H_{44}O_6$	7,9(11)-22a,5 β -Spirostdiene-3 α ,7-diol diacetate	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{31}H_{44}O_6S$	2 β ,4b-Dimethyl-1- β -(2-tosyloxyethyl)-2-methylallyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4 α -ol	-	Sol	Band freq	Rosenkrantz	JACS	75 (1953)	4430
$C_{31}H_{44}O_6S$	2 β ,4b-Dimethyl-1- β -(2-tosyloxyethyl)-2-methylallyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4 β -ol	-	-	Band freq	Johns	JACS	76 (1954)	5026
$C_{31}H_{44}O_6S$	2 β ,4b-Dimethyl-1- β -(2-tosyloxyethyl)-2-methylallyl-7-ethylenedioxy-1,2,3,4,4a α ,4b,5,6,7,8,10,10a β -dodecahydrophenanthrene-4 β -ol	-	-	Band freq	Johns	JACS	76 (1954)	5026

C ₃₁ H ₄₄ O ₇	Kammogenin acetate	700-1400	Sol	Band study Spec, Ident	Jones Eddy	JACS AC	74 (1952) 25 (1953)	80 266
C ₃₁ H ₄₄ O ₇ ⁵	20 α - Δ^5 -Kammogenin acetate	2750-3100	Sol	Spec, Band freq	Smith	AC	31 (1959)	1539
C ₃₁ H ₄₄ O ₇ ⁸	Δ^8 -22 α ,5 α -Spirostene- β ,11 α -diol-7-one- β ,11-diacetate	-	Sol	Ident	Mancera	JACS	75 (1953)	4428
C ₃₁ H ₄₄ O ₇ ⁸⁽⁹⁾	Δ^8 -22-Isoallospirosten- β ,11 α -diol-7-one diacetate	-	Sol	Freq	Djerassi	JACS	74 (1952)	1712
C ₃₁ H ₄₄ O ₇ ⁹⁽¹¹⁾	Δ^9 -22 α ,5 α -Spirostane- β ,11-diol-12-one β ,11-diacetate	-	Sol	Band freq	Djerassi	JACS	76 (1954)	5533
C ₃₁ H ₄₅ BrO ₇	2 β a-Bromo- β ,12 β -diacetoxy-5 α ,22 α -spirostan-11-one	724-1758	Sol	Group freq, Assign	Dickson	JCS	- (1955)	447
C ₃₁ H ₄₅ BrO ₇	2 β a-Bromo- β ,12 β -diacetoxy-5 α ,22 α -spirostan-11-one	728-1752	Sol	Group freq, Assign	Dickson	JCS	- (1955)	447
C ₃₁ H ₄₅ O ₅	Diacetyldihydrojervine	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74 (1952)	5357
C ₃₁ H ₄₆ ClNO ₅	22,26-Imino- β α -chloro-16-jervene-2 β -ol-11-one 2 β ,N-diacetate	-	S	Band freq	Iselin	JACS	76 (1954)	5616
C ₃₁ H ₄₆ ClNO ₅	17 α ,22,26-Nitrilo- β α -chlorogervane-17,2 β -diol-11-one 17,2 β -diacetate	-	S	Band freq	Iselin	JACS	76 (1954)	5616
C ₃₁ H ₄₆ ClNO ₆	22,26-Imino- β α -chloro-1 β (17 α)-jervene-17,2 β -diol-11-one,2 β ,N-diacetate	-	S	Band freq	Iselin	JACS	76 (1954)	5616

$C_{31}H_{46}N_2O_4$	N,N' -Dibenzoyloxy- α - dodecylglutaramide	-	S	Group freq	Ames	JCS - (1955)	631
$C_{31}H_{46}O_3$	Dehydrobutironic acid	-	S	Ident	Gascoigne	JCS - (1953)	1830
$C_{31}H_{46}O_3$	$\Delta^{13(18),19}$ -30-Noroleanen- -3 β -ol-11-one 3-acetate	-	Sol	Band freq	Djerassi	JACS 76 (1954)	4085
$C_{31}H_{46}O_4$	Methyl diketochino- cystate	-	-	Ident	Djerassi	JACS 77 (1955)	3579
$C_{31}H_{46}O_4$	Methyldioxolemadienate	-	Sol	Band freq	Hallsall	JCS - (1953)	4139
$C_{31}H_{46}O_4$	Methyl-3,19-dioxo-olean- 12-en-28-oate	1350-1500 680-3700	Sol Sol	Freq Freq, I	Cole Cole	JCS - (1956) JCS - (1957)	1007 1332
$C_{31}H_{46}O_4$	Methyl-3,19-dioxo-olean 13(18)-en-28-oate	1350-1500	Sol	Freq	Cole	JCS - (1956)	1007
$C_{31}H_{46}O_4$	Δ^{12} -18 β -Oleanen-3,21- dion-28-oic acid methyl ester	-	Sol	Band freq	Djerassi	JACS 77 (1955)	1825
$C_{31}H_{46}O_5$	Pseudodiosgenin diacetate	- 660-5000	- Sol Sol	Ident Spec, Group freq Band freq	Bauben Hayden Ziegler	JACS 76 (1954) AC 26 (1954) JACS 77 (1955)	4618 550 1223
$C_{31}H_{46}O_5S_2$	22 $\alpha,5\beta$ -Spirostan-3 α -ol- 11-one-7-cycloethyleno- mercaptal acetate	-	Sol	Band freq	Rosenkrantz	JACS 75 (1953)	4430
$C_{31}H_{46}O_6$	ψ -Hecogenin diacetate	-	-	Ident	Callow	JCS - (1955)	1966
$C_{31}H_{46}O_6$	Kryptogenin acetate	- 700-1400	Sol Sol	Freq Spec, Ident	Bowers Eady	JCS - (1953) AC 25 (1953)	2548 266
$C_{31}H_{46}O_6$	Yuccagenin diacetate	850-1000 700-1400 890-1340	Sol Sol Sol	Spec Spec, Ident Group freq, I	Rothman Eady Jones	JACS 74 (1952) AC 25 (1953) JACS 75 (1953)	4012 266 158

C ₃₁ H ₄₆ O ₇	Sol	Group freq	Rosenfeld	JACS	77 (1955)	4367
3β,11ξ-Diacetoxy-5α,22a-spirostan-12-one	-					
C ₃₁ H ₄₆ O ₇	-	Ident	Rosenfeld	JACS	77 (1955)	4367
3β,12β-Diacetoxy-5α,22a-spirostan-11-one	-	Ident	Wendler	JACS	77 (1955)	1632
Manogenin diacetate	800-1050 700-1400 890-1340	Freq, Anal Spec, Ident Group freq, I Ident	Wall Eddy Jones Kridner	AC AC JACS JACS	24 (1952) 25 (1953) 75 (1953) 76 (1954)	1337 266 158 2938
C ₃₁ H ₄₆ O ₇	7-15μ	Spec, Freq	Eddy	AC	27 (1955)	1067
20-Isomanogenin diacetate						
C ₃₁ H ₄₆ O ₇	S	Group freq	Bernstein	JOC	18 (1953)	1418
8,14ξ-Oxido-22a-allocastrostane-7ξ-ol-3-one ethylene ketal acetate						
C ₃₁ H ₄₆ O ₇	-	Band study	Wendler	JACS	77 (1955)	1632
5α,22a-Spirostan-3β,11α-diol-12-one diacetate						
C ₃₁ H ₄₆ O ₉	Sol	Group freq	Jones	JACS	72 (1950)	956
7-Keto-3α,6α,12α-triacetoxycholanolic acid methyl ester						
C ₃₁ H ₄₇ NO ₅	S	Band freq	Wintersteinger	JACS	76 (1954)	5609
O,N-Diacetyltetrahydrojervine						
C ₃₁ H ₄₇ O ₆	S S,Sol	Ident Group freq	Callow Callow	JCS JCS	- (1955) - (1955)	1671 1966
5-Palmityl-7-(1-piperidylmethyl)-8-quinolinol hydrobromide	-	Struct	Edgerton	JACS	74 (1952)	5209
C ₃₁ H ₄₈ N ₂ O ₂ ·HBr	2.75-3.2μ	Spec, H bond	Coggeshall	JACS	72 (1950)	2836
Bis-(2-hydroxy-3-methyl-5-isocetylphenyl)-methane						
C ₃₁ H ₄₈ O ₂	S,Sol	Freq	Ambelang	JACS	75 (1953)	947
Di-(2-hydroxy-3,5-di-tert-butyl-6-methylphenyl)-methane	2.5-3.4μ					

$C_{31}H_{48}O_2$	Di-(4-hydroxy-2-methyl-5-t-butylphenyl)-octylmethane	2.5-3.4 μ	S, Sol	Freq	Amelang	JACS 75 (1953)	947
$C_{31}H_{48}O_2$	2-Methyl-2-phylyl-2,3-dihydro-1,4-naphthoquinone	-	-	Ident	Hirschmann	JACS 76 (1954)	4592
$C_{31}H_{48}O_2$	Methylursa-2;12-dien-28-oate	680-3700	Sol	Freq, I	Cole	JCS - (1957)	1332
$C_{31}H_{48}O_3$	Methyldehydro-oxo-elemenate	-	Sol	Band freq	Holsall	JCS - (1953)	4139
$C_{31}H_{48}O_3$	Methyl β -hydroxyoleano-11;13(18)-dien-28-oate	680-3700	Sol	Freq, I	Cole	JCS - (1957)	1332
$C_{31}H_{48}O_3$	Methyl β -oxolup-20(29)-en-28-oate	680-3700	Sol	Freq, I	Cole	JCS - (1957)	1332
$C_{31}H_{48}O_3$	Methyl β -oxoolean-18-en-28-oate	1350-1500 680-3700	Sol Sol	Freq Freq, I	Cole Cole	JCS - (1956) JCS - (1957)	1007 1332
$C_{31}H_{48}O_3$	Methyl β -oxours-12-en-28-oate	1350-1500 680-3700	Sol Sol	Freq Freq, I	Cole Cole	JCS - (1956) JCS - (1957)	1007 1332
$C_{31}H_{48}O_3$	Methyl pinicolate-A	-	Sol	Group freq	Guider	JCS - (1954)	4471
$C_{31}H_{48}O_3$	Norechinocystenolone acetate	-	Sol	Freq	Djerassi	JACS 77 (1955)	3579
$C_{31}H_{48}O_4$	Methyl machaerate	-	Sol	Group freq	Djerassi	JACS 77 (1955)	1825
$C_{31}H_{48}O_5$	Dihydrodiosgenin diacetate	835-1000	Sol	Spec, Anal	Wall	AC 24 (1952)	1337
$C_{31}H_{48}O_5$	Pseudoarsapogenin diacetate	-	Sol Sol	Spec, Group freq Freq	Hayden Scheer	AC 26 (1954) JACS 77 (1955)	550 641
$C_{31}H_{48}O_5$	Pseudoisoleugenin diacetate	-	Sol Sol	Spec, Group freq Freq	Hayden Scheer	AC 26 (1954) JACS 77 (1955)	550 641

$C_{31}H_{48}O_5$	Sol	Spec, Group freq Spec, Ident	Hayden Callow	AC JCS	26 (1954) - (1955)	550 1966
Pseudotigogenin diacetate	Sol	5-16 μ				
$C_{31}H_{48}O_5$ 22a-5 α -Spirostan- β -ol-12-one acetate ethylene hemithioetal	Sol	-	Ident	JACS	75 (1953)	3704
$C_{31}H_{48}O_6$ Anhydrohecolyl alcohol diacetate	-	-	Group freq, I	JACS	76 (1954)	527
$C_{31}H_{48}O_6$ 22-Isallospirostan- β ,6 α -diol- β ,6-diacetate	Sol	700-1400	Spec, Ident	AC	25 (1953)	266
$C_{31}H_{48}O_6$ 22-Isospirostan- β ,6 β -diol diacetate	Sol	1800-1050 890-1340	Freq, Anal Spec, Group freq, I	AC JACS	24 (1952) 75 (1953)	1337 158
$C_{31}H_{48}O_6$ 20-isochlorogenin diacetate	Sol	7-15 μ	Spec, Band freq	AC	27 (1955)	1067
$C_{31}H_{48}O_6$ Cholegenin diacetate	-	-	Group freq	JCS	- (1954)	1223
$C_{31}H_{48}O_6$ 25-isocholegenin diacetate	-	-	Group freq	JCS	- (1954)	1223
$C_{31}H_{48}O_6$ β ,12 α -Diacetoxy-5 α ,22a-spirostane	Sol	-	Group freq, Ident	JCS	- (1954)	1739
$C_{31}H_{48}O_6$ β ,12 β -Diacetoxy-5 α ,22a-spirostane	Sol	-	Group freq	JCS	- (1954)	1739
$C_{31}H_{48}O_6$ 12-Dihydromanogenin diacetate-2,3	Sol	890-1340	Group freq, I	JACS	75 (1953)	158
$C_{31}H_{48}O_6$ Gitogenin diacetate	Sol	800-1050 700-1400 890-1340	Freq, Anal Spec, Ident Group freq, I Band freq	AC AC JACS JACS	24 (1952) 25 (1953) 75 (1953) 77 (1955)	1337 266 158 3829
$C_{31}H_{48}O_6$ 20-isogitogenin diacetate	Sol	7-15 μ	Spec, Band freq	AC	27 (1955)	1067
$C_{31}H_{48}O_6$ 20-isomarkogenin diacetate	Sol	7-15 μ	Spec, Band freq	AC	27 (1955)	1067

$C_{31}H_{50}O_2$	Δ	Sol	Freq	Jones	JACS	74 (1952)	5648
-Stigmastadienol- 3β -acetate	-	-					
$\Delta^{7,22}$ -Stigmastadienol- 3β -acetate	-	Sol	Ident Freq	Hamilton Jones	JCS JACS	- (1952) 74 (1952)	5051 5648
ψ -Taraxasteryl formate	-	Sol	Group freq	Ames	JCS	- (1954)	1905
3β -Acetoxy- 7α -methoxy-8(14) 22 -ergostadiene	-	-	Comparison	Fieser	JACS	75 (1953)	4404
14-Acetoxy- 3β -methoxy ergosta- $7,22$ -diene	-	Sol	Freq	Page	JCS	- (1955)	2017
Allobetulin formate	1350-1500	Sol	Freq	Cole	JCS	- (1956)	1007
Cholesteryl acetate	-	-	Ident Freq	Carroll Jones	JACS JACS	75 (1953) 74 (1952)	5400 5648
Eburicic acid	-	Sol	Freq	Holker	JCS	- (1953)	2422
Methyl 3α -hydroxy lup- $20(29)$ -en- 28 -oate	950-3639 680-3700	Sol Sol	Spec, Band study Freq, I	Allsop Cole	JCS JCS	- (1956) - (1957)	4868 1332
Methyl 3β -hydroxy lup- $20(29)$ -en- 28 -oate	950-3639 680-3700	Sol Sol	Spec, Band study Freq, I	Allsop Cole	JCS JCS	- (1956) - (1957)	4868 1332
Methyl 3β -hydroxyolean- 12 -en- 28 -oate	680-3700 3600-3650	Sol Sol	Freq, I Freq, Struct	Cole Cole	JCS JCS	- (1957) - (1959)	1332 1218
Methyl 3β -hydroxyolean- 18 -en- 28 -oate	1350-1500 680-3700	Sol Sol	Freq Freq, I	Cole Cole	JCS JCS	- (1956) - (1957)	1007 1332
Methyl 3α -hydroxyurs- 12 -en- 24 -oate	1600-3700	Sol	H bond, Freq	Cole	JCS	- (1959)	1224
Methyl 3β -hydroxyurs- 12 -en- 24 -oate	1600-3700	Sol	H bond, Freq	Cole	JCS	- (1959)	1224

$C_{31}H_{50}O_3$	Methyl β -hydroxyurs-12-en-28-oate	1350-1500 680-3700 3600-3650	Sol Sol Sol	Freq Freq, I Freq, Struct	Cole Cole Cole	JCS JCS JCS	- - -	(1956) (1957) (1959)	1007 1332 1218
$C_{31}H_{50}O_3$	Methyl A-nor-2-ketoeburic-o-enoate	-	S	Band freq	Holker	JCS	-	(1953)	2414
$C_{31}H_{50}O_3$	Methyl oleanolate	1350-1500	- Sol	Ident Freq	Djerassi Cole	JACS JCS	77 -	(1955) (1956)	3579 1007
$C_{31}H_{50}O_3$	Methyl- β -oxolupan-28-oate	1350-1500	Sol	Freq	Cole	JCS	-	(1956)	1007
$C_{31}H_{50}O_3$	Δ^5 -Stigmastenol- β -one-7-acetate	-	S, Sol	Group freq	Tarpley	APS	9	(1955)	69
$C_{31}H_{50}O_3$	Δ^{22} -Stigmasten- β -ol-6-one acetate	-	Sol	Band freq	Aragnostopoulos	JACS	76	(1954)	532
$C_{31}H_{50}O_4$	Δ^5 -Cholestene- β -4 α -diol diacetate	-	Sol	Band freq	Fieser	JACS	76	(1954)	1728
$C_{31}H_{50}O_4$	$\Delta^{8(14)}$ -Cholestene- β , 7 α -diol diacetate	-	Sol	Band freq, Ident	Fieser	JACS	75	(1953)	4404
$C_{31}H_{50}O_4$	Δ^5 -Cholesten-4 α -ol- β -one ethylene ketal acetate	-	Sol	Band freq	Fieser	JACS	76	(1954)	1728
$C_{31}H_{50}O_4$	β , 7 α -Diacetoxy- Δ^5 -cholestene	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74	(1952)	5357
$C_{31}H_{50}O_4$	β , 7 β -Diacetoxy- Δ^5 -cholestene	2.5-15 μ	Sol	Spec, Band freq	Hirschmann	JACS	74	(1952)	5357
$C_{31}H_{50}O_4$	Methyl β , 19 α -dihydroxy olean-12-en-28-oate	680-3700 3600-3650	Sol Sol	Freq, I Freq, Struct	Cole Cole	JCS JCS	- -	(1957) (1959)	1332 1218

$C_{31}H_{50}O_4$	Methyl echinocystate	-	-	Ident	Djerassi	JACS	77 (1955)	3579
$C_{31}H_{50}O_4$	Methyl hederagenin	1600-3700	Sol	Freq, H bond	Cole	JCS	- (1959)	1224
$C_{31}H_{50}O_4$	Methyl 3 β -hydroxy-12-oxooleanan-28-oate	1350-1500 3600-3650	Sol Sol	Freq Freq, Struct	Cole Cole	JCS JCS	- (1956) - (1959)	1007 1218
$C_{31}H_{50}O_4$	Methyl machaevinatate	-	-	Ident	Djerassi	JACS	77 (1955)	1825
$C_{31}H_{50}O_4$	Methyl polyporenate	-	Sol	Group freq, Struct	Guider	JCS	- (1954)	3234
$C_{31}H_{50}O_4$	Methyl siaresinolate	1350-1500	Sol	Freq	Cole	JCS	- (1956)	1007
$C_{31}H_{50}O_5$	Dihydropseudosarsanopogenin diacetate	-	-	Ident, Iso	Scheer	JACS	77 (1955)	641
$C_{31}H_{50}O_5$	Dihydropseudosmilagenin diacetate	-	-	Ident, Iso	Scheer	JACS	77 (1955)	641
$C_{31}H_{50}O_5$	Dihydrotigogenin diacetate	-	- Sol Sol	Band study Group freq Group freq, Struct	Doukas Elks Callow	JACS JCS JCS	75 (1953) - (1954) - (1955)	5355 1739 1966
$C_{31}H_{50}O_5$	Methyl 3 β ,19 α -dihydroxy-12-oxooleanan-28-oate	1350-1500 3600-1650	Sol Sol	Freq Freq	Cole Cole	JCS JCS	- (1956) - (1959)	1007 1218
$C_{31}H_{50}O_5$	Methyl arjunolate	-	Sol	Group freq	King	JCS	- (1954)	3995
$C_{31}H_{50}O_6$	Methyl dihydro-12-oxo-arjunolate	-	S	Group freq	King	JCS	- (1954)	3995
$C_{31}H_{50}O_6$	Methyl 12,13-epoxy-arjunolate	-	Sol	Group freq	King	JCS	- (1954)	3995
$C_{31}H_{50}O_6$	Methyl terminolate	-	S, Sol	Group freq	King	JCS	- (1955)	1333
$C_{31}H_{50}O_{10}$	Andromedotoxin	-	S	Group freq	Wood	JACS	76 (1954)	5689
$C_{31}H_{52}$	Eburico-8,20-diene	-	Sol	Group freq	Holker	JCS	- (1953)	2422
$C_{31}H_{52}O$	Cyclolandenol	- 2.5-15 μ 3600-3650	Sol Sol Sol	Freq Struct Freq, Struct	Bentley Cole Cole	JCS JCS JCS	- (1955) - (1959) - (1959)	596 1212 1218

$C_{31}H_{52}O$	Euphorbol	-	-	Group study	Barbour	JCS - (1955)	2194
$C_{31}H_{52}O_2$	Methyl lupan-28-oate	1350-1500	Sol	Freq	Cole	JCS - (1956)	1007
$C_{31}H_{52}O_2$	⁵ Δ -Stigmastanol- β acetate	-	S, Sol	Group freq	Tarpley	APS 9 (1955)	69
$C_{31}H_{52}O_3$	Cholestanol- β -acetate	-	Sol	Group freq	Jones	JACS 74 (1952)	5648
$C_{31}H_{52}O_3$	Methyl betulinatate	-	-	Ident	Djerassi	JACS 76 (1954)	5780
$C_{31}H_{52}O_3$	1-n-Octane-2-n-octanoic acid methyl ester-5-t-butyl-7-methylchroman	2-15 μ	L	Spec	Sprengling	JACS 74 (1952)	2937
$C_{31}H_{52}O_3$	β ,16 β ,21-Trihydroxy eburico-7,9(11)-diene	-	-	Ident	Bowers	JCS - (1953)	2548
$C_{31}H_{52}O_4$	⁵ Δ -Cholesten-4 α -ol- β -one dimethyl ketal acetate	-	Sol	Band freq	Fieser	JACS 76 (1954)	1728
$C_{31}H_{54}O_2$	Stigmastanol- β acetate	-	Sol	Group freq	Jones	JACS 74 (1952)	5648
$C_{31}H_{54}O_2$	5 β -stigmast-22-en- β -one β -dimethyl ketal	-	S	Ident, Spec	Idler	JACS 75 (1953)	1712
$C_{31}H_{56}O_2$	β , β -Diethoxycholestane	-	-	Group freq	Slomp	JACS 77 (1955)	1216
$C_{31}H_{60}$	11 α -Decahydronaphthaleneheneicosane	1.1-1.25 μ	L	Band freq	Page	JCS - (1955)	2017
				Group Absorption, Anal	Evans	AC 23 (1951)	1604
<u>C₃₂ COMPOUNDS</u>							
$C_{32}H_{60}Cl_2O_3$	cis-meso-4,5-Bis-(2'-Chloro-phenyl)- β ,6-diphenyl-phthalic anhydride	-	-	Ident	Shapiro	JACS 75 (1953)	4769

$C_{32}H_{18}Cl_2O_3$			Ident	Shapiro	JACS	75 (1953)	4769
$C_{32}H_{18}Cl_2O_3$	trans-4,5-Bis-(2'-Chlorophenyl)-3,6-diphenyl-phthalic anhydride	-	-	-	-	-	-
$C_{32}H_{18}N_8$	Phthalocyanine (Metal free)	650-2000	S	Struct, Band study	Cannon	4 (1951)	373
$C_{32}H_{20}O_4$	1,6-Dihydroxy-1,6-di-p-biphenyl-1,3,5-hexatriene-cis-3,4-dioic bislactone	2-15.5 μ	S	Spec, Group freq	Klingsberg	54 (1954)	59
$C_{32}H_{22}O_2$	Tetraphenylphthalide	2-16 μ	S	Spec	Bonner	18 (1953)	426
$C_{32}H_{23}N_2O_5$	3,3 - Iminobis(4-benzylidene-1-phenyl-5-pyrazolone)	400-4000	-	Freq	Gagnon	37 (1959)	110
$C_{32}H_{24}$	1,2,5,6,9,10,13,14-Tetrabenzocyclohexadeca-1,3,5,7,9,11,13,15-Octene	-	Sol	Freq	Bergmann	75 (1953)	4281
$C_{32}H_{24}N_2O_5S_2$	Anthracene-p-quinone dibenzenesulfonimide	-	-	Group freq	Adams	74 (1952)	2603
$C_{32}H_{24}N_2O_5S_2$	2-(β -Hydroxy- α -naphthyl)-1,4-naphthalenedibenzene-sulfonamide	-	-	Group study	Adams	74 (1952)	5560
$C_{32}H_{24}O$	2-Biphenyl trityl ketone	-	S	Spec, Struct	Mosher	73 (1951)	795
$C_{32}H_{24}O$	O-(α , α -Diphenyl-o-tolyl)-benzophenone	-	-	Group freq, Ident	Fuson	77 (1955)	1138
$C_{32}H_{24}O$	9,10,10-Triphenyl-9,10-dihydro-9-phenanthrol	-	S	Spec, Struct	Mosher	73 (1951)	795
$C_{32}H_{24}O_2$	O-(o-Benzoylphenyl)-triphenyl carbinol	-	S	Spec, Ident, Struct	Mosher	73 (1951)	795
$C_{32}H_{24}O_8$	Tetra-m-cresotide	1700-1800	S, Sol	Group freq	Short	- (1952)	206

$C_{32}H_{24}O_8$	Tetra-o-cresotide	1700-1800	Sol	Group freq	Short	JCS	- (1952)	206
$C_{32}H_{24}O_8$	Tetra-p-cresotide	1700-1800	S	Group freq	Short	JCS	- (1952)	206
$C_{32}H_{26}$	Pentaphenylethane	650-2000	Sol	Spec	Cannon	SA	4 (1951)	373
		-	Sol	Group freq, I	Pinchas	JCS	- (1954)	863
$C_{32}H_{26}O$	Pentaphenylethanol	-	S	Group freq	Mosher	JACS	75 (1953)	4604
$C_{32}H_{26}O$	1-Triphenylacetyl-2-phenyl- 1,2-dihydrobenzene enol form	-	S	Band study	Mosher	JACS	75 (1953)	4604
$C_{32}H_{26}O_2$	1,4-Dibenzal-1,4- dibenzylbutane	-	-	Group freq, Struct	Fuson	JACS	77 (1955)	174
$C_{32}H_{26}O_2$	9,10-Dimethylanthracene photoxide	850-1300	-	Freq	Nikitin	OS	4 (1958)	702
$C_{32}H_{26}O_2$	1,1,8,8-Tetraphenyl-trans- 2,trans-6-octadien-4-yne- 1,8-diol	-	L	Group freq, I	Allan	JCS	- (1955)	1874
$C_{32}H_{26}O_2$	Tetraphenyl-o-xylylene- α, α' -diol	2-16 μ	S	Spec, Band study	Bonner	JOC	18 (1953)	426
$C_{32}H_{26}O_8$	Bis isocoumaranone	-	-	Band freq	Wasserman	JACS	81 (1955)	4615
$C_{32}H_{26}O_8$	O-Tetramethyl-5,5'-di- benzyllellagic acid	5-6.15 μ	S	Struct	Stitt	JACS	77 (1959)	973
$C_{32}H_{27}NO$	1-Methyl-3,5-di-(p- phenylbenzylidene)- 4-piperidone	-	S	Group freq	Leonard	JACS	77 (1955)	1852
$C_{32}H_{27}NO$	1-Methyl-3,5-di-(p- phenylbenzyl)-4- pyridone	-	S	Group freq	Leonard	JACS	77 (1955)	1852
$C_{32}H_{27}NO_3$	Ethyl α -Cyano- β -(o-anisyl) β -(9-fluorenyl)- β -phenyl- propionate	-	-	Freq	Elderfeld	JACS	76 (1954)	5439

C ₃₂ H ₂₇ N ₅ O ₂	N-Benzyl-3-(3-benzyl-ureido)-5,6-diphenylpyrazinamide	Sol	Band freq, Struct	Taylor	JACS	74 (1952)	1651
C ₃₂ H ₃₀	9,10-Dimesitylphenanthrene	-	Prod. of react.	Fuson	JOC	16 (1951)	637
C ₃₂ H ₃₂ N ₂ O ₄	p,p'-Bis(N,N-dimethylcarboxamido)-benzopinacol	S	Spec, Group freq	Lynn	JOC	16 (1951)	1546
C ₃₂ H ₃₂ N ₂ O ₄	1,6(or 7)-Dicyclohexylamino-4,9-dihydroxyperylene-3,10-quinone	S	Table	Colderbank	JCS	- (1954)	1285
C ₃₂ H ₃₅ O	α-Benzhydryl-γ-phenylbutyromesitylene	-	Group freq	Fuson	JOC	18 (1953)	1263
C ₃₂ H ₃₆ O ₂	9,10-Dihydro-9,10-dihydroxy-9,10-dimesitylphenanthrene	-	Ident	Fuson	JOC	19 (1954)	373
C ₃₂ H ₃₆ O ₂	(o-Mesitylphenyl)-o-(α-mesitylbenzylalcohol)	-	Band freq, Struct Ident	Fuson Fuson	JOC JACS	16 (1951) 77 (1955)	631 3776
C ₃₂ H ₃₄	Cyclodotriaconta-1,3,9,11,17,19,25,27-Octayne	S	Spec	Wolovsky	JACS	81 (1959)	4600
C ₃₂ H ₃₄ N ₂ O ₄	Deuteroporphyrin dimethyl ester	S	Spec, Assign	Falk	AJSR	4A (1951)	579
C ₃₂ H ₃₄ N ₂ O ₄	Rhodoporphyrin free acid	S	Spec, Assign	Falk	AJSR	4A (1951)	579
C ₃₂ H ₃₄ O ₈	Gossypol dimethyl ether	Sol	Spec, Group freq, Struct	O'Connor	JACS	76 (1954)	2368
C ₃₂ H ₃₄ O ₁₂ S ₄	tetra-O-p-toluene-sulfonylerythritol	S	Band freq	Tipson	JACS	74 (1952)	1354
C ₃₂ H ₃₄ -36 ⁰ 14	Chartreusin	S	Spec	Leach	JACS	75 (1953)	4011
C ₃₂ H ₃₆ OSi	Triphenylsilyloctyl phenyl ether	-	Inductive effect	Josien	CPR	249 (1959)	826

$C_{32}H_{37}NO_4$	Desoxycorticosterone α -naphthylurethan	-	S	I, Group freq	Werbin	JACS 77 (1955)	4431
$C_{32}H_{38}N_2O_8$	Ganescine	2-15 μ	S	Spec, Group freq Struct	Klohs MacPhillamy	JACS 77 (1955)	4084
		2.5-12 μ	Sol	Spec	Neuss	JACS 77 (1955)	4335
						JACS 77 (1955)	4087
$C_{32}H_{38}N_2O_{10}$	Deserpidinediol	-	S	Ident	MacPhillamy	JACS 77 (1955)	4335
$C_{32}H_{38}N_2O_{10}$	Isodeserpidinediol	-	S	Ident	MacPhillamy	JACS 77 (1955)	4335
$C_{32}H_{38}N_4$	Aetioporphyrin	670-4000	S	Spec, Assign	Falk	ASJR 4A (1951)	579
$C_{32}H_{39}NO_3$	Δ^5 -Pregnenolone- α - naphthylurethan	-	S	Group freq, I	Werbin	JACS 77 (1955)	4431
$C_{32}H_{40}Si_4$	2,4,6,8-Tetraethyltetra- phenylcyclo tetra- siloxane	2-16 μ	Sol	Spec	Young	JACS 70 (1948)	3758
$C_{32}H_{40}O_{19}$ $7\frac{1}{2}H_2O$	Robinin	-	-	Freq	Inglett	JOC 23 (1958)	93
$C_{32}H_{42}O_5$	21-Benzylidenepregnane- 3 α ,20 β -diol-11-one diacetate	-	-	Band study	Oliveto	JACS 76 (1954)	6111
$C_{32}H_{42}O_{11}$	Methyl polyacetylglucosi- duronate of 3,5 Δ^5 -androstadiene-3-ol- 17-one	650-3700	L	Spec, Assign	Smakula	JACS 81 (1959)	1708
$C_{32}H_{43}BrO_6$	Methyl monobromodike to- pyroquinovadienoate acetate	-	Sol	Group freq	Barton	JCS - (1953)	3111
$C_{32}H_{44}OSi$	Triphenylsilyldecyl butyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826

C ₃₂ H ₄₄ O ₂	(10-p-10-p)-Cyclor- phandione-1,17	-	Sol	Group freq	Schubert	JACS	76 (1954)	5462
C ₃₂ H ₄₄ O ₄	Methyl 3,16-dioxoeburico- 7,9(11),24(28)-triene- 21-oate	-	-	Ident	Bowers	JCS	- (1953)	2548
C ₃₂ H ₄₄ O ₅	⁵ Δ -Pregnene-16α-benzyl- oxy-3,20-dione bisethylene ketal	-	S	Band freq	Bernstein	JACS	76 (1954)	5674
C ₃₂ H ₄₄ O ₅	⁵ Δ -Pregnene-16α-benzyl- oxy-3β-ol-20-one acetate ethylene ketal	-	S	Band freq	Bernstein	JACS	76 (1954)	5674
C ₃₂ H ₄₄ O ₁₁	Methylpolyacetylglycosi- duronate of	650-3700	Sol	Spec, Assign	Smakula	JACS	81 (1959)	1708
C ₃₂ H ₄₄ O ₁₁	⁴ Δ -androstene-17β-ol- 3-one	650-3700	L	Assign, Spec	Smakula	JACS	81 (1959)	1708
C ₃₂ H ₄₆ N ₂ O ₅	Methyl polyacetyl- glucopyranosiduronate of	-	Sol	Band freq	Djerassi	JACS	75 (1953)	3632
C ₃₂ H ₄₆ N ₂ O ₅	⁵ Δ -androstene-3β-ol- 17-one	-	Sol	Band freq	Fieser	JACS	75 (1953)	4386
C ₃₂ H ₄₆ O ₄	Pilocerine acetate	2-14 μ	S	Spec	Nakanishi	BCSJ	29 (1956)	7
C ₃₂ H ₄₆ O ₅	B-Norcoprostane-3,6-dione- 3-(2,4-dinitrophenyl- hydrazone	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
C ₃₂ H ₄₆ O ₅	Pristimerol dimethyl ether	-	Sol	Band freq	Djerassi	JACS	76 (1954)	4085
C ₃₂ H ₄₆ O ₅	3β-Acetyloxylanosta-5,8- diene-7,11,12-trione	-	Sol	Band freq	Djerassi	JACS	76 (1954)	4085
C ₃₂ H ₄₆ O ₅	18-Dehydroglycyrrhetic acid 3-acetate	-	Sol	Band freq	Djerassi	JACS	76 (1954)	4085

$C_{32}H_{46}O_6$	6-Keto-3 α -p-toluene-sulfonyl allocholanolic acid, methyl ester	-	Sol	Group freq	Jones	JACS 72 (1950)	956
$C_{32}H_{46}O_6$	Methyl 3 α -p-toluene-sulfonyl-12-ketocholanate	-	-	Band freq	Reich	JOC 16 (1951)	1753
$C_{32}H_{46}O_{11}$	Methyl polyacetylglycopyranosiduronate of androstane-3 β -ol-17-one	650-3700	Sol	Spec, Assign	Smakula	JACS 81 (1959)	1708
$C_{32}H_{47}NO$	4-Phenyl- Δ^5 -4-aza-cholestenone-3	2-12 μ	Sol	Band freq	Woodwards	JACS 74 (1952)	4223
$C_{32}H_{48}Br_2O_5$	3 β ,7 β -Diacetoxy-22,23-dibromo-14 β -ergost-8-en-11-one	-	S	Group freq	Grigor	JCS - (1954)	2333
$C_{32}H_{48}Br_2O_5$	22,23-Dibromo-3 β ,7 β -diacetoxyergost-8-en-11-one	-	S	Group freq	Grigor	JCS - (1954)	2333
$C_{32}H_{48}O_3$	Anhydro-oxoelemedienyl acetate-I	-	Sol	Band freq	Halsoll	JCS - (1953)	4139
$C_{32}H_{48}O_3$	Anhydro-oxoelemedienyl acetate-II	-	Sol	Band freq	Halsoll	JCS - (1953)	4139
$C_{32}H_{48}O_3$	Ergosteryl acetate	-	Sol	Spec, Ident	Bader	JACS 74 (1952)	3992
$C_{32}H_{48}O_4$	3 β -Acetoxylanosta-5:8-dien-7:11-dione	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
$C_{32}H_{48}O_4$	Methyl 3,16-dioxoburico-7,9(11)-diene-21-oate	-	S	Band freq	Bowers Cort	JCS - (1953)	2548
$C_{32}H_{48}O_4$	Methyl 3 β -hydroxy-16-oxoburico-7,9(11),24(28)-triene-21-oate	-	-	Ident		JCS - (1954)	3713
$C_{32}H_{48}O_4$	Methyl 3 β -hydroxy-16-oxoburico-7,9(11),24(28)-triene-21-oate	-	Sol	Band freq, Struct	Bowers	JCS - (1953)	2548
$C_{32}H_{48}O_4$	Methyl polyporene C	-	Sol	Freq, Struct	Bowers	JCS - (1953)	2548

$C_{32}H_{48}O$	Thurberogenin acetate	-	Ident	Djerassi	JACS	77 (1955)	1200
$C_{32}H_{48}O$	3β -Acetoxy- 1β -hydroxy- 12-oxooleanan-28-oic 13(28) lactone	1350-1500	Freq	Cole	JCS	- (1956)	1007
$C_{32}H_{48}O$	3β -Acetoxy-23-oxoolean- 12-en-28-oic acid	1500-3700	Freq	Cole	JCS	- (1959)	2005
$C_{32}H_{48}O$	$3\beta,5\alpha$ -Diacetoxy-9 $\alpha,11\alpha$ - epoxyergosta-7,22-diene	-	Group freq	Bladon	JCS	- (1953)	2921
$C_{32}H_{48}O$	$3\beta,5\alpha$ -Diacetoxyergosta- 7,22-diene-11-one	-	Group freq	Bladon	JCS	- (1953)	2921
$C_{32}H_{48}O$	$3\beta,5\alpha$ -Diacetoxyergosta- 8,22-dien-11-one	-	Group freq	Bladon	JCS	- (1953)	2921
$C_{32}H_{48}O$	$3\beta,5\alpha$ -Diacetoxyergosta- 8(9),22-dien-7-one	-	Group freq	Elks	JCS	- (1954)	463
$C_{32}H_{48}O$	$3\beta,5\alpha$ -Diacetoxy ergosta- 9(11),22-dien-7-one	-	Group freq	Elks	JCS	- (1954)	463
$C_{32}H_{48}O$	$3\beta,5\alpha$ -Diacetoxy-9 β -ergosta- 7,22-dien-11-one	-	Group freq	Bladon	JCS	- (1953)	2921
$C_{32}H_{48}O$	$3\beta,7\alpha$ -Diacetoxyergosta- 8,22-dien-11-one	-	Group freq	Henbest	JCS	- (1954)	728
$C_{32}H_{48}O$	$3\beta,7\beta$ -Diacetoxyergosta- 8,22-dien-11-one	-	Group freq	Henbest	JCS	- (1954)	728
$C_{32}H_{48}O$	$3\beta,11\alpha$ -Diacetoxyergosta- 5,8(9)-dien-7-one	-	Group freq	Bladon	JCS	- (1953)	2916
$C_{32}H_{48}O$	Dumortierigenin monoacetate	-	Group freq	Djerassi	JACS	76 (1954)	2969
$C_{32}H_{48}O$	$\Delta^{7,14,22}$ -Ergostatriene- $3\beta,5\alpha,6\alpha$ -triol 3,6- diacetate	-	Band freq	Fieser	JACS	75 (1953)	4066

$C_{32}H_{48}O_6$	$3\alpha, 12\alpha$ -Diacetoxy-7,24-dioxo-26,27-bisnorlanost-8-ene	-	Sol	Band freq	Halsall	JCS - (1954)	2385
$C_{32}H_{49}ClO_3$	3β -Acetoxyolean-12-en-28-oyl chloride	1350-3700	Sol	Freq, I	Cole	JCS - (1957)	1332
$C_{32}H_{49}NO_9$	Cevadine	2-13 μ	Sol Sol	Spec Group freq	Kupchan Barton	JACS 75 (1953) JCS - (1954)	5519 3950
$C_{32}H_{50}O_2$	Olea-11,13(18)-dienyl acetate	-	Sol	Band freq	Barton	JCS - (1955)	876
$C_{32}H_{50}O_2$	19α (H)-Taraxasta-20(30), 21-dien- 3β -yl acetate	-	S	Band freq	Ames	JCS - (1954)	1905
$C_{32}H_{50}O_3$	3β -Acetoxylanosta-8:24-dien-26-al	2.575 μ	Sol	Struct	Cole	JCS - (1959)	1212
$C_{32}H_{50}O_3$	3β -Acetoxy lup-20(29)-en-30-al	1350-1500 680-3700	Sol Sol	Freq Freq, I	Cole Cole	JCS - (1956) JCS - (1957)	1007 1332
$C_{32}H_{50}O_3$	3β -Acetoxyolean-18-en-28-al	1350-1500 680-3700	Sol Sol	Freq Freq, I	Cole Cole	JCS - (1956) JCS - (1957)	1007 1332
$C_{32}H_{50}O_3$	3β -Acetoxyurs-12-en-11-one	1350-1500 680-3700	Sol Sol	Freq Freq, I	Cole Cole	JCS - (1956) JCS - (1957)	1007 1332
$C_{32}H_{50}O_3$	Anhydro-oxoolemenyl acetate-II	-	S	Band freq	Halsall	JCS - (1953)	4139
$C_{32}H_{50}O_3$	7-Xe tolanosta-5,8-dien- 3β -yl acetate	-	Sol	Freq	Barton	JCS - (1953)	1842
$C_{32}H_{50}O_4$	3β -Acetoxy-13 β -hydroxy-oleanan-28-oic-13(28)-lactone	1350-1500	Sol	Freq	Cole	JCS - (1956)	1007
$C_{32}H_{50}O_4$	3β -Acetoxy-13 β -hydroxy-18 α -oleanan-28-oic-13(28)-lactone	1350-1500	Sol	Freq	Cole	JCS - (1956)	1007

$C_{32}H_{50}O_4$	β -Acetoxylanost-5-ene-7,11-dione	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
$C_{32}H_{50}O_4$	β -Acetoxylanost-8-ene-7,11-dione	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
$C_{32}H_{50}O_4$	β -Acetoxylup-20(29)-en-28-oic acid	1500-3700	Sol	Freq	Cole	JCS - (1959)	2005
$C_{32}H_{50}O_4$	β -Acetoxylean-12-en-28-oic acid	1500-3700	Sol	Freq	Cole	JCS - (1959)	2005
$C_{32}H_{50}O_4$	β -Acetoxyl-18-olean-12-en-28-oic acid	1500-3700	Sol	Freq	Cole	JCS - (1959)	2005
$C_{32}H_{50}O_4$	Methyl β -hydroxy-16-oxoeburico-7,9(11)-diene-21-oate	-	Sol	Band freq, Struct	Bowers	JCS - (1953)	2548
$C_{32}H_{50}O_4$	Methyl 16 β -hydroxy-3-oxoeburico-7,9(11)-diene-21-oate	-	Sol	Band freq	Bowers	JCS - (1953)	2548
$C_{32}H_{50}O_4$	Olean-18-ene- β ,28-diol diformate	680-3700	Sol	Freq, I	Cole	JCS - (1957)	1332
$C_{32}H_{50}O_4$	Oleanolic acid acetate	-	-	Band freq, Ident	Djerassi	JACS 75 (1953)	2254
$C_{32}H_{50}O_4$	18-Isocoleanolic acid lactone acetate	-	Sol	Band freq Ident	Djerassi Djerassi	JACS 76 (1954) JACS 77 (1955)	2969 1200
$C_{32}H_{50}O_4$	Olean-18-en- β ,28-diol diformate	1350-1500	Sol	Freq	Cole	JCS - (1956)	1007
$C_{32}H_{50}O_5$	β -Acetoxyl-12 α :13 β -dihydroxylean-28-oic 13(28)-lactone	1350-1500 3600-3650	Sol Sol	Freq Freq, Struct	Cole Cole	JCS - (1956) JCS - (1959)	1007 1218
$C_{32}H_{50}O_5$	β ,11 α -Diacetoxyl-5 α ,8 α -epoxyergost-9-ene	-	Sol	Group freq	Clayton	JCS - (1953)	2009
$C_{32}H_{50}O_5$	β ,5 α -Diacetoxylergost-22-en-11-one	-	S	Group freq	Bladon	JCS - (1954)	125

$C_{32}H_{50}O_5$	Hecogenin tetrahydro-pyranyl ether	-	-	Band study	Hirschmann	JACS	76 (1954)	4013
$C_{32}H_{50}O_5$	Stellatogenin monoacetate	-	Sol	Freq	Djerassi	JACS	77 (1955)	1200
$C_{32}H_{50}O_5$	22a,5 α -Spirostan- β -ol-12-one acetate trimethylene hemithioetal	-	Sol	Ident	Djerassi	JACS	75 (1953)	3704
$C_{32}H_{50}O_3$	Steviolbioside	-	-	Group study	Wood	JOC	20 (1955)	875
$C_{32}H_{51}BrO_3$	11 β -Bromo-12-oxo-18-oleanan- β -yl acetate	-	Sol	Group freq	Allan	JCS	- (1955)	2125
$C_{32}H_{52}N_2O_3$	Lycopodine	-	Sol	Group freq	Marion	JACS	73 (1951)	305
$C_{32}H_{52}O_2$	Cycloarteryl acetate	-	Sol	Group study	Cole	JCS	- (1954)	3810
$C_{32}H_{52}O_2$	9:19-Cyclolanost-24-en- β -yl acetate	950-3639	-	Spec, Freq	Allsop	JCS	- (1956)	4868
$C_{32}H_{52}O_2$	9:19-Cyclolanost-24-en- β -yl acetate	950-3639	-	Spec, Freq	Allsop	JCS	- (1956)	4868
$C_{32}H_{52}O_2$	Isoeuphadienyl acetate	-	Sol	Band freq	Barton	JCS	- (1955)	876
$C_{32}H_{52}O_2$	Lanosta-5,7-dien- β -yl-acetate	-	Sol	Freq	Barton	JCS	- (1953)	1842
$C_{32}H_{52}O_2$	Lanosta-7:9(11)-dien- β -yl acetate	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
$C_{32}H_{52}O_2$	Lanosta-8,24-dienyl acetate	3-14 μ	Sol	Spec, Band study	Cole	JCS	- (1954)	3807
$C_{32}H_{52}O_2$	Lanosta-8:24-dien- β -yl acetate	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
$C_{32}H_{52}O_2$	Methyl eburico-2,8-dienoate	-	S	Group freq	Holker	JCS	- (1953)	2414
$C_{32}H_{52}O_2$	Lup-20(29)-en- β -yl-acetate	950-3639 680-3700	- Sol	Spec Freq, I	Allsop Cole	JCS JCS	- (1956) - (1957)	4868 1332

$C_{32}H_{52}O_2$	Lup-20(29)-en- β -yl acetate	950-3639 1350-1500 680-3700	Sol Sol Sol	Spec Freq Freq, I	Allsop Cole Cole	JCS JCS JCS	- - -	(1956) (1956) (1957)	1007 1007 1332
$C_{32}H_{50}O_2$	Methyl dehydrodideoxy-dihydrobunulosate	-	-	Ident	Cort	JCS	-	(1954)	2713
$C_{32}H_{50}O_2$	Olean-12-en- β -yl acetate	950-3639	-	Spec	Allsop	JCS	-	(1956)	4868
$C_{32}H_{50}O_2$	Olean-12-en- β -yl acetate	950-3639	Sol	Spec, Band study	Allsop	JCS	-	(1956)	4868
$C_{32}H_{50}O_2$	Phyllanthyl acetate	-	Sol	Freq	Cole	JCS	-	(1954)	3810
$C_{32}H_{50}O_2$	19 α (H)-Taraxast-20-en- β -yl acetate	-	S	Ident	Ames	JCS	-	(1954)	1905
$C_{32}H_{50}O_2$	γ -Taraxasteryl acetate	-	Sol	Group freq	Ames	JCS	-	(1954)	1905
$C_{32}H_{50}O_2$	Taraxeryl acetate	-	S	Freq	Brooks	JCS	-	(1955)	1675
$C_{32}H_{52}O_2$	Urs-12-en- β -yl acetate	950-3639	-	Spec, Freq	Allsop	JCS	-	(1956)	4868
$C_{32}H_{52}O_2$	Urs-12-en- β -yl acetate	950-3639 1350-1500 680-3700	- Sol Sol	Spec, Band study Freq Freq, I	Allsop Cole Cole	JCS JCS JCS	- - -	(1956) (1956) (1957)	4868 1007 1332
$C_{32}H_{52}O_3$	β -Acetoxy-7 α -ethoxy- Δ ^{8,14,22} -Ergostadiene	-	S,Sol	Group freq, Ident	Fieser	JACS	75	(1953)	4404
$C_{32}H_{52}O_3$	β -Acetoxylanost-8-en-7-one	2.5-15 μ	Sol Sol	Freq Struct	Barton Cole	JCS JCS	- -	(1953) (1959)	1842 1212
$C_{32}H_{52}O_3$	β -Acetoxylanost-8-en-11-one	2.5-15 μ	Sol	Struct	Cole	JCS	-	(1959)	1212
$C_{32}H_{52}O_3$	β -Acetoxylup-20(29)-en-28-ol	3600-3650	Sol	Struct, Freq	Cole	JCS	-	(1959)	1218
$C_{32}H_{52}O_3$	β -Acetoxyleanan-12-one	1350-1500	Sol	Freq	Cole	JCS	-	(1956)	1007

$C_{32}H_{52}O_3$	β -Acetoxylean-18-en-28-ol	3600-3650	Sol	Struct, Freq	Cole	JCS - (1959)	1218
$C_{32}H_{52}O_3$	11-Keto- Δ^9 -lanostenol-2 acetate	-	Sol	Struct, Group freq	McGhie	JCS - (1952)	3176
$C_{32}H_{52}O_3$	Lup-20(29)-ene- β ,28-diol β -acetate	680-3700	Sol	Freq, I	Cole	JCS - (1957)	1332
$C_{32}H_{52}O_3$	Methyl 16 α -hydroxyeburico-7,9(11)-dien-21-oate	-	S	Freq	Powers	JCS - (1954)	3070
$C_{32}H_{52}O_3$	Methyl 16 α -hydroxy-20-iseburico-7,9(11)-dien-21-oate	-	S	Freq	Powers	JCS - (1954)	3070
$C_{32}H_{52}O_3$	Olean-18-ene- β ,28-diol β -acetate	680-3700	Sol	Freq, I	Cole	JCS - (1957)	1332
$C_{32}H_{52}O_3$	11-Oxoceph-8-enyl acetate	-	S	Group freq	Barton	JCS - (1955)	876
$C_{32}H_{52}O_4$	β -Acetoxylanostane-7,11-dione	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
$C_{32}H_{52}O_4$	β ,5 α -Diacetoxergost-14-one	-	-	Group freq	Bladon	JCS - (1954)	736
$C_{32}H_{52}O_4$	β ,11-Diacetoxergost-9(11)-ene	-	Sol	Group freq	Cramshaw	JCS - (1954)	731
$C_{32}H_{52}O_5$	β ,11 α -Diacetox-9 α ,11 α -epoxyergostane	-	-	Group freq	Cramshaw	JCS - (1954)	731
$C_{32}H_{52}O_5$	β ,5 α -Diacetox-9 β -ergostan-11-one	-	Sol	Group freq	Bladon	JCS - (1953)	2921
$C_{32}H_{52}O_5$	$\Delta^8(14)$ -Ergostene- β ,5 α ,6 α -triol β ,6-diacetate	-	Sol	Band freq, Ident	Rieser	JACS 75 (1953)	4066
$C_{32}H_{53}O_3$	Cholesteryl acetate semicarbazone	-	-	Freq	Bader	JACS 73 (1951)	4195

C ₃₂ H ₅₄ O ₂	Methyl betulate	1350-1500	Sol	Freq	Cole	JCS	- (1956)	1007
C ₃₂ H ₅₄	5-(7-Tetrahydronaphthyl)- -n-docosene-5	5400-8900	Sol	Assign, Spec	Rose	JRNB	19 (1937)	143
C ₃₂ H ₅₄ O ₂	Cycloartanyl acetate	9-11 μ	Sol	Spec, Freq	Barton Cole	JCS	- (1951)	1444
C ₃₂ H ₅₄ O ₂	Isotirucallenylyl acetate	-	-	Group study	Barbour	JCS	- (1955)	2194
C ₃₂ H ₅₄ O ₂	⁷ Δ ⁷ -Lanostenol acetate	-	-	Ident	Woodward	JACS	76 (1954)	2852
C ₃₂ H ₅₄ O ₂	Lanostenyl acetate	-	Sol	Struct	Barton	JCS	- (1951)	3147
C ₃₂ H ₅₄ O ₂	Lanost-7-en-3β-y1 acetate	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
C ₃₂ H ₅₄ O ₂	Lanost-8-en-3α-y1 acetate	950-3639	-	Spec, Band study	Allsop	JCS	- (1956)	4868
C ₃₂ H ₅₄ O ₂	Lanost-8-en-3β-y1 acetate	950-3639 2.5-15 μ	- Sol	Spec, Band study Struct	Allsop Cole	JCS JCS	- (1956) - (1959)	4868 1212
C ₃₂ H ₅₄ O ₂	Lanost-9(11)-en-3β-y1 acetate	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
C ₃₂ H ₅₄ O ₃	3β-Acetoxylanostan-11-one	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
C ₃₂ H ₅₄ O ₃	7-Oxoephanyl acetate	-	S	Ident	Barton	JCS	- (1955)	876
C ₃₂ H ₅₄ O ₄	3β, 11β-Diacetoxypergostane	-	Sol	Group freq	Cramshaw	JCS	- (1954)	731
C ₃₂ H ₅₄ O ₄	ψ-Taraxastanetriol 3-acetate	-	-	Ident	Halsall	JCS	- (1954)	1902
C ₃₂ H ₅₆	5-(7-Tetrahydronaphthyl)- -n-docosane	5400-8900	Sol	Assign, Spec	Rose	JRNB	19 (1937)	143
C ₃₂ H ₅₆ O ₃	3β-Acetoxylanostan- 11-ol	3600-3650	Sol	Freq	Cole	JCS	- (1959)	1218
C ₃₂ H ₅₆ O ₃	7β-Acetoxylanostan-11α- ol	3600-3650	Sol	Freq	Cole	JCS	- (1959)	1218

$C_{32}H_{62}$	5-(2-Decahydronaphthyl)- n-docosane	5400-8900	Sol	Spec, Assign	Rose	JRNB	19 (1937)	143	
$C_{32}H_{64}O_4$	Dipalmitylperoxide	-	Sol	Group freq	Davison	JCS	- (1951)	2456	
$C_{32}H_{64}O_4$	Di-n-undecylsebacate	2-16 μ	Sol	Spec	Stahl	JACS	74 (1952)	5489	
$C_{32}H_{66}$	n-Ditriacontane	721-732 700-3000	L,S Sol	Temp. effect on bands Molecular Ext. Coefficient	Robert Jones	CPR SA	234 (1952) 9 (1957)	2270 235	
<u>C₃₃ COMPOUNDS</u>									
$C_{33}H_{24}O$	2,3,6,7-Tetraphenyl- 2,6,8 Δ -cyclo- indatrienone	1600-1800	Sol	Group freq	Fuson	JACS	76 (1954)	2526	
$C_{33}H_{24}O$	3,3,5,6-Tetraphenyl- indanone	2-16 μ	S	Spec, Struct	Allen	JOC	20 (1955)	315	
$C_{33}H_{26}N_2O_2S_2$	Ethyl-1,4-naphtho- quinone dibenzene- sulfonimido-2-benzoyl acetate	-	-	Group study	Adams	JACS	74 (1952)	5557	
$C_{33}H_{26}O$	p-Benzylphenyl trityl ketone	-	-	Group freq	Fuson	JACS	77 (1955)	1138	
$C_{33}H_{26}O$	1,1,2,3,3-Pentaphenyl- 2-propen-1-ol	-	-	Group freq, Ident	Lutz	JACS	77 (1955)	366	
$C_{33}H_{28}N_2O_2S_2$	Ethyl-1,4-naphthalene dibenzene-sulfonamido- 2-benzoyl acetate	-	-	Group study	Adams	JACS	74 (1952)	5557	
$C_{33}H_{28}O$	2-Hydroxy-1,1,1,3,3- pentaphenylpropane	-	Sol	Group freq, I	Pinchas	JCS	- (1954)	863	

C ₃₃ H _{NO} ₂	-	Band study	Potts	JCS	- (1955)	2466
3-Cyano-1,6-diphenyl-3,4-di-O-tolyl-hexane-1,6-dione	-					
C ₃₃ H ₃₃ N ₃ O ₃	2-15 μ	Spec	Burke	JACS	72 (1950)	4691
3,4,6,7,8,10,11,12-Octahydro-3,7,11-tribenzyl-2H-benzo 1,2-e,3,4-e',5,6-e" tris-m-oxazine						
C ₃₃ H ₃₄ N ₄ O ₅	670-4000	Spec, Assign	Falk	AJSR	4A (1951)	579
2-Formyldeuteroporphyryn dimethyl ester						
C ₃₃ H ₃₄ N ₄ O ₅	670-4000	Spec, Assign	Falk	AJSR	4A (1951)	579
4-Formyldeuteroporphyryn dimethyl ester						
C ₃₃ H ₃₈ N ₈ O ₁₀	-	Ident	Mattox	JACS	74 (1952)	4340
3 α -Hydroxy-11,20-diketo-17 α -pregnan-21-al-20,21-bis-(2,4-dinitrophenyl-hydrazone)						
C ₃₃ H ₃₈ N ₈ O ₁₀	-	Ident	Mattox	JACS	74 (1952)	4330
3 α -Hydroxy-11,20-diketo-pregnan-21-al-20,21-bis-(2,4-dinitrophenyl-hydrazone)						
C ₃₃ H ₃₈ OSi	-	Inductive effect	Josien	CPR	249 (1959)	826
Triphenylsilylnonyl phenyl ether						
C ₃₃ H ₄₀ N ₂ O ₉	2-12 μ	Spec, Group freq	Djerassi	JACS	75 (1953)	5446
Reserpine	-	Group freq, Struct	Klohs	JACS	75 (1953)	4867
	-	Group freq	Neuss	JACS	75 (1953)	4870
	-	Ident	Djerassi	JACS	76 (1954)	4463
	-	Ident	Klohs	JACS	76 (1954)	1381
	-	Spec	Klohs	JACS	76 (1954)	2843
	2.5-12 μ	Spec, Struct, Group freq	Neuss	JACS	76 (1954)	2463
	-	Stereo	Diassi	JACS	77 (1955)	2028
	-	Ident, Iso	MacPhillamy	JACS	77 (1955)	4335
	5-12 μ	Spec	Neuss	JACS	77 (1955)	4087
C ₃₃ H ₄₀ N ₂ O ₉	-	Ident	MacPhillamy	JACS	77 (1955)	4335
3-isoreserpine						

$C_{33}H_{40}NO_4$	22a-Spirosta-4,8-diene-3,11-dione-3-2,4-dinitrophenylhydrazone	-	Sol	Group freq	Djerassi	JCS - (1954)	2346
$C_{33}H_{43}NO_7$	22,26-Imino-5,13,15,17(17a)-jervate traene-3 β ,23-diol-11-one triacetate	-	S	Band freq	Wintersteiner	JACS 75 (1953)	4938
$C_{33}H_{45}NO_6$	Triacetyl dihydro-11-ketoveratramine	-	-	Band freq, Ident	Wintersteiner	JACS 74 (1952)	4474
$C_{33}H_{46}OSi$	Triphenylsilylundecyl butyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826
$C_{33}H_{47}NO_7$	17a,22,26-Nitriolo-jerv-5-ene-3 β ,17,23-triol-11-one-3,17,23-triacetate	-	S	Band freq	Wintersteiner	JACS 75 (1953)	4938
$C_{33}H_{47}NO_7 \cdot HClO_4$	22,26-Imino-3 β ,17,23-triacetoxy-5,13(17a)-jervadiene-11-one perchlorate	-	S	Band freq	Wintersteiner	JACS 76 (1953)	4938
$C_{33}H_{47}NO_8$	22,26-Imino-5,13(17a)-jervadiene-3 β ,17,23-triol-11-one-3,23,N-triacetate	-	S	Band freq	Wintersteiner	JACS 76 (1953)	4938
$C_{33}H_{47}NO_8$	22,26-Imino-16-jervene-3 β ,23-diol-11,15-dione-3,23,N-triacetate	-	S	Band freq	Wintersteiner	JACS 76 (1954)	5609
$C_{33}H_{47}NO_8$	22,26-Imino-17(20)-isojervene-3 β ,23-diol-11,16-dione-3,23,N-triacetate	-	S	Band freq	Wintersteiner	JACS 76 (1954)	5609
$C_{33}H_{47}NO_{10}$	Cevagenine C-orthoacetate diacetate	2-13 μ	Sol	Spec, Group freq, Ident	Kupchan	JACS 77 (1955)	686

$C_{33}H_{48}N_2O_4$		Sol	Ident	Beereboom	JACS	75 (1953)	3500
$C_{33}H_{48}N_2O_4$	Δ -Cholesten-3-one-2,4-dinitrophenylhydrazone	-	Ident				
$C_{33}H_{48}N_2O_4$	Δ -Cholesten-3-one-2,4-dinitrophenylhydrazone	Sol	Band freq, Group freq	Reich	JOC	18 (1953)	822
$C_{33}H_{48}N_2O_5$	Cholestane-3,6-dione-2,4-dinitrophenylhydrazone	Sol	Band freq, Ident	Fieser	JACS	75 (1953)	4377
$C_{33}H_{48}N_2O_6$	Ketone-10 α -2,4-dinitrophenylhydrazone	Sol	Band freq	Fieser	JACS	75 (1953)	4418
$C_{33}H_{48}O_5$	Methyl-3 β -acetoxy-11-oxooleana-12;18-dien-28-oate	Sol	Group freq, Ident	Cole	JCS	- (1956)	1007
$C_{33}H_{49}NO$	4-Benzyl- Δ -4-aza-cholestenone-3	Sol	Band freq	Woodward	JACS	74 (1952)	4223
$C_{33}H_{49}NO_7$	22,26-Imino-16-jervene-3 β ,23-diol-11-one-3,23,N-triacetate	S	Band freq	Wintersteiner	JACS	76 (1954)	5609
$C_{33}H_{49}NO_7$	22,26-Imino-17(20)-isojervene-3 β ,23-diol-11-one-3,23,N-triacetate	S	Band freq	Wintersteiner	JACS	76 (1954)	5609
$C_{33}H_{49}NO_7$	16,22,26-Nitrilojervene-3 β ,17,23-triol-11-one	S	Band freq	Wintersteiner	JACS	76 (1954)	5609
$C_{33}H_{49}NO_7$	Veratrosine	-	Ident	Klohs	JACS	75 (1953)	2133
$C_{33}H_{49}NO_{10}$	Cevinilal C-orthoacetate diacetate	-	Group freq	Kupchan	JACS	77 (1955)	683
$C_{33}H_{49}NO_{10}$	Zygadenine triacetate	Sol	Spec Ident, Band freq	Kupchan Kupchan	JACS JACS	75 (1953) 77 (1955)	1025 689
$C_{33}H_{49}NO_{10}$	Pseudozygadenine triacetate	Sol	Spec	Kupchan	JACS	75 (1953)	1025

$C_{33}H_{49}NO_{11}$	Protocevine triacetate	2-13 μ	Sol	Spec, Ident	Kupchan	JACS	75 (1953)	5519
$C_{33}H_{50}O_4$	β -Acetoxy-23-hydroxy- eburico-8,24(28)-dien- 21-oic-lactone	-	Sol	Group freq	Holker	JCS	- (1953)	2422
$C_{33}H_{50}O_4$	β -Acetoxy-16 β -hydroxy- 20-isoeburico-7,9(11)- dien-21-oic acid lactone	-	Sol	Freq	Bowers	JCS	- (1954)	3070
$C_{33}H_{50}O_4$	Methyl- β -acetoxyoleana- 9(11),12-dien-28-oate	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{33}H_{50}O_4$	Methyl- β -acetoxyoleana- 11,13(18)-dien-28-oate	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{33}H_{50}O_4$	Methyl- β -acetoxyoleana- 12,18-dien-28-oate	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{33}H_{50}O_5$	Methyl β -acetoxy-11- oxo-18 α -olean-12-en- 28-oate	1350-1500	Sol	Group freq, Ident	Cole	JCS	- (1956)	1007
$C_{33}H_{50}O_5$	Methyl- β -acetoxy-11- oxoolean-12-en-28-oate	1350-1500 680-3700	Sol Sol	Group freq, Ident Freq, I	Cole Cole	JCS JCS	- (1956) - (1957)	1007 1332
$C_{33}H_{50}O_5$	Methyl- β -acetoxy-11- oxoolean-12-en-29-oate	1350-1500	Sol	Assign	Cole	JCS	- (1956)	1007
$C_{33}H_{50}O_5$	Methyl- β -acetoxy-11- oxoolean-12-en-30-oate	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{33}H_{50}O_5$	Methyl- β -acetoxy-11- oxo-18-iscolean-12- en-28-oate	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{33}H_{50}O_5$	Methyl- β -acetoxy-19- oxo-18 α -olean-12-en- 28-oate	1350-1500	Sol	Group freq, Ident	Cole	JCS	- (1956)	1007
$C_{33}H_{50}O_5$	Methyl- β -acetoxy-11- oxours-12-ene-28-oate	1350-1500 680-3700	Sol Sol	Assign Freq, I	Cole Cole	JCS JCS	- (1956) - (1957)	1007 1332

$C_{33}H_{50}O_6$	Sol	Band freq, Struct	Halsall	JCS	(1953)	4139
Methyl acetoxymethylenedioxolemenate	-	-	-	-	-	-
$C_{33}H_{50}O_6$	Sol	1350-1500	Cole	JCS	(1956)	1007
Methyl- β -acetoxymethylenedioxolemenan-28-oate	-	-	-	-	-	-
$C_{33}H_{50}O_8$	Sol	-	Klass	JACS	(1955)	3829
Digitogenin triacetate	-	-	-	-	-	-
$C_{33}H_{50}O_8$	-	-	Wendler	JACS	(1955)	1632
5 α ,22 α -Spirostane- β ,11 α ,12 β -triol triacetate	-	-	-	-	-	-
$C_{33}H_{50}O_9$	Sol	-	Klass	JACS	(1955)	3829
22 α ,5 α -Spirostane-2 α ,3 β -diol-15-one dicathylate	-	-	-	-	-	-
$C_{33}H_{50}O_9$	Sol	-	Klass	JACS	(1955)	3829
22 α ,5 α -14-Isospirostane-2 α ,3 β -diol-15-one dicathylate	-	-	-	-	-	-
$C_{33}H_{52}O_3$	Sol	-	Jones	JACS	(1952)	5648
$\Delta^{5,22}$ -Stigmastadienol-3 β -acetate	-	-	-	-	-	-
$C_{33}H_{52}O_4$	-	-	Cort	JCS	(1954)	3713
O-Acetylleuburic acid	-	-	-	-	-	-
$C_{33}H_{52}O_4$	Sol	950-3639	Allsop	JCS	(1956)	4868
Methyl-3 α -acetoxylup-20(29)-en-28-oate	Sol	680-3700	Cole	JCS	(1957)	1332
$C_{33}H_{52}O_4$	Sol	950-3639	Allsop	JCS	(1956)	4868
Methyl-3 β -acetoxylup-20(29)-en-28-oate	Sol	680-3700	Cole	JCS	(1957)	1332
$C_{33}H_{52}O_4$	Sol	680-3700	Cole	JCS	(1957)	1332
Methyl-3 β -acetoxylup-olean-12-en-28-oate	-	-	-	-	-	-
$C_{33}H_{52}O_4$	Sol	680-3700	Cole	JCS	(1957)	1332
Methyl-3 β -acetoxymethylenedioxolemen-18-en-28-oate	-	-	-	-	-	-
$C_{33}H_{52}O_4$	Sol	680-3700	Cole	JCS	(1957)	1332
Methyl-3 β -acetoxymethylenedioxolemen-12-en-28-oate	-	-	-	-	-	-
$C_{33}H_{52}O_4$	Sol	680-3700	Cole	JCS	(1957)	1332
Methyl-3 β -acetoxymethylenedioxolemen-18-en-28-oate	-	-	-	-	-	-
$C_{33}H_{52}O_4$	Sol	11-13 μ	Barton	JCS	(1951)	257

$C_{33}H_{52}O_5$	Methyl- β -acetoxy-19 α -hydroxyolean-12-en-28-oate	680-3700	Sol	Freq, I	Cole	JCS - (1957)	1332
$C_{33}H_{52}O_5$	Methyl- β -acetoxy-11-oxooleanan-28-oate	1350-1500	Sol	Group freq, Ident	Cole	JCS - (1956)	1007
$C_{33}H_{52}O_5$	Methyl- β -acetoxy-12-oxooleanan-28-oate	1350-1500	Sol	Group freq, Ident	Cole	JCS - (1956)	1007
$C_{33}H_{52}O_5$	Methyl- β -acetoxy-19-oxo-18 α -oleanan-28-oate	1350-1500	Sol	Group freq, Ident	Cole	JCS - (1956)	1007
$C_{33}H_{52}O_5$	Methyl- β -acetoxy-19-oxooleanan-28-oate	1350-1500	Sol	Group freq, Ident	Cole	JCS - (1956)	1007
$C_{33}H_{52}O_6$	Methyl acetoxydioxo- elementate	-	Sol	Band freq	Halsall	JCS - (1953)	4139
$C_{33}H_{52}O_6$	Methyl- β -acetoxy-19 α -hydroxy-12-oxooleanan-28-oate	1350-1500 3600-3650	Sol Sol	Group freq, Ident Group freq, Ident	Cole Cole	JCS - (1956) JCS - (1959)	1007 1218
$C_{33}H_{52}O_8$	Gitogenin dicaethylate	-	Sol	Band freq	Klass	JACS 77 (1955)	3829
$C_{33}H_{52}O_9$	Digitogenin 2,3-dicaethylate	-	Sol	Band freq	Klass	JACS 77 (1955)	3829
$C_{33}H_{52}O_9$	neodigitogenin-2,3-dicaethylate	-	Sol	Band freq	Klass	JACS 77 (1955)	3829
$C_{33}H_{52}O_{11}$	Acetylundromedofoxin	-	S	Freq	Wood	JACS 76 (1954)	5689
$C_{33}H_{53}NO_7$	Isorubijervosine	2-13 μ	S	Spec	Klons	JACS 75 (1953)	2133
$C_{33}H_{54}O_2$	Cycloaudenol acetate	-	Sol	Group freq	Bentley	JCS - (1955)	596
$C_{33}H_{54}O_2$	9:19-Cycloeburic-25-en- β -yl acetate	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
$C_{33}H_{54}O_3$	Δ^5 -Stigmastenol- β - acetoacetate	-	Sol	Group freq	Jones	JACS 74 (1952)	5648

C ₃₃ H ₅₄ O ₆	4	Δ ⁵ -Cholestene-3β,6β-diol dicathylate	-	-	Freq	Fieser	JACS	74 (1952)	3309
C ₃₃ H ₅₄ O ₆	5	Δ ⁵ -Cholestene-3β,4β-diol dicathylate	-	-	Freq	Fieser	JACS	74 (1952)	3309
C ₃₃ H ₅₄ O ₆	5	Δ ⁵ -Cholestene-3β,7β-diol dicathylate	-	-	Freq	Fieser	JACS	74 (1952)	3309
C ₃₃ H ₅₄ O ₆		7α-Hydroxycholesterol dicathylate	-	-	Freq	Fieser	JACS	74 (1952)	3309
C ₃₃ H ₅₆ O ₂		Cyclolaudanyl acetate	-	Sol	Group freq	Bentley	JCS	- (1955)	596
C ₃₃ H ₅₆ O ₂		9:19-Cycloeburican-3β-yl acetate	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
C ₃₃ H ₅₆ O ₂		Isoeuphorberyl acetate	-	-	Group study	Barbour	JCS	- (1955)	2194
C ₃₃ H ₅₆ O ₆		Coprostane-3β,6α-diol dicathylate	-	-	Freq	Fieser	JACS	74 (1952)	3309
C ₃₃ H ₆₆ O ₈ P		L-α-(Dimyristoyl)-Cephalin	2-16 μ 2.5-14.5 μ	S S	Spec, Band freq Spec, Struct	Baer Marinetti	JACS JACS	74 (1952) 76 (1954)	152 1347
C ₃₃ H ₆₆ Si		Cyclopentamethylene ditetradecylsilane	2-35 μ	L	Assign	Oshesky	JACS	79 (1957)	2057
<u>C₃₄ COMPOUNDS</u>									
C ₃₄ H ₁₆ O ₂		Violanthrone	630-2010	S	Spec	Cannon	SA	4 (1951)	373
			-	S	Group	Hadzi	JACS	73 (1951)	5460
			6000	S, Sol	Absorption	Akama tu	JCP	20 (1952)	1481
			650-2000	S	Spec assign	Durie	AJC	10 (1957)	429
C ₃₄ H ₁₆ O ₂		isoviolanthrone	6000 650-2000	S, Sol S	Absorption Spec, Group freq	Akama tu Durie	JCP AJC	20 (1952) 10 (1957)	1481 429

$C_{34}H_{18}$	isoviolanthrene	650-2000	S	Spec, Group freq	Durie	AJC	10 (1957)	429
$C_{34}H_{18}O_2$	3,3'-Dibenzanthronyl	-	S	Group freq	Hadzi	JACS	73 (1951)	5460
$C_{34}H_{18}O_2$	4,4'-Dibenzanthronyl	-	S	Group freq	Hadzi	JACS	73 (1951)	5460
		650-2000	S	Spec, Group freq	Durie	AJC	10 (1957)	429
$C_{34}H_{24}$	1,2,3,4-Tetraphenylfulvalene	-	-	Band study	Schreiber	JACS	76 (1954)	3554
		-	-	Band study	Schreiber	JACS	76 (1954)	6125
$C_{34}H_{26}O$	1-Cyclopentadienyl-tetraphenylcyclopentadien-1-ol	-	-	Group freq	Schreiber	JACS	76 (1954)	3354
$C_{34}H_{26}O_{10}$	3,3'-Di-O-methyl-5,5'-di-C-benzylellegic acid diacetate	5.0-6.15 μ	S	Struct	Stitt	JACS	81 (1959)	4615
$C_{34}H_{26}O_{12}$	Diacetyldihydroxyerythroaphin-fb	687-3333	S	Table	Brown	JCS	- (1955)	1144
$C_{34}H_{27}N_5O_4$	3,3'-Imino bis-(4-p-methoxybenzylidene-1-phenyl-5-pyrazolone)	400-4000	-	Freq, Discussion	Gagnon	CJC	37 (1959)	110
$C_{34}H_{28}O_2$	1-Benzyl-2,2,4,4-tetra-phenyloxe tanol	-	S, Sol	Band freq	Holy	JACS	77 (1955)	391
$C_{34}H_{30}Cl_2N_4O_4Si$	N,N-Bis-(β -hydroxyethyl)-m-triphenylsilyl-p-(2,6-dichloro-4-nitrophenylazo)aniline	2-16 μ	Sol	Spec, Freq	Sunthanbar	JOC	18 (1953)	47
$C_{34}H_{30}Cl_2N_6O_4$	Benzidine yellow	2-16 μ	S	Spec	Tyler	AC	25 (1953)	390
$C_{34}H_{30}O_6$	meso-1,6-Di-O-acetoxy-phenyl-3,4-diphenyl-hexane-1,6-dione	-	-	Group freq	Jack	JCS	- (1954)	3684
$C_{34}H_{30}O_6$	dl-1,6-Di-O-acetoxyphenyl-3,4-diphenylhexane-1,6-dione	-	-	Group freq	Jack	JCS	- (1954)	3684

C ₃₄ H ₃₁ N ^O ₅ 4	3,3'-Imino bis-(4-p-methoxybenzylidene-1-phenyl-pyrazalin-5-ol)	400-4000	-	Freq	Gagnon	CJC	37 (1959)	110
C ₃₄ H ₃₂	5-Neopentyl-1,2,3,4-tetra-phenylcyclopentadiene	-	-	Group freq	Fuson	JOC	18 (1953)	570
C ₃₄ H ₃₄	9,10-Didurylphenanthrene	-	-	Ident	Fuson	JOC	19 (1954)	373
C ₃₄ H ₃₄ N ^O ₄	Protoporphyrin (free acid)	670-4000	S	Spec, Assign	Falk	AJSR	4A (1951)	579
C ₃₄ H ₃₄ N ^O ₄ 6	Diformyldeuteroporphyrin dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR	4A (1951)	579
C ₃₄ H ₃₄ O ₂	2,2'-Diduroylbiphenyl	-	-	Ident	Fuson	JOC	19 (1954)	373
		-	-	Ident	Fuson	JACS	77 (1955)	3776
C ₃₄ H ₃₄ O ₂	p,p'-Diduroylbiphenyl	-	-	Group freq, Ident	Fuson	JACS	76 (1954)	5561
C ₃₄ H ₃₆ N ^O ₄ 5	Monocetyldeteroporphyrin dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR	4A (1951)	579
C ₃₄ H ₃₆ O ₂	9,10-Diduryl-9,10-dihydro-9,10-dihydroxyphenanthrene	-	-	Group freq	Fuson	JOC	19 (1954)	373
C ₃₄ H ₃₆ O ₂	O-(0-Duroylphenyl)-phenyl-durylcarbinol	-	-	Ident	Fuson	JACS	77 (1955)	3776
C ₃₄ H ₃₈ N ^O ₆ ·H ₂ SO ₄ ·5H ₂ O	Morphine sulfate pentahydrate	650-5000	S	Spec	Manning	APS	10 (1956)	85
C ₃₄ H ₄₀ OS ₁	Triphenylsilyldecyl phenyl ether	-	-	Inductive effect	Josien	CPR	249 (1959)	826
C ₃₄ H ₄₀ O ₂	Δ ^{20,22} -3α,9α-Epoxy-22,22'-diphenylbisnor-cholenone-11	1713	Sol	Freq, Struct, Anal	Jones	JACS	71 (1949)	241

C ₃₄ H ₄₆ O ₁₁	650-3700	L,S	Spec, Assign	Smakula	JACS	81 (1959)	1708
Methyl polyacetylglucosiduronate of $\Delta^{3,5}$ -pregnadiene- β -ol-20-one							
C ₃₄ H ₄₇ NO ₄ ⁴	2-13 μ	Sol	Spec, Struct	Weisenborn	JACS	75 (1953)	259
Δ^4 -Isorubijervone-p-toluenesulfonate							
C ₃₄ H ₄₈ N ₂ O ₇	-	-	Ident	Wall	JACS	77 (1955)	1230
16,22-Epoxycoprostan- β -ol-3-(3,5,dinitrobenzoate)							
C ₃₄ H ₄₈ OS	670-3700	S	Spec	Bernstein	JOC	16 (1951)	685
7-Dehydrocholesteryl thiobenzoate							
C ₃₄ H ₄₈ O ₃ ⁹⁽¹¹⁾	-	Sol	Group study	Pieser	JACS	75 (1953)	121
Δ^9 -Cholestenol- β -one-7-benzoate							
C ₃₄ H ₄₈ O ₁₁	650-3700	S,L	Spec, Assign	Smakula	JACS	81 (1959)	1708
Methyl polyacetylglucopyranosiduronate of Δ^5 -pregnene- β -ol-20-one							
C ₃₄ H ₄₉ NO ₉	-	Sol	Group freq	Barton	JCS	- (1954)	3950
Cevadine orthoacetate							
C ₃₄ H ₅₀ Br ₂ O ₂	400-1400	Sol	Group freq	Barton	JCS	- (1956)	331
5 β ,6 α -Dibromocholestan- β -yl-benzoate							
C ₃₄ H ₅₀ Br ₂ O ₂	400-1400	Sol	Group freq	Barton	JCS	- (1956)	331
5 α ,6 β -Dibromocholestan- β -yl-benzoate							
C ₃₄ H ₅₀ Cl ₂ O ₂	-	Sol	Group freq	Jones	JACS	72 (1950)	956
5 α ,6 α -Dichlorocholestanol- β -benzoate							
C ₃₄ H ₅₀ Cl ₂ O ₂	400-1400	Sol	Group freq	Jones Barton	JACS JCS	72 (1950) - (1956)	956 331
5 α ,6 β -Dichlorocholestanol- β -benzoate							

C ₃₄ H ₅₀ O ₅	Cholesteryl thio- benzoate	670-3700	S	Spec	Bernstein	JOC	16 (1951)	685
C ₃₄ H ₅₀ O ₂	⁵ Δ -Cholestenol- β - benzoate	- 2.5-15 μ	Sol Sol S, Sol	Group freq Spec, Band freq Group freq	Jones Hirschmann Tarpley	JACS JACS APS	72 (1950) 74 (1952) 9 (1955)	956 5357 69
C ₃₄ H ₅₀ O ₂	⁸⁽¹⁴⁾ Δ -Cholestenol- β -benzoate	-	-	Assign	Jones	JACS	70 (1948)	2024
C ₃₄ H ₅₀ O ₂	¹⁴ Δ -Cholestenol- β - benzoate	-	-	Assign	Jones	JACS	70 (1948)	2024
C ₃₄ H ₅₀ O ₂	sym-Di-(p-carbomethoxynona- methylenephenyl) ethane cyclicacyloin	-	-	Group freq	Fuson	JACS	74 (1952)	1621
C ₃₄ H ₅₀ O ₃	⁵ Δ -Cholestene diol- β , 4 β -benzoate- β	-	Sol	Group freq	Jones	JACS	72 (1950)	956
C ₃₄ H ₅₀ O ₆	Dumortierigenin diacetate	-	Sol	Group freq	Djerassi	JACS	76 (1954)	2969
C ₃₄ H ₅₁ BrO ₃	5 α -Bromo-6 β -hydroxy cholestan- β -yl- benzoate	400-1400	Sol	Group freq	Barton	JCS	- (1956)	331
C ₃₄ H ₅₁ ClO ₃	5 α -Chloro-6 β -hydroxy- cholestan- β -yl- benzoate	400-1400	Sol	Group freq	Barton	JCS	- (1956)	331
C ₃₄ H ₅₁ ClO ₃	6 β -Chloro-5 α -hydroxy- cholestan- β -yl- benzoate	400-1400	Sol	Group freq	Barton	JCS	- (1956)	331
C ₃₄ H ₅₁ NO ₃	3-Desoxy-5,6-dihydro- isorubijervine tosylate	2-13 μ	Sol	Spec, Struct	Weisenborn	JACS	75 (1953)	259

$C_{34}H_{51}NO_3^S$	Solanidane- β -ol tosylate	2-13 μ	Sol	Spec, Struct	Weisenborn	JACS	75 (1953)	259
$C_{34}H_{51}NO_5^S$	Isorubijervine-p-toluenesulfonate	2-13 μ	Sol	Spec, Struct	Weisenborn	JACS	75 (1953)	259
$C_{34}H_{52}$	5-(ρ -Diphenyl)- n -docosane-5	5400-8900	Sol	Assign, Spec	Rose	JRNB	19 (1937)	143
$C_{34}H_{52}O_2$	Cholesterol-4 β -benzoate	-	Sol	Group freq	Jones	JACS	74 (1952)	5648
$C_{34}H_{52}O_4$	Methyl- β -acetoxystyric-7,9(11),24(28)-triene-21-oate	-	-	Ident	Bowers	JCS	- (1953)	2548
$C_{34}H_{52}O_4$	Oleane-9(11),12-diene-3,28-diol diacetate	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{34}H_{52}O_4$	Oleane-11,13(18)-diene-3,28-diol diacetate	680-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{34}H_{52}O_5$	Gummosogenin diacetate	-	Sol	Band freq	Djerassi	JACS	76 (1954)	4089
$C_{34}H_{52}O_5^S$	Cholestane- β ,5 α -diol-6-one- β -p-toluenesulfonate	-	-	Band freq	Reich	JOC	16 (1951)	1753
$C_{34}H_{52}O_6$	β ,12 α -Diacetoxy-1 β -hydroxyoleanan-28-oic-13(28)-lactone	1350-1500	Sol	Group freq, Ident	Cole	JCS	- (1956)	1007
$C_{34}H_{52}O_6$	β ,12 α ,24-Triacetoxy-26,27-bisnorlanostan-8,23-diene	-	Sol	Band freq	Halsall	JCS	- (1954)	2385
$C_{34}H_{53}NO_{10}$	Germidine	2-14 μ	S	Freq, I, Struct Anal	Fried	JACS	74 (1952)	3041
		-	Sol	Ident	Papinean	AC	24 (1952)	1918
		-	Sol	Ident	Kupchan	JACS	76 (1954)	5545
		-	S,Sol	Ident	Weisenborn	JACS	76 (1954)	5543

$C_{34}H_{70}$	11-n-Deoyltetracosane	1.1-1.25 μ 3.4-14.7 μ	L Sol	Group study, Anal Group anal	Evans Francis	AC AC	23 (1951) 25 (1953)	1604 1466	
$C_{34}H_{70}$	3-Methyltritriacontane	700-1400	Sol	Spec	Stallberg	N	160 (1947)	580	
$C_{34}H_{70}$	4-Methyltritriacontane	700-1400	Sol	Spec	Stallberg	N	160 (1947)	580	
$C_{34}H_{70}$	n-Tetra triacontane	2.6-3.8 μ 1470	Sol L,S	Spec, Assign Freq	Fox Stein	PES JCP	A175 (1940) 22 (1954)	208 1993	
<u>C₃₅ COMPOUNDS</u>									
$C_{35}H_{18}O_4$	16-Methoxy-17-hydroxy-dibenzanthrone	650-2000	S	Spec, Struct	Durie	AJC	11 (1958)	168	
$C_{35}H_{28}O_3$	4,5-Dibenzoyl-3,6-dimethyl-1,2-diphenyl-3,6-methano-7-oxocyclohexene	2-15 μ	S	Spec	Allen	JOC	20 (1955)	306	
$C_{35}H_{30}O_{10}$	3-Methyl-D-glucose tetrabenzoate	8-15 μ	S	Spec	Kuhn	AC	22 (1950)	276	
$C_{35}H_{31}NO_9$	Monohydroxymonopiperidinoerythroaphin-fb	722-3289	S	Table	Brown	JCS	- (1955)	954	
$C_{35}H_{34}N_2O_4S_2$	N,N'-Dibenzyl-N,N'-dibenzene sulfonyl-diaminomesitylene	650-4000	S	Iso	Adams	JACS	70 (1948)	4204	
$C_{35}H_{35}ClN_4O_5$	Chlorocruoroporphyridimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR	4A (1951)	579	
$C_{35}H_{36}O_7$	Gossypolmonoisoprene	2-12 μ	Sol	Spec, Group freq, Struct	O'Connor	JACS	76 (1954)	2368	
$C_{35}H_{39}N_5O_4$	Ergotinin	-	Sol	Freq	Marion	JACS	73 (1951)	305	

$C_{35}H_{40}N_2O_{11}$	3 α -Acetoxy-11,20-dike to- pregnan-21-a1-20,21-bis- (2,4-dinitrophenylhydrazone)	-	S	Ident	Mattox	JACS 74 (1952)	4340
$C_{35}H_{42}N_2O_9$	Rescinnamine	-	S	Spec Group freq, Struct	Klohs Klohs	JACS 76 (1954) JACS 77 (1955)	2843 2241
$C_{35}H_{42}OS_1$	Triphenylsilylundecyl phenyl ether	-	-	Inductive effect	Josien	CPR 249 (1959)	826
$C_{35}H_{42}O_2$	22 Δ -3 $\alpha,9\alpha$ -Epoxy-24, 24'-diphenylnorchole- none-11	1713	Sol	Freq, Struct anal	Jones	JACS 71 (1949)	241
$C_{35}H_{44}O_3$	3 $\alpha,9\alpha$ -Epoxy-23,23'- diphenylnorcholanol- 23-one-11	1713	Sol	Freq, Struct	Jones	JACS 71 (1949)	241
$C_{35}H_{46}O_6$	Methyl-3 β -benzoyloxy-7, 11-dioxo-25,26,27-tris- norlanost-8-en-24-oate	2.5-15 μ	Sol	Struct	Cole	JCS - (1959)	1212
$C_{35}H_{46}O_{15}$	Pentaacetylglaucarubin	-	-	Band study	Ham	JACS 76 (1954)	6066
$C_{35}H_{47}N_2O_{11}$	Cevine orthoacetate-2,4- dinitrophenylhydrazone	-	-	Struct, Group freq	Barton	JCS - (1954)	2137
$C_{35}H_{49}NO_{10}$	Vanilloylzygadenine	2-13 μ	Sol	Spec Ident	Kupchan Kupchan	JACS 75 (1953) JACS 77 (1955)	1025 755
$C_{35}H_{49}NO_{11}$	Anhydroprotocevine tetraacetate	2-13 μ	Sol	Spec, Ident	Kupchan	JACS 75 (1953)	5519
$C_{35}H_{51}F_3O_{10}$	Digitogenin-2,3-dicaethylate -15-trifluoroacetate	-	Sol	Band freq	Klass	JACS 77 (1955)	3829
$C_{35}H_{51}NO_{11}$	Zygadenine tetraacetate	-	Sol	Band freq	Kupchan	JACS 77 (1955)	689
$C_{35}H_{52}O_2$	3 β -Benzylxyergos-9-ene	-	-	Group freq	Crawshaw	JCS - (1954)	731

$C_{35}H_{52}O_5$	Lantadene B	-	S, Sol	Group freq, Ident	Barton	JCS - (1954)	3689
$C_{35}H_{52}O_5$	Rehmannic acid	-	S, Sol	Group freq	Barton	JCS - (1954)	3689
$C_{35}H_{52}O_6$	Icterogenin	-	- S	Struct, Freq Group freq	Barton Barton	JCS - (1954) JCS - (1954)	887 3689
$C_{35}H_{53}NO_{10}$	22,26-Iminojervane-3 β , 16,17,23-tetrol-11-one- 3,16,23,N-tetraacetate	-	S	Band freq	Wintersteiner	JACS 76 (1954)	5609
$C_{35}H_{54}N_2O_2$	Cholestan-3-one-2- (p-dimethylamino- phenyl) nitrono	-	Sol	Band freq	Beereboom	JACS 75 (1953)	3500
$C_{35}H_{54}O_3$	3 β -Benzoyloxyergostan- 11 α -ol	-	Sol	Group freq	Crawshaw	JCS - (1954)	731
$C_{35}H_{54}O_6$	Methyl diacetylocholate	-	Sol	Band study	Djerassi	JACS 77 (1955)	3579
$C_{35}H_{54}O_6$	Methyl diacetyl- machaerinolate	-	-	Ident	Djerassi	JACS 77 (1955)	1825
$C_{35}H_{54}O_7$	Methyl-3 α ,12 α -diacetoxy- 24-oxolanost-8-en-26-oate	-	Sol	Band freq	Halsall	JCS - (1954)	2385
$C_{35}H_{54}O_8S_2$	22 α ,5 α -Spirostane-2 α ,3 β - diol-15-one dicathylate ethylene thioetal	-	Sol	Band freq	Klass	JACS 77 (1955)	3829
$C_{35}H_{64}O_5$	D-1,2-Dipalmitolein	2-15 μ	Sol	Spec, Group freq	Hanohan	JACS 76 (1954)	1804
$C_{35}H_{68}O_5$	D-1,2-Dipalmitin	2-15 μ	Sol	Spec, Group freq	Hanohan	JACS 76 (1954)	1804
$C_{35}H_{68}O_5$	1,3-Dipalmitin	2-12 μ 0.9-3 μ	Sol Sol	Band study Spec	Goldblatt Holman	JACS 77 (1955) AC 28 (1956)	2477 1533
$C_{35}H_{70}O$	Stearone	1650-1800 0.9-3 μ 1700	Sol Sol Sol	Group study Spec Freq, I	Gross Holman Thompson	TFS 47 (1951) AC 28 (1956) SA 9 (1957)	354 1533 208
$C_{35}H_{72}$	3-Methyl tetra- triacontane	700-1400	Sol	Spec	Stallberg	N 160 (1947)	580

$C_{35}H_{72}$	4-Methyltetra- triacotane	700-1400	Sol	Spec	Stallberg	N	160 (1947)	580	
$C_{35}H_{72}$	5-Methyltetra- triacotane	700-1400	Sol	Spec	Stallberg	N	160 (1947)	580	
<u>C_{36} COMPOUNDS</u>									
$C_{36}H_{20}O_4$	16,17-Dimethoxy- dibenzanthrone	650-2000	S	Spec, Group freq	Durie	AJC	10 (1957)	429	
$C_{36}H_{20}O_4$	16-Ethoxy-17-hydroxy- dibenzanthrone	650-2000	Sol	Spec, Ident	Durie	AJC	11 (1958)	168	
$C_{36}H_{24}ClN_2O_5S$	N,N,N',N' -Tetrabenzene- sulfonyl-3,3',5,5'-tetra- chlorobenzidine	-	-	Spec	Adams	JACS	74 (1952)	3033	
$C_{36}H_{26}N_2O_4S_2$	Anthracene-1,4-naphtho- quinone dibenzene sulfonimide adduct	-	-	Freq	Adams	JACS	74 (1952)	2593	
$C_{36}H_{26}O_{12}$	5,5'-Di-C-benzylelagic acid tetraacetate	5.0-6.15 μ	S	Struct	Stitt	JACS	81 (1959)	4615	
$C_{36}H_{27}ClSi$	Tri-2-biphenyl- chlorosilane	-	-	Ident	Gilman	JOC	20 (1955)	862	
$C_{36}H_{28}O$	1-Benzyl-2,3,4,5-tetra- phenylcyclopenta-2,4- dien-1-ol	2-15 μ	Sol	Spec, Group freq	Sonntag	JACS	75 (1953)	2283	
$C_{36}H_{28}OSi$	Tri-2-biphenyl- silanol	-	Sol	Group freq	Gilman	JOC	20 (1955)	862	
$C_{36}H_{28}Si$	Tri-2-biphenylsilane	-	S	Group freq	Gilman	JOC	20 (1955)	862	
$C_{36}H_{30}N_3P$	Hexaphenylborazole	-	S, Sol	Struct	Watnabe	SA	16 (1960)	78	

C_3H_3O	2-15 μ	S	Group freq	Allen	JOC	20 (1955)	306
4,7-Dimethyl-4,7-methano-10-oxo-1,2,5,6-tetra-phenyl 4,7,8,9-tetrahydroindene							
$C_{36}H_{30}O$							
Hexaphenyldisiloxane	-	-	Ident	Brook	JACS	76 (1954)	2333
Hexaphenylcyclo-trisiloxane	650-1300 2-16 μ 650-1650	Sol Sol S	Spec Spec Spec, Group assign	Thompson Young Richards	JCS JACS JCS	- (1947) 70 (1948) - (1949)	289 3758 124
1,3-Dihydroxyhexa-phenyl trisiloxane	650-1300 500-1650	- S	Spec Spec, Group assign	Thompson Richards	JCS JCS	- (1947) - (1949)	289 124
1,4-Di-t-butyl-1,4-dibiphenylene-2-butene	-	-	Ident	Fuson	JOC	16 (1951)	21
Diphenyl ketene-N-n-butylimine dimer	-	-	Freq	Stevens	JACS	76 (1954)	4398
Diacetylideuteroporphyrin dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR	4A (1951)	579
Cyclohexatriaconta-1,3,10,12,19,21,28,30-octayne	3-15 μ	S	Spec	Wolovsky	JACS	81 (1959)	4600
P,P'-Bis(N,N-diethyl-carboxamido) benzopinacol	670-3600	S	Spec, Group freq,	Lynn	JOC	16 (1951)	1546
Codeine sulfate pentahydrate	680-5000	S	Spec	Manning	APS	10 (1956)	85
$C_36H_{42}N_2O_6 \cdot H_2O$							
N,N-Bis-(dibenzyl-phosphoryl)-1-cystine dimethyl ester	3-15 μ	L,S	Spec, Group freq	Li	JACS	77 (1955)	3519
Mesoporphyrin dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR	4A (1951)	579

$C_{36}H_{42}N_4O_6$	Haematoporphyrin dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$C_{36}H_{42}O_8$	Gossypol hexamethyl ether (violet, m.p 146-8°)	2-12 μ	Sol	Spec, Struct, Group freq	O'Connor	JACS 76 (1954)	2368
$C_{36}H_{42}O_8$	Gossypol hexamethyl ether (pale yellow, m.p 160-2°)	2-12 μ	Sol	Spec, Struct, Group freq	O'Connor	JACS 76 (1954)	2368
$C_{36}H_{42}O_{12}$	Deserpidinediol diacetate	-	S	Assign	Phillamy	JACS 77 (1955)	4335
$C_{36}H_{42}O_{12}$	3-Isodeserpidinediol diacetate	-	S	Assign	Phillamy	JACS 77 (1955)	4335
$C_{36}H_{44}N_2O_9$	N-Allylreserpine	-	S	Band study	Huebner	JACS 76 (1954)	5792
$C_{36}H_{44}O_2$	Δ^2 -3 α ,9 α -Epoxy-24,24'-diphenyl-cholenone-11	1713	Sol	Absorption freq, Struct	Jones	JACS 71 (1949)	241
$C_{36}H_{46}O_3$	Octaethylporphin	400-4000	S	Spec, H bond	Mason	JCS - (1958)	976
$C_{36}H_{46}O_3$	24,24-Diphenylchol-23-en-3 α ,12 β -diol-11-one	-	-	Group freq	Heishberg	JACS 74 (1952)	2585
$C_{36}H_{46}O_3$	3 α ,9 α -Epoxy-24,24'-diphenylcholanol-24-one-11	1713	Sol	Struct, Absorption freq	Jones	JACS 71 (1949)	241
$C_{36}H_{48}O_4$	Octaethylchlorin	400-4000	S,Sol	Spec, H bond	Mason	JCS - (1958)	976
$C_{36}H_{50}N_2O_6$	$\Delta^{5,24(28)}$ -Stigmastadienol-3 β -3,5-dinitrobenzoate	-	Sol	Group freq	Jones	JACS 74 (1952)	5648
$C_{36}H_{50}N_4$	Octaethyltetrahydroporphin	400-4000	S	Spec, H bond	Mason	JCS - (1958)	976

C ₃₆ H ₅₀ O ₅	JACS	74 (1952)	5220
3β-Acetoxy-4β-benzoxy- Δ ⁵ -cholesten-7-one	JACS	74 (1952)	5220
3β-Benzoxy-4β-ace toxy- Δ ⁵ -cholesten-7-one	JACS	74 (1952)	5220
7, 14, 22 Δ ⁵ -Ergostatriene- 3β,5α,6α-triol 3,6- diacetate maleic anhydride adduct	JACS	75 (1953)	5416
C ₃₆ H ₅₁ NO ₁₀	JCS	- (1954)	3950
Cevadine orthoacetate acetate	JCS	- (1954)	3950
Veratroylyzgaenine	JACS	75 (1953)	4925
	JACS	75 (1953)	1025
	JACS	77 (1955)	755
C ₃₆ H ₅₂ N ₂ O ₆ S	JCS	- (1954)	1739
Hecogenin acetate toluene-p-sulfonyl- hydrazone	JCS	- (1954)	1739
5, 24(28) Δ ⁵ -Stigmasta- dienol-3β-benzoate	JACS	74 (1952)	5648
3β-Benzoxyloxy-4,4- dimethyl-15-keto- 8(14) Δ ⁵ -cholestene	JACS	76 (1954)	2852
C ₃₆ H ₅₂ O ₃	JACS	74 (1952)	5648
Δ ⁵ -Cholestenol-3β- benzoyl acetate	JACS	74 (1952)	5648
C ₃₆ H ₅₂ O ₇ S	JACS	76 (1954)	2227
22a-5α-Spirostane-3β, 11α-diol-3-acetate-11-p- toluenesulfonate	JACS	76 (1954)	2227

$C_{36}H_{52}O_8$	Methyl c:d-diketopolyprenate A a:b-diacetate	-	Sol	Struct	Holsall	JCS - (1953)	468
$C_{36}H_{53}NO_{10}$	Dihydroevadine orthoacetate	-	Sol	Group freq	Barton	JCS - (1954)	3950
$C_{36}H_{55}NO_{11}$	Neogermitrine	2-14 μ	S Sol	Struct, Freq, I Anal	Fried Papinean	JACS 74 (1952)	3041
		-	-	Ident	Kupchan	AC 24 (1952)	1918
		-	-	Ident	Klohs	JACS 75 (1953)	4641
		-	Sol	Ident	Kupchan	JACS 76 (1954)	1152
		-	-	Ident	Kupchan	JACS 76 (1954)	5545
		-	-	Ident	Kupchan	JACS 77 (1955)	755
$C_{36}H_{56}O_6$	Longispinogenin triacetate	-	Sol	Ident	Djerassi	JACS 76 (1954)	4089
		-	-	Ident	Djerassi	JACS 76 (1954)	5780
		-	-	Ident	Djerassi	JACS 77 (1955)	3579
$C_{36}H_{56}O_6$	Methyl-O-diacetyl-dehydrodihydro-tumulosate	-	Sol	Band freq, Ident	Cort	JCS - (1954)	3713
$C_{36}H_{56}O_6$	Methyl-O-diacetyltumulosate	-	-	Band freq	Cort	JCS - (1954)	3713
$C_{36}H_{58}O_4$	Bis (1,3,5-tri-t-butyl-2,5-cyclohexadien-4-one) peroxide	-	Sol	Group freq	Cook	JACS 75 (1953)	6242
$C_{36}H_{58}O_6$	Methyl-O-diacetyldihydrotumulosate	-	-	Freq	Cort	JCS - (1954)	3713
$C_{36}H_{62}O_6$	Glycerol triundecylenate	1100-1800	-	Spec	Barnes	IEC 15 (1943)	659
$C_{36}H_{70}O_4$	Distearoyl peroxide	-	Sol	Group freq	Davison	JCS - (1951)	2456
$C_{36}H_{70}O_4$	Di-n-tridecyl sebacate	2-16 μ	Sol	Spec	Stahl	JACS 74 (1952)	5487
$C_{36}H_{72}N_2O_6S$	Sphingosine sulfate	2-16 μ	Sol	Spec	Mislow	JACS 74 (1952)	5155

$C_{36}H_{72}O_2$	n-Hexatriacontanoic acid	2-15 μ	S	Spec, Quant anal	Meiklejohn	AC	29 (1957)	329
$C_{36}H_{74}$	n-Hexatriacontane	721-732 13.8 μ 700-3000 650-800	L, S S Sol L, S	Band study Spec Ext. coefficient Band freq	Robert Krimm Jones Martin	CPR JCP SA SA	234 (1952) 22 (1954) 9 (1957) 12 (1958)	2270 567 235 12
$C_{36}H_{74}NO_9P$	1- α -(Dimyristoyl) lecithin	2.8-12 μ	Sol	Spec, Group freq, Struct	Baer	JACS	75 (1953)	621
$C_{36}H_{74}S$	Diocetadecyl thioether	2.5-14.5 μ	S	Spec	Marinetti	JACS	76 (1954)	1347
$C_{36}H_{74}S_2$	Diocetadecyl disulfide	1100-1400	S	Spec, Band study	Jones	JACS	74 (1952)	2575
$C_{36}H_{76}Si$	Di-n-octadecylsilane	2-16 μ	Sol	Group freq	Kniseley	SA	15 (1959)	651
$C_{36}H_{76}Si$	Tri-n-dodecylsilane	2-16 μ	Sol	Group freq	Kniseley	SA	15 (1959)	651
$C_{37}H_{22}O_4$	16-Methoxy-17-ethoxy-dibenzanthrone	600-2000	L	Spec, Ident	Durie	AJC	11 (1958)	168
$C_{37}H_{28}O$	3,6-Methano-7-oxo-1,2,3,5,6-pentaphenylcyclohexene	2-15 μ	S	Group freq, Spec	Allen	JOC	20 (1955)	306
$C_{37}H_{30}Si$	Triphenylmethyltriphenylsilane	- -	- -	Ident Similarity to Ge compd	Brook Brook	JACS JACS	75 (1953) 76 (1954)	4759 77
$C_{37}H_{30}Si$	p-Triphenylsilylphenyldiphenylmethane	-	-	Ident	Brook	JACS	75 (1953)	4759
$C_{37}H_{32}Si_2$	Pentaphenyl-p-tolyldisilane	-	Sol	Freq, Absorption	Margoshes	AC	27 (1955)	351

C₃₇ COMPOUNDS

$C_{37}H_{48}O_{16}$	Hexaacetylglau- carubin	-	-	Group study	Ham	JACS	76 (1954)	6066
$C_{37}H_{52}O_3$	3β -Benzoyloxy lup- 20(29)-en-3O-al	1350-1500 680-3700	Sol Sol	Freq Freq, Double bond	Cole Cole	JCS	- (1956) - (1957)	1007 1332
$C_{37}H_{52}O_4$	3β -Benzoyloxy lanost- 8-ene-7, 11-dione	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
$C_{37}H_{54}O_2$	Olean-12-en- 3β -yl benzoate	1350-1500 1350-3700	Sol Sol	Freq Freq, I	Cole Cole	JCS	- (1956) - (1957)	1007 1332
$C_{37}H_{54}O_2$	Olean-18-en- 3β -yl benzoate	1350-3700	Sol	Freq, I	Cole	JCS	- (1957)	1332
$C_{37}H_{54}O_2$	Urs-12-en- 3β -yl benzoate	1350-1500 1350-3700	Sol Sol	Freq Freq, I	Cole Cole	JCS	- (1956) - (1957)	1007 1332
$C_{37}H_{54}O_3$	3β -Benzoyloxy- oleanan-12-one	1350-1500	Sol	Freq	Cole	JCS	- (1956)	1007
$C_{37}H_{54}O_3$	3β -Benzoyloxy-4,4, 14-trimethyl-15-keto- Δ^7 -cholestene	-	-	Group freq	Woodward	JACS	76 (1954)	2852
$C_{37}H_{54}O_6$	22-(β,β -Dimethyl- acryloyloxy) oleanonic acetic anhydride	-	Sol	Group freq	Barton	JCS	- (1954)	3689
$C_{37}H_{55}NO_{12}$	Triacetylprotover- atridine	-	S, Sol	Spec, Struct	Kupchan	JACS	76 (1954)	5545
$C_{37}H_{57}NO_{10}$	Germanidine	-	-	Group freq	Klohs	JACS	75 (1953)	4925
$C_{37}H_{59}NO_{11}$	Germerine	3-14 μ -	S Sol	Freq, I, Struct Anal	Fried BpirsauCouture	JACS AC	74 (1952) 24 (1952)	3041 1918
$C_{37}H_{59}NO_{12}$	Germbudine	850-3700	Sol	Spec	Myers	JACS	77 (1955)	3348
$C_{37}H_{59}NO_{12}$	Neogermbudine	850-3700	Sol	Spec	Myers	JACS	77 (1955)	3348

$C_{37}H_{67}NO_{13}$	Erythromycin	2.5-12 μ	Sol	Spec, Group freq, Struct	Flynn	JACS	76 (1954)	3121
		2.5-12 μ	Sol	Spec	Pettinga	JACS	76 (1954)	569
		-	-	Ident	Flynn	JACS	77 (1955)	3104
		-	-	Freq, Anal	Marsh	AC	27 (1955)	636
$C_{37}H_{69}NO_{13}$	Dihydroerythromycin	-	-	Group freq	Wiley	JACS	77 (1955)	3676
$C_{37}H_{74}NO_8P$	L- α -(Dipalmitoyl)-cephalin	2-16 μ	S	Spec, Anal, Band freq	Baer	JACS	74 (1952)	152
$C_{37}H_{76}Si$	Cyclopentamethylene-dihexadecylsilane	2-35 μ	L	Assign	Oshesky	JACS	79 (1957)	2057
<u>C_{38} COMPOUNDS</u>								
$C_{38}H_{24}O_4$	16,17-Die thoxy-dibenzanthrone	650-2000	S	Spec, Freq	Durie	AJC	10 (1957)	429
$C_{38}H_{28}O_4$	1-Cyclopentadienyl-tetraphenylcyclopentadien-1-ol maleic anhydride adduct	-	-	Group freq	Schreiber	JACS	76 (1954)	3354
$C_{38}H_{32}O_9S$	Bis-p-phenylphenacyl-riddellate sulfite	-	S	Group freq	Adams	JACS	75 (1953)	4638
$C_{38}H_{32}O_{12}$	Tetraacetyldihydroerythroaphir-fb	-	-	Ident	Brown	JCS	- (1955)	959
$C_{38}H_{34}N_2O_8$	10,10'-Di-(1,2-dimethoxycarbonyl-ethyl)-5,5',10,10'-tetrahydro-5,5'-diacridinyldene	-	S	Ident, Group freq	Acheson	JCS	- (1954)	3240
$C_{38}H_{34}Si_2$	1,1-Di-p-tolyl-1,2,2,2-tetrapheryldisilane	-	Sol	Freq, Absorption	Margoshes	AC	27 (1955)	351

$C_{38}H_{34}Si_2$	1,2-Di-p-tolyl-1,1,2,2-tetraphenyldisilane	-	Sol	Freq, Absorption	Margoshes	AC	27 (1955)	351
$C_{38}H_{38}O_2$	1,4-Dibenzal-1,4-dimesitylbutane	-	-	Ident	Fuson	JOC	19 (1954)	1575
$C_{38}H_{38}O_4$	1,4-Dibenzoyl-1,4-dimesitylbutane	-	-	Ident	Fuson	JOC	19 (1954)	1575
$C_{38}H_{38}O_{12}$	Methylapogossypolone tetraacetate	2-12 μ	Sol	Spec, Struct, Config	Shirley	JACS	77 (1955)	4606
$C_{38}H_{40}N_2O_7$	Temupine	-	Sol	Ident, Spec	Bick	JCS	- (1953)	695
$C_{38}H_{40}O_2$	1,4-Dimesityl-2,3-diphenylcyclohexane	-	-	Group freq	Fuson	JACS	77 (1955)	174
$C_{38}H_{40}O_4$	1,2-Diphenyl-1,2-dihydroxy-3,6-dimesitylcyclohexane	-	Sol	Iso, Band and Group freq	Fuson	JOC	19 (1954)	1575
$C_{38}H_{46}N_2O_6$	Tetramethylhaemato-porphyrin dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR	4A (1951)	579
$C_{38}H_{47}BrO_3$	12 α -Bromo-24,24-diphenylchol-23-en-3 α -ol-11-one acetate	-	-	Spec	Hershberg	JACS	74 (1952)	2585
$C_{38}H_{48}O_3$	²³ Δ -24,24-Diphenyl-cholenol-3 α -one-11-acetate	-	S, Sol	Group freq	Tarpley	APS	9 (1955)	69
$C_{38}H_{48}O_4$	24,24-Diphenylchol-23-en-3 α ,12 β -diol-11-one acetate	-	-	Spec Group freq	Hershberg Tarpley	JACS APS	74 (1952) 9 (1955)	2585 69
$C_{38}H_{50}O_2$	²³ Δ -3 α -Acetoxy-24,24'-diphenylcholenol	-	Sol	Group freq	Jones	JACS	72 (1950)	956

$C_{38}H_{52}O_3$	Cholesteryl-1-naphthylcarbonate	5.70-10.60 μ Sol	Table	Tsou	JACS	76 (1954)	6108
$C_{38}H_{52}O_3$	Cholesteryl-2-naphthylcarbonate	- Sol	Band freq	Tsou	JACS	76 (1954)	6108
$C_{38}H_{53}NO_2$	Cholesterol- α -naphthylurethan	S	Group freq	Werbin	JACS	77 (1955)	4431
$C_{38}H_{53}NO_{11}$	Anhydrocevadine triacetate	2-13 μ Sol	Spec	Kupchan	JACS	75 (1953)	5519
$C_{38}H_{53}NO_{11}$	Cevadine orthoacetate diacetate	- Sol 2-13 μ Sol	Group freq, Struct Spec, Group freq, Struct	Barton Kupchan	JCS JACS	- (1954) 77 (1955)	3950 686
$C_{38}H_{54}O_3$	Cholestanyl-2-naphthyl-carbonate	- Sol	Band freq	Tsou	JACS	76 (1954)	6108
$C_{38}H_{54}O_4$	Methyl- β -benzoyloxy olean-18-en-28-oate	1350-1500 Sol 1350-3700 Sol	Assign Freq, I	Cole Cole	JCS JCS	- (1956) - (1957)	1007 1332
$C_{38}H_{55}NO_2$	β -Cholesterol- α -naphthylurethan	S	Group freq, I, Ext. coefficient	Werbin	JACS	77 (1955)	4431
$C_{38}H_{57}NO_{12}$	Monocetylnecogermitrine	S, Sol S	Spec Ident	Kupchan Weisenborn	JACS JACS	76 (1954) 76 (1954)	5545 5543
$C_{38}H_{60}O_{18}$	Stevioside	-	Group freq	Wood	JOC	20 (1955)	875
$C_{38}H_{64}O$	Methyl- β -ealeo-stearate dimer	-	Group freq	Clingman	JCS	- (1954)	1088
$C_{38}H_{65}N_{15}O_{16} \cdot 6HCl$	Roseothricin hydrochloride salt A	600-4000 S	Spec, Struct	Goto	BCSJ	30 (1957)	729
$C_{38}H_{72}O_7$	β -Lactyl- α, γ -dipalmitin	2-12 μ Sol	Band freq	Goldblatt	JACS	77 (1955)	2477
$C_{38}H_{74}O_4$	Di-n-te tridecyl sebacate	2-16 μ Sol	Spec	Stahl	JACS	74 (1952)	5487

$C_{38}H_{98}O_5Si_{10}$	Eicosamethyl-3, 10, 17, 24, 31-pentaoxa-2, 4, 9, 11, 16, 18, 23, 25, 30, 32-decasilatritriacontane	-	-	Group freq	Sommer	JACS 77 (1955)	2482
<u>C_{39} COMPOUNDS</u>							
$C_{39}H_{313}N_3O_3$	Tri-p-nitrobenzoyl-asperuloside	-	S	Group freq	Briggs	JCS - (1954)	4182
$C_{39}H_{34}O_4$	Tribenzoylasperuloside	-	S	Group freq	Briggs	JCS - (1954)	4182
$C_{39}H_{36}Si_2$	1, 1, 1-Triphenyl-2, 2, 2-tri-p-tolyldisilane	-	Sol	Group freq	Margoshes	AC 27 (1955)	351
$C_{39}H_{36}Si_2$	1, 1, 2-Triphenyl-1, 2, 2-tri-p-tolyldisilane	-	Sol	Group freq	Margoshes	AC 27 (1955)	351
$C_{39}H_{48}O_3$	(7-p-7-p-7-p) Cyclophantrione-1, 14, 27	-	Sol	Group freq	Schubert	JACS 76 (1954)	5462
$C_{39}H_{54}$	2-Diphenylmethylen-A-norcholestane	-	S	Band freq	Smith	JACS 76 (1954)	6119
$C_{39}H_{54}$	3-Diphenylmethylen-A-norcholestane	-	S	Band freq	Smith	JACS 76 (1954)	6119
$C_{39}H_{54}N_4O_{12}$	22a, 5 α -Spirostane-2 α , 3 β -diol-15-one dicatechylate-2, 4-dinitrophenylhydrazone	-	Sol	Band freq	Klass	JACS 77 (1955)	3829
$C_{39}H_{54}N_4O_{12}$	22a, 5 α -isospirostane-2 α , 3 β -diol-15-one dicathylate-2, 4-dinitrophenylhydrazone	-	Sol	Band freq	Klass	JACS 77 (1955)	3829
$C_{39}H_{57}NO_{11}$	Germinitrine	-	-	Band freq	Klohs	JACS 75 (1953)	4925

Formula	Compound Name	Wavenumber (cm ⁻¹)	Phase	Assignment	Author	Year	Page
C ₃₉ H ₅₉ N ₁₁ O	Germanitriene	-	-	Band freq	Klohs	75 (1953)	4925
C ₃₉ H ₆₁ N ₁₂ O	Germitriene	2-14 μ	S	Freq, I Anal	Fried Papinean	74 (1952)	3041
		-	Sol	-		24 (1952)	1918
C ₃₉ H ₆₁ N ₁₄ O	Desacetylineo-protoveratrine	-	-	Ident	Klohs Myers	75 (1953)	3595
		900-3700	Sol	Spec, Ident		77 (1955)	3348
C ₃₉ H ₇₄ O ₆	Trilaurin	650-4000	L	Spec, Anal	Chapman Chapman	- (1956)	2522
		720	S	Band study		- (1957)	4489
C ₃₉ H ₇₆ O ₅	1,2-Distearin (A,B,C)	670-3500	S,L	Struct	Chapman	- (1958)	4680
C ₃₉ H ₇₆ O ₅	1,3-Distearin (D)	700-3500	S,L	Struct	Chapman	- (1958)	4680
C ₃₉ H ₇₆ O ₅	Glyceryl distearate	-	-	Struct	Gray	53 (1949)	23
C ₃₉ H ₇₇ O ₉ P	α,β-Distearoyl-α-glyceryldihydrogen-phosphate	-	-	Assign, Table	Bellamy	- (1953)	728
<u>C₄₀ COMPOUNDS</u>							
C ₄₀ H ₂₈ N ₄ O	O-Quinonedibenzimide dimer	-	-	Band freq	Adams	76 (1954)	2763
C ₄₀ H ₂₉ ClO	10-Chloro-4,7-methano-3,5,6,8,10-pentaphenyl-4,7,8,9-tetrahydroindene none	-	S	Group freq, Struct	Allen	20 (1955)	310
		-	-	Ident	Fuson	16 (1951)	21
C ₄₀ H ₃₀ O ₂	1,2-Dibenzyl-1,2-dibiphenylene thane	-	S	Struct, Band freq	Allen	20 (1955)	310
		-	-	Ident	Fuson	16 (1951)	21

$C_{40}H_{38}Br_2O_8 \cdot H_2O$	Dibromopiperidinoerythroepin-fb hydrate	665-1629	S	Table	Brown	JCS - (1955)	954
$C_{40}H_{38}N_4O_{16}$	Uroporphyrin I octa-carboxylic acid	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$C_{40}H_{38}Si_2$	1,1-Diphenyl-1,2,2,2-tetra-p-tolyldisilane	-	Sol	Group freq	Margoshes	AC 27 (1955)	351
$C_{40}H_{38}Si_2$	1,2-Diphenyl-1,1,2,2-tetra-p-tolyldisilane	-	Sol	Group freq	Margoshes	AC 27 (1955)	351
$C_{40}H_{40}$	Cyclotetraconta-1,3,9,11,17,19,25,27,33,35-decayne	3-15 μ	S	Spec	Wolovsky	JACS 81 (1959)	4600
$C_{40}H_{40}N_2O_8$	Dipiperidinoerythroepin-fb	738-1631	S	Table, Ident	Brown	JCS - (1955)	954
$C_{40}H_{46}N_4O_8$	Coproporphyrin I tetramethyl ester (α & β)	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$C_{40}H_{46}N_4O_8$	Coproporphyrin III tetramethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$C_{40}H_{48}$	Cyclotetraconta-1,3,11,13,21,23,31,33-octayne	3-15 μ	S	Spec	Wolovsky	JACS 81 (1959)	4600
$C_{40}H_{48}$	Renieratene	2-15 μ	S	Spec, Anal	Yamaguchi	BCSJ 30 (1957)	979
$C_{40}H_{48}N_4O_4 \cdot H_2SO_4 \cdot 2H_2O$	Quinine sulphate dihydrate	650-5000	S	Spec	Manning	APS 10 (1956)	85
$C_{40}H_{52}O_7$	α -Cellotriose hendecaacetate	8-15 μ	S	Spec	Kuhn	AC 22 (1950)	276
$C_{40}H_{54}$	Dehydrocarotene-I	-	-	Group study	Karmaker	JACS 77 (1955)	55

C ₄₀ H ₅₆	α-Carotene (all trans)	6.8-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	neo-α-Carotene B	6.8-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	neo-α-Carotene U	6.8-14 μ	S,Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	β-Carotene	1-14 μ	L	Spec	Stair	JRNB	11 (1933)	703
		-	-	Quant mech.	Mulliken	JCP	7 (1939)	364
		1-14 μ	-	Data	Arouoff	CR	47 (1950)	175
C ₄₀ H ₅₆	β-Carotene (central mono-cis)	6.5-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	β-Carotene (all- trans)	2-15 μ	Sol	Spec, Group freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	neo-β-Carotene B	6.8-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	neo-β-Carotene U	6.5-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	γ-Carotene (all-trans)	6.8-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	neo-γ-Carotene P	6.8-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	pro-γ-Carotene	6.8-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	Lycopene (all-trans)	6.8-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	neo-Lycopene A	6.8-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆	Prolycopene	6.8-14 μ	Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆ ^O ₂	Zeaxanthin (all-trans)	6.8-14 μ	S,Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆ ^O ₂	neozeaxanthin A	6.8-14 μ	S,Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆ ^O ₂	neozeaxanthin B	6.8-14 μ	S,Sol	Spec, Band freq	Lunde	JACS	77 (1955)	1647
C ₄₀ H ₅₆ ^O ₂	Xanthophyll	1.3-14.2 μ	L	Freq	Stair	PR	33 (1929)	1092
		1-14 μ	L	Spec	Stair	JRNB	11 (1933)	703

$C_{40}H_{60}O_{12}$	Methyl polyacetyl- glucosiduronate of $\Delta^{3,5}$ -cholesta- diene-3-ol	650-3700	L,S	Spec, Assign	Smakula	JACS 81 (1959)	1708
$C_{40}H_{74}O_5$	Diethylene glycol oleate	2-15 μ	L	Spec	Kendall	APS 7 (1953)	179
$C_{40}H_{78}NO_9P$	(Dipalmitoleyl)-L- α -lecithin	2-15 μ	Sol	Spec	Hanahan	JACS 74 (1952)	5070
$C_{40}H_{78}O_4$	Di-n-pentadecyl sebacate	2-16 μ	Sol	Spec	Stahl	JACS 74 (1952)	5487
$C_{40}H_{82}NO_9P$	(Dipalmitoyl)-L- α - lecithin	2-15 μ 2.8-12 μ	Sol Sol	Spec Spec, Group freq, Assign	Hanahan Baer	JACS 74 (1952) JACS 75 (1953)	5070 621
<u>C₄₁ COMPOUNDS</u>							
$C_{41}H_{26}O_2$	Triptycyl triptoate	2-12 μ	Sol	Spec, Struct	Bartlett	JACS 76 (1954)	1088
$C_{41}H_{32}O_2$	4,7-Methano-10-methoxy- 3,5,6,8,10-pentapheryl- 4,7,8,9-tetrahydro- indanone	-	S	Struct	Allen	JOC 20 (1955)	310
$C_{41}H_{40}Si_2$	Penta-p-tolylphenyl- disilane	-	Sol	Freq	Margoshes	AC 27 (1955)	351
$C_{41}H_{47}NO_{17}$	Wilforzine	-	S,Sol	Iso	Beroza	JACS 75 (1953)	2136
$C_{41}H_{47}NO_{19}$	Wilforzine	2-16 μ	S,Sol	Spec, Band freq	Beroza	JACS 74 (1952)	1585
$C_{41}H_{47}NO_{20}$	Wilforzine	2-16 μ	S,Sol	Spec, Band freq	Beroza	JACS 74 (1952)	1585
$C_{41}H_{48}NO_{13}$	Pseudomilaginin di-3,5-dinitro- benzoate	660-5000 -	S,Sol Sol	Spec, Group freq Group freq	Hayden Scheer	AC 26 (1954) JACS 77 (1955)	550 641

C ₄₁ H ₄₈ N ₄ O ₁₃	Pseudosarsapogenin di- β , γ -dinitrobenzoate	660-5000	S, Sol Sol	Spec, Group freq Group freq	Hayden Scheer	AC JACS	26 (1954) 77 (1955)	550 641
C ₄₁ H ₅₄ O ₄	$\Delta^{8(14)}$ -Cholestene- β , γ -diol dibenzoate	-	Sol	Freq	Fieser	JACS	75 (1955)	4404
C ₄₁ H ₅₄ O ₅	Dihydroseudosarsapogenin dibenzoate	-	-	Iso	Scheer	JACS	77 (1955)	641
C ₄₁ H ₅₄ O ₅	Dihydroseudosmilagenin dibenzoate	-	Sol	Iso	Scheer	JACS	77 (1955)	641
C ₄₁ H ₅₆ N ₄ O ₈	Lantadene B 2,4-dinitrophenylhydrazone	-	Sol	Band freq	Barton	JCS	- (1954)	3689
C ₄₁ H ₅₆ N ₄ O ₈	Rehmannic acid 2,4-dinitrophenylhydrazone	-	Sol	Band freq	Barton	JCS	- (1954)	3689
C ₄₁ H ₆₁ N ₄ O ₁₃	Escholerine	-	-	Group freq	Klohs	JACS	76 (1954)	1152
C ₄₁ H ₆₃ N ₄ O ₁₄	Protoveratrine A	2-14 μ 2-13 μ -	S Sol Sol	Struct Spec Analysis	Fried Klohs Coutureg	JACS JACS AC	74 (1952) 74 (1952) 24 (1952)	3041 5107 1918
C ₄₁ H ₆₃ N ₄ O ₁₅	Neoprotoveratrine	2-13 μ 800-3700	Sol Sol	Spec Spec, Ident	Klohs Myers	JACS JACS	74 (1952) 77 (1955)	5107 3348
C ₄₁ H ₈₂ N ₄ O ₈	L- α -(distearoyl)-Cephalin	2-16 μ	S	Spec, Anal, Band freq	Baer	JACS	74 (1952)	152
C ₄₁ H ₈₄ Si	Cyclopentamethylene-dioctyldecylsilane	2-35 μ	L	Assign	Oshesky	JACS	79 (1957)	2057
C ₄₂ COMPOUNDS								
C ₄₂ H ₂₄ O ₁₂	Hexasalicylide	1700-1800	S	Group freq	Short	JCS	- (1952)	206
C ₄₂ H ₂₆ O ₃	Triptoic anhydride	2-12 μ	Sol	Spec, Struct	Bartlett	JACS	76 (1954)	1088

$C_{42}H_{26}O_4$	Ditriptyol peroxide	2-12 μ	Sol	Spec, Struct	Bartlett	JACS 76 (1954)	1088
$C_{42}H_{30}Cl_2$	1,4-Di-(p-chlorobenzyl)- 1,4-dibiphenylene-2- butene	-	Sol	Band study	Lavie	JOC 18 (1953)	367
$C_{42}H_{30}O$	Ellagorubin	5.0-6.15 μ	S	Struct	Stitt	JACS 81 (1959)	4615
$C_{42}H_{30}O_8$	O-Tetrabenzylelagic acid	5.0-6.15 μ	S	Struct	Stitt	JACS 81 (1959)	4615
$C_{42}H_{32}$	1,4-Dibenzyl-1,4- dibiphenylene-2- butene (trans)	-	-	Freq	Lavie	JOC 18 (1953)	367
$C_{42}H_{32}Cl_2$	1,4-Di-(p-Chlorobenzyl)- 1,4-dibiphenylenebutane	-	Sol	Freq	Lavie	JOC 18 (1953)	367
$C_{42}H_{34}$	1,4-Dibenzyl-1,4- dibiphenylenebutane	-	-	Group freq	Lavie	JOC 18 (1953)	367
$C_{42}H_{42}N_2O_6 \cdot 2C_2H_5OH$	Gossypoldiphenyl- hydrazone	2-12 μ	Sol	Spec, Group freq, Struct	O'Connor	JACS 76 (1954)	2368
$C_{42}H_{42}O_{14}$	Gossypol hexaacetate (white)	2-12 μ	Sol	Spec, Group freq, Struct	O'Connor	JACS 76 (1954)	2368
$C_{42}H_{42}O_{14}$	Gossypol hexaacetate (yellow)	2-12 μ	Sol	Spec, Group freq, Struct	O'Connor	JACS 76 (1954)	2368
$C_{42}H_{42}Si_2$	Hexa-p-tolyldisilane	-	Sol	Freq	Margoshes	AC 27 (1955)	351
$C_{42}H_{44}N_2O_8 \cdot C_5H_5N$	Biscyclohexylamino- erythroaphin-fb	825-1631	S	Ident	Brown	JCS - (1955)	954
$C_{42}H_{46}O_{12}$	Methylapogossypol hexaacetate	2-12 μ	Sol	Spec, Struct	Shirley	JACS 77 (1955)	4606
$C_{42}H_{67}NO_{16}$	Megnamycin	2-11 μ	Sol	Spec, Struct	Wagner	JACS 75 (1953)	4684

C ₄₂ H ₇₈ O ₄	Diphytyl oxalate	-	L	Band freq	Hirschmann	JACS	76 (1954)	4592
C ₄₂ H ₈₂ O ₄	Di-n-hexadecyl-sebacate	2-16 μ	Sol	Spec	Stahl	JACS	74 (1952)	5487
<u>C₄₃ COMPOUNDS</u>								
C ₄₃ H ₅₀ N ₄ O ₁₁ S	Methyl-3,3-dimethyl-9-oxo-5-phenyl-6,8-dipthalimido-7-(phthalimidoacetoxy)-4-thia-1-azabicyclo-3.4.0-7-nonene-2-carboxylate	2-11 μ	Sol	Spec, Band freq	Sheehan	JACS	73 (1951)	4373
C ₄₃ H ₄₈ O ₇	2β,8β,11α-Tribenzoyloxy-lanane	-	Sol	Band study	Barnes	JCS	- (1953)	571
C ₄₃ H ₄₈ O ₇	3β,7β,11α-Tribenzoyloxy-4,4,14-trimethyl-5α-androstan-17-one	2.5-15 μ	Sol	Struct	Cole	JCS	- (1959)	1212
C ₄₃ H ₄₉ NO ₁₈	Wilforine	2-16 μ	S, Sol	Spec, Band study	Beroza	JACS	73 (1951)	3656
C ₄₃ H ₄₉ NO ₁₉	Wilfordine	-	S, Sol	Comparison	Beroza	JACS	75 (1953)	2136
C ₄₃ H ₆₁ Cl ₃ O ₄	5,16-Pregnadien-3β-ol 20-one 2:1 chloroform adduct	2-16 μ	S, Sol	Spec, Band study	Beroza	JACS	73 (1951)	3656
C ₄₃ H ₆₆ N ₂ O ₁₂ S ₂	Oxytocin	-	-	Freq	Cords	JACS	75 (1953)	5416
C ₄₄		-	-	Ident	duVigneaud	JACS	75 (1953)	4879
<u>C₄₄ COMPOUNDS</u>								
C ₄₄ H ₂₆ Cl ₄ N ₄	Tetra-(p-chlorophenyl)porphine	600-3500	S	Assign	Thomas	JACS	78 (1956)	1338

$C_{44}H_{26}N_2O_8$	Tetra-(p-nitrophenyl) porphine	S	600-3500	Assign	Thomas	JACS	78 (1956)	1338
$C_{44}H_{30}N_4$	Tetraphenylporphine	S	600-3500	Assign	Thomas	JACS	78 (1956)	1338
$C_{44}H_{30}N_4$	meso-Tetraphenylporphine	S, Sol	400-4000	Spec, H bond	Mason	JCS	- (1958)	976
$C_{44}H_{30}O_4$	1,2-Di-9'-(bis-10'-benzoyloxy)-anthranylethane	S	3-15 μ	Spec, Group freq	Roitt	JCS	- (1952)	2695
$C_{44}H_{30}O_{10}$	cis-trans-Dibenzoylerythroaphin-sI	S	-	Group freq	Brown	JCS	- (1955)	959
$C_{44}H_{34}O_8$	O-Dimethyllellagorubin	S	696-1754	Freq	Brown	JCS	- (1955)	1144
$C_{44}H_{36}$	5-Benzyl-5-phenylethyl-1,2,3,4-tetraphenylcyclopentadiene	S	5-6.15 μ	Struct	Stitt	JACS	81 (1959)	4615
$C_{44}H_{38}F_3N_2O_{10}$	Heptafluorobutyric acid-N,N-dimethyl-aniline	-	-	Group freq, Ident	Fuson	JOC	18 (1953)	570
$C_{44}H_{50}O_2$	1,6-Diduryl-2,5-dimesityl-2,4-hexadiene-16-dione	-	-	Freq	Hauptschein	JACS	73 (1951)	5139
$C_{44}H_{52}O_2$	1,6-Diduryl-2,5-dimesityl-1,3,5-hexatriene-1,6-diol	-	-	Group freq	Fuson	JACS	75 (1953)	1494
$C_{44}H_{54}O_6$	Dumortierigenin dibenzoate	-	-	Group freq	Fuson	JACS	75 (1953)	1494
$C_{44}H_{56}O_{20}$	Methyl polyacetylglucosiduronate of $\Delta^{1,3,5}$ -estratriene-3,17 β -diol	Sol	-	Band freq	Djerassi	JACS	76 (1954)	2969
		S	650-3700	Spec, Assign	Smakula	JACS	81 (1959)	1708

C ₄₄ H ₈₆ O ₄	Di-n-heptadecyl-sebacate	2-16 μ	Sol	Spec	Stahl	JACS	74 (1952)	5487
C ₄₄ H ₉₀ N ₉ O ₉ P	L- α -(Distearoyl)-lecithin	2.8-12 μ	Sol	Spec, Group freq	Baer	JACS	75 (1953)	621
<u>C₄₅ COMPOUNDS</u>								
C ₄₅ ^{H₃₂N₂O₅S₄}	Bis-(1,4-naphthoquinone-dibenzenesulfonamido-2)-methane	-	-	Group study	Adams	JACS	74 (1952)	5557
C ₄₅ ^{H₃₂O}	2-Oxo-1,1,3,3,5,6-hexaphenylindan	-	S	Spec, Struct	Allen	JOC	20 (1955)	315
C ₄₅ ^{H₃₅N₅O₅S₄}	Bis-(1,4-naphthalene-dibenzenesulfonamido-2)-nitromethane	-	-	Group study	Adams	JACS	74 (1952)	5557
C ₄₅ ^{H₃₆N₄O₅S₄}	Bis-(1,4-naphthalene-dibenzenesulfonamido-2)-methane	-	-	Group study	Adams	JACS	74 (1952)	5557
C ₄₅ ^{H₄₂O₁₀S₂}	D-Glucose diethyl-mercaptal pentabenzoate	8-15 μ	S	Spec	Kuhn	AC	22 (1950)	276
C ₄₅ ^{H₅₀}	Cyclopentatetraconta-1,3,10,12,19,21,28,30,37,39-decayne	3-15 μ	S	Spec	Wolovsky	JACS	81 (1959)	4600
C ₄₅ ^{H₇₀N₂O₅S₂}	N,N'-Didodecyl-N,N'-dibenzenesulfonyl-diaminomesitylene	650-4000 650-3900	S -	Melting point Spec, Iso	Adams Adams	JACS JACS	62 (1940) 70 (1948)	732 4204
C ₄₅ ^{H₇₄O₁₇}	Sarsasaponin	840-1000	S	Spec, Band freq	Rothman	JACS	74 (1952)	4013
C ₄₅ ^{H₇₈O₇}	O-Benzyl- β -lactyl- α , γ -dipalmitin	2-12 μ	Sol	Band freq	Goldblatt	JACS	77 (1955)	2477

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$C_{45}H_{86}O_6$	Trimyristin	- 2-16 μ -	Sol Sol Sol	Quant anal Spec Anal	Shreve Shreve Swern	AC AC JAOC	22 (1950) 22 (1950) 27 (1950)	1261 1498 17	
<u>C₄₆ COMPOUNDS</u>									
$C_{46}H_{34}O_{10}$	Ellagorubin diacetate	5.0-15 μ	S	Struct	Stitt	JACS	81 (1959)	4615	
$C_{46}H_{75}NO_{17}$	Candidin	700-4000	S	Spec, Struct	Vining	CJC	34 (1956)	1163	
$C_{46}H_{89}N_2PS$	N,N-Di-n-decyl-benzenethio-phosphonic diamide	2-12 μ	S	Spec, Anal	Daasch	AC	23 (1951)	853	
$C_{46}H_{90}O_4$	Di-n-octadecyl-sebacate	2-16 μ	Sol	Spec	Stahl	JACS	74 (1952)	5487	
<u>C₄₇ COMPOUNDS</u>									
$C_{47}H_{66}O_{22}$	Methylpolyacetyl-glucosiduronate of allopregnane-3 β ,17 α ,21-triol-20-one	650-3700	S	Spec, Assign	Smakula	JACS	81 (1959)	1708	
$C_{47}H_{76}O_{18}$	Sarsasaponin acetate	840-1000	Sol	Spec	Rothman	JACS	74 (1952)	4013	
$C_{47}H_{79}N_2O_7P$	α , α' -Dipalmityl- β -glyceryl-N,N-diphenyl-phosphorodiamidate	-	-	Assign	Bellamy	JCS	- (1953)	728	

C₄₈ COMPOUNDS

C ₄₈ H ₃₄	m-Octaphenyl	5-38 μ	S	Spec, Freq, Assign	Stewart	JRNB	60 (1958)	125
C ₄₈ H ₃₄ O ₁₂	Hexa-m-cresotide	1700-1800	S	Group freq	Short	JCS	- (1952)	206
C ₄₈ H ₃₄ N ₄	Tetra-p-tolyl-porphine	600-3500	S	Assign	Thomas	JACS	78 (1956)	1338
C ₄₈ H ₃₈ N ₄ O ₄	Tetra-(p-methoxyphenyl) porphine	600-3500	S	Assign	Thomas	JACS	78 (1956)	1338
C ₄₈ H ₄₀ Si ₄	Octaphenylcyclo-tetrasiloxane	650-1300 2-16 μ 500-1650	- Sol S	Spec Spec Spec, Assign	Thompson Young Richards	JCS JACS JCS	- (1947) 71 (1948) - (1949)	289 3758 124
C ₄₈ H ₅₄ N ₄ O ₁₆	Uroporphyrin I octamethyl ester (α and β)	670-4000	S	Spec, Assign Ident	Falk MacDonald	AJSR JACS	4A (1951) 75 (1953)	579 3040
C ₄₈ H ₅₄ N ₄ O ₁₆	Uroporphyrin III octamethyl ester (β)	670-4000	S	Spec, Assign	Falk	AJSR	4A (1951)	579
C ₄₈ H ₉₅ N ₉ H ₂ O	Cerebrin	2-16 μ	S	Spec	Mislow	JACS	74 (1952)	5155
C ₄₈ H ₁₀₂ N ₃ O ₆ P ₃	n-Octyl phospho-nitrilate	2-21 μ	L	Spec, Anal	Daasch	AC	23 (1951)	853

C₄₉ COMPOUNDS

C ₄₉ H ₃₆ O ₈	3,3',4-Tri-O-benzyl-5,5'-di-C-benzyl-ellagic acid	5.0-6.15 μ	S	Struct	Stitt	JACS	81 (1959)	4615
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C₅₀ COMPOUNDS

C ₅₀ H ₃₂ O ₁₁	2',3',3',4,4'-Pentabenzoybenzal-acetophenone	1550-4000	S	Group freq	Hergert	JACS	75 (1953)	1622
C ₅₀ H ₃₉ N	ρ, ρ'-Di-trityl diphenylamine	2.9 μ	-	Ident	Craig	JACS	71 (1949)	2250
C ₅₀ H ₇₀ O ₈	Bis (methyl-β-acetoxybisnor-choladienate)	-	Sol	Group freq	Mosetting	JOC	17 (1952)	764

C₅₁ COMPOUNDS

C ₅₁ H ₃₈ O ₉	3,3',4-Tri-O-benzyl-5,5'-di-O-benzyl-ellagic acid acetate	5.0-6.15 μ	S	Struct	Stitt	JACS	81 (1959)	4615
C ₅₁ H ₈₅ O ₉ P	α,β-Distearoyl-α'-glyceryl diphenyl phosphate	670-3500	-	Assign, Spec	Bellamy	JCS	- (1953)	728
C ₅₁ H ₉₈ O ₆	Tripalmitin	1100-1800 650-3500 0.9-3 μ 720	- S,L Sol S	Spec Spec, Struct Spec Band study	Barnes Chapman Holman Chapman	IEC JCS AC JCS	15 (1943) - (1956) 28 (1956) - (1957)	659 2522 1533 4489

C₅₂ COMPOUNDS

C ₅₂ H ₃₄ O ₂	9,10-Diphenylanthracene photooxide	850-1300	-	Freq	Nikilin	OS	4 (1958)	702
C ₅₂ H ₇₀ O ₃₅	α-Cellulose triacetate	8-15 μ	S	Spec	Kuhn	AC	22 (1950)	276

C ₅₂ H ₇₇ N ₁₇ O	O,N-Dicarbonyloxydes-N-methylerythromycin	-	-	Freq	Flynn	JACS 77 (1955)	3104
C ₅₂ H ₁₀₂ O ₆	1-Stearodipalmitin	720	S	Band study	Chapman	JCS - (1957)	4489
<u>C₅₄ COMPOUNDS</u>							
C ₅₄ H ₈₆	α-Cholesterylene	600-3600	-	Spec	Owades	JACS 73 (1951)	4223
C ₅₄ H ₉₀ ²	2α-(Δ ² -Cholesten-3-yl)-cholestan-3-one	-	-	Group freq	Corey	JACS 77 (1955)	1672
C ₅₄ H ₉₀ ⁰	Dicholesteryl ether	-	-	Ident	Tsou	JACS 76 (1954)	6108
C ₅₄ H ₉₀ ^{0 2}	Epicholesterol-Δ ⁴ -cholesten-3-one complex	-	Sol	Band freq, Ident	Fieser	JACS 75 (1953)	4377
C ₅₄ H ₉₀ ^{0 3}	Epicholesterol-Δ ⁴ -cholesten-6β-ol-3-one complex	-	S	Bonding study	Fieser	JACS 75 (1953)	4377
C ₅₄ H ₉₂ O ₂	Cholestanonepicholesterol complex	-	S,Sol	Group freq, Band freq	Fieser	JACS 75 (1953)	4377
C ₅₄ H ₁₁₀	n-Tetrapentacotane	1470	L,S	Freq	Stein	JCP 22 (1954)	1993
<u>C₅₅ COMPOUNDS</u>							
C ₅₅ H ₇₄ N ₄ O ₅	Phoephytin	1-14/4 1-14/4 630-3500	L - S,Sol	Spec Spec Spec, Freq, Assign	Stair Aronoff Weigl	JRNB 11 (1933) CR 47 (1950) JACS 75 (1953)	703 175 2173

$C_{55}H_{106}O_6$	Palmitostearin	-	Sol	Anal Spec Anal	Shreve Shreve Swern	AC AC JAOC	22 (1950) 22 (1950) 27 (1950)	1261 1498 17	
$C_{55}H_{106}O_6$	1-Palmitodistearin (β_L form)	720	S	Band study	Chapman	JCS	- (1957)	4489	
<u>C₅₆ COMPOUNDS</u>									
$C_{56}H_{42}O_8$	O-Tetrabenzyl-5,5'-di- C-benzylellagic acid	5.0-6.15 μ	S	Struct	Stitt	JACS	81 (1959)	4615	
$C_{56}H_{90}O_7$	5 α -Hydroxy-6-keto- cholestane- β -carboxylic anhydride	-	S	Group freq	Roberts	JCS	- (1954)	3178	
$C_{56}H_{94}O_5$	5 α -Hydroxycholestane- β -carboxylic anhydride	-	S, Sol	Group freq	Roberts	JCS	- (1954)	3178	
<u>C₅₇ COMPOUNDS</u>									
$C_{57}H_{104}O_6$	Trislaudin	2-16 μ	Sol	Quant anal Spec Anal Spec	Shreve Shreve Swern Feuge	AC AC JAOC JAOC	22 (1950) 22 (1950) 27 (1950) 28 (1951)	1261 1498 17 420	
$C_{57}H_{104}O_6$	Triolein	-	-	Spec, Iso Quant anal Spec Anal Spec	Benedict Shreve Shreve Swern Feuge	JACS AC AC JAOC JAOC	72 (1950) 22 (1950) 22 (1950) 27 (1950) 28 (1951)	4356 1261 1498 17 420	
$C_{57}H_{110}O_6$	Tristearin	1050-1800	-	Spec Struct, Ident Spec	Barnes Gray Feuge	IEC JPC JAOC	15 (1943) 53 (1949) 28 (1951)	659 23 420	

C ₅₇ H ₁₁₀ O ₆	Tristearin (β form)	650-3500	L,S	Spec, Struct	Chapman	JCS - (1956)	2522
<u>C₅₈ COMPOUNDS</u>							
C ₅₆ H ₈₂ O ₈	Bis-(β -acetoxy- 22-isoprostadiene)	720	S	Band study	Chapman	JCS - (1957)	4489
C ₅₉ H ₉₂ O ₄	Chromanol	2-10 μ	Sol	Group freq	Mosettig	JOC 17 (1952)	764
<u>C₆₄ COMPOUNDS</u>							
C ₆₄ H ₄₆ N ₂ O ₄	3,3'-Iminobis-(4- benzylidene-1-phenyl- 5-pyrazolone) dimer	400-4000	-	Freq	Graynon	CJC 37 (1959)	110
C ₆₄ H ₁₃₀	Tetrahexacontane		S,L, Sol	Spec, Assign	Krimm	PR 94 (1954)	1426
<u>C₆₅ COMPOUNDS</u>							
C ₆₅ H ₁₂₄ N ₂ O ₁₂ ^P	α , α' -Dilauroyl- kephalin	670-3500	-	Spec, Assign	Bellamy	JCS - (1953)	728
C ₆₅ H ₁₂₄ N ₂ O ₁₂ ^P	α , β -Dilauroylkephalin	670-3500	-	Spec, Assign	Bellamy	JCS - (1953)	728

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C₇₂H₆₀O₄Si₅ Tetrakis(triphenyl-
silyloxy)silane 600-3000 Sol Spec, Assign Zeitler JPC 61 (1957) 1174

IIa. Inorganic Compound of Nonmetals

(Containing elements C, H, D, T, halogens, N, O, P, S, As, B, Se, Si and noble gases)

Formula	Name	Range	State	Remarks	Reference
CHDN ₂	Cyanamide-d ₁	17900-40300 Mc/Sec	-	Spec, Struct	Tyler PRCS - (1959) 155
CHN	Hydrogen cyanide	-	-	Thermo	Tolman JACS 45 (1923) 2277
		3-15 μ	G	Spec	Baker PR 23 (1924) 200
		-	G	Vib-rot. analysis	Badger PR 37 (1931) 800
		3-15 μ	G	Thermo	Badger JACS 54 (1932) 3523
		-	G	Spec	Choi PR 42 (1932) 777
		-	G	Freq, Assign	Adel PR 45 (1934) 277
		-	G	Spec, Anal	Herzberg PRS 147 (1934) 434
		-	G	Freq	Mecke TFS 30 (1934) 200
		1-20 μ	G	Mol. Const.	PR 48 (1935) 516
		-	-	Thermo	JCP 3 (1935) 259
		4.3-5.4 μ	Sol	Spec	Gordy JCP 3 (1935) 664
		1.04 μ	G	Pressure effect	Cornell PR (1936) 279
		4.2-5.4 μ	Sol	Pressure broadening	Gordy JCP 4 (1936) 85
		-	G	FC	Herzberg PR 50 (1936) 1186
		-	-	Freq	Penney PHS 156 (1936) 654
		-	-	Pressure effect	Williams JCP 4 (1936) 85
		-	G	Thermo	Cornell PR 51 (1937) 739
		-	G	FC	Gordon JCP 5 (1937) 30
		-	G	Pressure broadening	Linnett JCS - (1937) 1399
		-	-	Group study	Watson PR 51 (1937) 48
		-	-	FC	Herzberg JCP 8 (1940) 847
		-	-	Freq	Crawford JCP 9 (1941) 69
		-	-	Freq	Redlich JCP 9 (1941) 298
		14	G	Pressure broadening	Herzberg RMP 14 (1942) 219
		-	-	Bonding	Foley PR 61 (1942) 545
		-	-	Quant Mech.	Mecke TFS 30 (1942) 200
		-	-	Freq	Barnes IEC 15 (1943) 659
		-	-	Pressure broadening	Nielsen JCP 11 (1943) 160
		-	G	Self broadening	Foley PR 69 (1946) 616
		14	G	FC	Foley PR 69 (1946) 628
		-	-	Anal	Gordy JCP 14 (1946) 305
		-	-	FC	Halverson RMP 19 (1947) 87
		-	-	Pressure broadening	Walsh TFS 43 (1947) 60
		-	G	Struct	Anderson PR 76 (1949) 647
		-	G	Quant. Mech., FC	Chen PR 75 (1949) 1113
		-	-		Duchesne JCP 17 (1949) 586

79-2100	S	Spec, Assign	Hoffman	JCP	17	(1949)	1163
-	-	Bonding	Linnett	TFS	45	(1949)	844
-	-	Thermo	Stamm	JCP	17	(1949)	104
-	-	Bonding	Nielsen	PR	78	(1950)	296
-	G	Microwave	Shulman	PR	77	(1950)	421
-	-	Potential energy function	Brooks	TFS	47	(1951)	1152
-	-	Pressure broadening	Mizushima	PR	83	(1951)	94
-	-	FC	Thomas	JCP	19	(1951)	1162
-	-	I	Crawford	JCP	20	(1952)	977
-	G	Spec, Struct, Mol. Const.	Herzberg	N	169	(1952)	997
712-3312	G	I	Hyde	JCP	20	(1952)	647
-	G	Light velocity measurement	Rank	PR	86	(1952)	799
-	G	Mol. Const.	Rank	JOSA	42	(1952)	693
-	-	FC	Thomas	JCP	20	(1952)	920
-	-	FC	Thomas	JCS	-	(1952)	2383
-	G	Microwave	Weatherly	PR	87	(1952)	517
0.5-2.5	G	Spec, Struct, Anal	Douglas	JCP	21	(1953)	448
10	G	Microwave	Collier	PR	95	(1954)	1201
-	-	Thermo	Pennington	JCP	22	(1954)	1442
6500	G	Mol. Const.	Rank	PR	94	(1954)	575
5500	G	Bond	Wiggins	JCP	22	(1954)	547
1.5	-	Band study	Jaffe	JOSA	45	(1955)	405
1.5	G	High resolution interferometry	Jaffe	JOSA	45	(1955)	636
-	G	Band study	Rank	PR	100	(1955)	993
-	Sol	Freq, I	Skinner	JCS	-	(1955)	487
-	G	Microwave	White	JCP	23	(1955)	249
2-9	G	Anal	Baker	AC	28	(1956)	1391
0.8-2	G	Microwave	Burrus	PR	101	(1956)	599
2095	Sol	Freq, I	Penneman	JCP	24	(1956)	293
2-15	G	Spec	Pierson	AC	28	(1956)	1218
1.0-1.6	-	Spec	Rank	JOSA	46	(1956)	477
-	-	Pressure broadening	Pigott	JCP	26	(1957)	384
-	G	Microwave	Weatherley	DA	18	(1958)	1469
-	-	Bond study, I	Wilmshurst	JPC	62	(1958)	631
-	G	Freq	Caldow	PRS	254	(1960)	1
-	G	Band study	Rank	JMS	4	(1960)	518
1-3	G	Molecular Const.	Rank	JOSA	50	(1960)	421

$C^{14}HN$	Hydrogen cyanide (isotopic)	-	G	Freq	Richardson	JCP	19 (1951)	1213
$C^{12}HN^{14}$	Hydrogen cyanide (isotopic)	-	G	Microwave	Simmons	PR	77 (1950)	77
$C^{13}HN^{14}$	Hydrogen cyanide (isotopic)	-	G	Microwave	Simmons	PR	77 (1950)	77
$C^{13}HN$	Hydrogen cyanide (isotopic)	2160-2000	S	Spec	Hoffman	JCP	17 (1949)	1163
		-	G	Freq	Richardson	JCP	19 (1951)	1213
		-	L,G	Mol. Const.	Kagarise	JCP	20 (1952)	1437
		-	-	Freq	Stranks	JACS	75 (1953)	2015
		4-7.5	G	Freq, Assign	Barr	JCS	- (1956)	3428
		3-14	Sol	Solvent effect, I	Caldow	PRS	254 (1960)	17
		1-3	-	Spec, Mol. Const.	Rark	JOSA	50 (1960)	421
CHNO	Cyanic acid	1.031	G	Spec	Herzberg	PR	50 (1936)	390
		-	Sol	Freq, I	Davison	JCS	- (1953)	3712
		-	-	FC	Thomas	TFS	49 (1953)	855
CHNO	Isocyanic acid	-	-	Microwave	Jones	JCP	18 (1950)	990
		-	G	Spec, Anal	Reid	JCP	18 (1950)	1544
		-	-	FC, Freq	Thomas	JCS	- (1952)	2383
		-	-	Thermo	Luft	JCP	22 (1954)	956
CHNS	Isothiocyanic acid	-	-	Freq	Jones	JCP	18 (1950)	990
		-	-	Struct	Jones	JCP	18 (1950)	1511
		400-4000	G	Spec, Assign	Reid	JCP	18 (1950)	1512
		-	-	FC	Thomas	JCS	- (1952)	2383
		-	-	FC	Thomas	TFS	49 (1953)	855
CH_2N_2	Cyanamide	2-15	S	Spec, Struct	Sukhorukov	OS	7 (1959)	9
		-	-	Spec, Struct	Tyler	PRCS	- (1959)	153
CH_3NSi	Silyl cyanide	300-3500	G	Assign, Struct	Linton	DA	19 (1958)	687
CH_3OB	Bovine carbonyl	2-25	-	Theoretical	Cowan	JCP	17 (1949)	218
		-	-	Microwave	Strandberg	JCP	17 (1949)	429
		2-25	G	Spec, Assign, NCA	Cowan	JCP	18 (1950)	1101
		-	-	Thermo	Galbraith	JCP	22 (1954)	1461

	2164	-	Freq	Margoshes	JCP	22	(1954)	381
	-	-	Mol. Const.	Meal	JCP	24	(1956)	1126
	200-3200	S,G	Spec, Assign, NCA	Bethke	JCP	26	(1957)	1118
	-	-	FC	Bethke	JCP	27	(1957)	978
	250-3000	S	Spec, Freq, Assign, H bond	Waddington	JCS	-	(1958)	4340
	400-4000	S	Spec	Waddington	JCS	-	(1959)	2499
	2.5-7.5 μ	Sol	Spec	Gordy	JCP	3	(1935)	664
	2-16 μ	S	Spec, Anal	Miller	AC	24	(1952)	1253
	250-4000	S	Freq, Assign, H bond	Waddington	JCS	-	(1958)	4340
	-	S	Spec, Struct	Tramer	CPR	249	(1959)	2755
	300-880	S	Spec	Miller	SA	16	(1960)	135
	2-16 μ	S	Spec	Miller	AC	24	(1952)	1253
	300-880	S	Spec	Miller	SA	16	(1960)	135
	700-3500	S	Ident, Assign	Davison	JCS	-	(1955)	3389
	700-1700	S	Spec, Struct, Config. Assign, Taut	Lieber	CJC	36	(1958)	801
	2-9 μ	Sol	Spec, Freq	Jencks	ABB	88	(1960)	193
	2-16 μ	S	Spec	Meloche	JINC	6	(1958)	104
	300-880	S	Spec	Miller	SA	16	(1960)	135
	17.5 μ	-	Freq	Adel	PR	45	(1934)	277
	1-20 μ	G	Mol. Const.	Bartunek	PR	47	(1935)	330
	-	G	Spec, Const.	Bartunek	PR	48	(1935)	516
	-	-	Thermo	Gordon	JCP	5	(1937)	30
	-	-	FC	Linnett	JCS	-	(1937)	1399
	-	-	FC	Crawford	JCP	9	(1941)	69
	-	-	Anal	Halverson	RMP	19	(1947)	87
	-	-	I	Crawford	JCP	20	(1952)	977
	569-2629	G	I	Hyde	JCP	20	(1952)	647
	-	G	Microwave	Weatherly	PR	87	(1952)	517
	0.5-2.5 μ	G	Spec, FC	Douglas	JCP	21	(1953)	448
	1900-8000	G	Freq	Allen	JCP	23	(1955)	1356
CH ₄ N ₂ O								
CH ₄ N ₂ S								
CH ₅ NO								
CH ₅ N ₃ O.HCl								
CH ₅ N ₃ S								
CH ₆ N ₂ O ₂								
CH ₈ N ₂ O ₃								
CDN								

	3020	G	Rot. Anal	Checkland	TFS	51 (1955)	1
	-	G	Microwave	White	JCP	23 (1955)	249
	-	G	Freq, I	Skinner	JCS	- (1955)	487
	-	G	Microwave	Burrus	PR	101 (1956)	599
	-	-	Struct	Amat	JMS	2 (1958)	163
	-	G	Freq	Caldow	PRS	254 (1960)	1
$C^{12}DN$	-	G	Freq, FC	Richardson	JCP	19 (1951)	1213
$C^{13}DN$	-	G	Freq, FC	Richardson	JCP	19 (1951)	1213
$C^{12}DN^{14}$	-	G	Microwave	Simmons	PR	77 (1950)	77
$C^{13}DN^{14}$	-	G	Microwave	Simmons	PR	77 (1950)	77
CD_2N_2	-	-	Spec, Struct	Tyler	PRCS	- (1959)	155
CD_3F	2-13 μ	G	Struct	Edgell	JACS	78 (1956)	2358
CD_3NSi	300-3500	G	Assign, Struct	Linton	DA	19 (1958)	687
$CBrFO$	300-2200	G	Spec	Patty	SA	15 (1959)	60
$CBrN$	-	-	FC	Penny	PRS	156 (1936)	654
	-	-	FC	Linnett	JCS	- (1937)	1399
	-	-	FC	Gordy	JCP	14 (1946)	305
	-	-	Microwave	Feld	PR	72 (1947)	1116
	-	-	Microwave	Gordy	PR	72 (1947)	259
	-	-	Microwave	Torones	PR	71 (1947)	644
	-	-	Microwave	Torones	PR	72 (1947)	644
	-	-	FC	Walsh	TFS	43 (1947)	60
	-	-	Microwave	Bardeen	PR	73 (1948)	97
	-	-	Microwave	Bardeen	PR	73 (1948)	627
	-	-	Quant. Mech., FC	Duchesne	JCP	17 (1949)	586
	-	-	FC	Linnett	TFS	45 (1949)	844
	-	-	Pressure broadening	Mizushima	PR	83 (1951)	94

$C^{12}Br^{79}N^{15}$	-	-	FC	Thomas	JCP	19 (1951)	1162
	-	-	FC	Thomas	JCP	20 (1952)	920
	-	G	Microwave	Trambarulo	PR	95 (1954)	622
	300-3200	G,S	Spec, Assign	Freitag	JCP	24 (1956)	109
$C^{12}Br^{79}N^{15}$	-	G	Microwave	Tetenbaum	PR	86 (1952)	440
	-	G	Microwave	Smith	PR	74 (1948)	370
	-	G	Microwave	Tetenbaum	PR	86 (1952)	440
	-	G	Microwave	Smith	PR	74 (1948)	370
	-	G	Microwave	Tetenbaum	PR	86 (1952)	440
	-	G	Microwave	Smith	PR	74 (1948)	370
	-	G	Microwave	Townes	PR	74 (1948)	1113
	-	G	Microwave	Tetenbaum	PR	86 (1952)	440
	-	G	Microwave	Burrus	PR	101 (1956)	599
$C^{12}Br^{81}N^{14}$	-	G	Microwave	Smith	PR	74 (1948)	370
	-	G	Microwave	Townes	PR	74 (1948)	1113
	-	G	Microwave	Tetenbaum	PR	86 (1952)	440
	-	G	Microwave	Burrus	PR	101 (1956)	599
$C^{12}Br^{81}N^{14}$	-	G	Microwave	Smith	PR	74 (1948)	370
	-	G	Microwave	Townes	PR	74 (1948)	1113
	-	G	Microwave	Tetenbaum	PR	86 (1952)	440
	-	G	Microwave	Burrus	PR	101 (1956)	599
$CBr^{79}N$	-	-	Microwave	Townes	PR	74 (1948)	1113
$C^{12}Br^{81}N^{15}$	-	G	Microwave	Tetenbaum	PR	86 (1952)	440
$CBr^{81}N$	1μ	-	Microwave	Townes	PR	71 (1947)	642
$CClFO$	$2-40\mu$	G,L	Spec, Assign	Nielsen	JCP	20 (1952)	596
	-	-	NCA, FC, Thermo	Lovell	JCP	22 (1954)	1953
	-	-	Freq	Kogarise	JACS	77 (1955)	1377
$CClN$	-	-	FC	Penney	PRS	156 (1936)	654
	-	-	FC	Linnett	JCS	- (1937)	1399
	-	-	FC	Gordy	JCP	14 (1946)	305
	-	-	Microwave	Townes	PR	71 (1947)	644

CCl_2O	Carbonyl chloride	-	-	Mol. Const. Struct	Villars	CR	11 (1932)	369
		-	-	Thermo	Mulliken	JCP	3 (1935)	564
		-	-	Freq, Thermo	Stevenson	JCP	6 (1938)	25
		1300-1800	-	Spec	Thompson	TFS	37 (1941)	251
		-	-	FC	Barnes	IEC	15 (1943)	659
		-	-	FC	Walsh	TFS	43 (1947)	158
		2-40 μ	-	Spec, Assign	Torkington	PRS	206 (1951)	17
		-	G, L	Potential function	Nielsen	JCP	20 (1952)	596
		1827	-	Freq	Duchesne	JCP	22 (1954)	1464
		-	-	Freq	Johannesen	JRNB	53 (1954)	197
		2-15 μ	-	Freq	Margoshes	JCP	22 (1954)	381
		500-5500	G	Spec	Kagarise	JACS	77 (1955)	1377
		-	G	Spec, Assign	Pierson	AC	28 (1956)	1281
		-	G	I, FC	Catalano	JACS	80 (1958)	1054
		-	G		Lovell	JMS	4 (1960)	173
$C^{12}Cl_2^{35}O^{16}$	Carbonyl chloride (isotopic)	-	-	Microwave	Robinson	JCP	21 (1953)	1741
$C^{12}Cl_2^{37}O^{16}$	Carbonyl chloride (isotopic)	-	-	Microwave	Robinson	JCP	21 (1953)	1741
CCl_2S	Thiophosgene	-	-	FC	Thompson	TFS	37 (1941)	251
		-	-	FC	Torkington	PRS	206 (1951)	17
		-	-	Vibrations	Duchesne	JCP	21 (1953)	548
		-	G	I, FC	Lovell	JMS	4 (1960)	173
CCl_3NS	Thiocyanogen trichloride	400-4000	L, G, Sol	Spec, Struct	Bacon	JCS	- (1958)	164
CF	Carbon fluoride	-	-	FC	Wu	PR	71 (1947)	118
CFN	Cyanogen fluoride	105.2-2294	-	FC, Freq	Thomas	JCP	20 (1952)	920
		-	-	Thermo	Luft	JCP	21 (1953)	1900
		1000-3000	G	Struct	Aynsley	PRCS	- (1959)	265
		-	G	Spec	Sheridan	N	185 (1959)	96
CF ₂	Carbon difluoride	-	-	Vibrations	Duchesne	JCP	21 (1953)	2005
CF ₂ O	Carbonyl fluoride	7.74 μ	G	Anal	Nielsen	JCP	19 (1951)	98
		2-40 μ	L, G	Spec, Assign	Nielsen	JCP	20 (1952)	596
		-	-	Ident	Callomon	JCS	- (1953)	3709

CIN	Cyanogen iodide	-	-	-	FC	NCA, FC, Thermo	FC	95 (1954)	PR	300
		-	-	-	FC	Ident	FC	22 (1954)	JCP	1953
		-	-	-	FC	Freq	FC	- (1955)	JCS	1881
		-	-	-	FC		FC	77 (1955)	JACS	1377
		-	-	-	FC		FC	156 (1936)	PRS	654
		-	-	-	FC		FC	- (1937)	JCS	1399
		-	-	-	FC	Microwave	FC	72 (1947)	PR	259
		-	-	-	FC		FC	43 (1947)	TFS	60
		-	-	-	FC	Microwave	FC	73 (1948)	PR	627
		-	-	-	FC		FC	73 (1948)	PR	635
		-	-	-	FC	Quant. Mech., FC	FC	17 (1949)	JCP	580
		-	-	-	FC		FC	45 (1949)	TFS	844
		0.2-0.3 μ	-	G	FC	Microwave	FC	78 (1950)	PR	140
		-	-	-	FC	Pressure broadening	FC	83 (1951)	PR	94
		-	-	-	FC		FC	19 (1951)	JCP	1162
		-	-	-	FC		FC	20 (1952)	JCP	920
		3.8-12 μ	-	Sol	FC	Spec	FC	- (1954)	JCS	4145
		-	-	Sol	FC	Freq	FC	- (1955)	JCS	471
		-	-	-	FC	Microwave	FC	99 (1955)	PR	1302
		-	-	-	FC		FC	97 (1955)	PR	1664
		300-3200	-	G,S	FC	Spec, Assign	FC	24 (1956)	JCP	109
		3-14 μ	-	Sol	FC	Solvent effect, I	FC	254 (1960)	PRS	17
		-	-	G	FC	Microwave	FC	74 (1948)	PR	370
		-	-	G	FC	Microwave	FC	74 (1948)	PR	1113
		-	-	G	FC	Microwave	FC	74 (1948)	PR	370
C ¹² I ¹²⁷ N ¹⁴	Cyanogen iodide (isotopic)	-	-	-	FC	Morse potential	FC	1 (1925)	BAPS	12
		-	-	-	FC		FC	34 (1929)	PR	57
		-	-	-	FC	Mol. Const.	FC	2 (1934)	JCP	128
		-	-	-	FC		FC	45 (1934)	PR	98
		-	-	-	FC		FC	- (1937)	JCS	1399
		-	-	-	FC	Potential function	FC	36 (1940)	TFS	1123
		-	-	-	FC	Potential function	FC	37 (1941)	TFS	299
		-	-	-	FC		FC	38 (1942)	TFS	1
		-	-	-	FC		FC	71 (1947)	PR	118
		1-1.6 μ	-	G	FC	Oxyacetylene flame	FC	83 (1951)	PR	249
		2053	-	G	FC	Spec	FC	21 (1953)	JCP	1399

	FC	Thompson	JCS		
-	Ident	Thompson	JCS	(1937)	1396
-	Spec	Bailey	JCP	6 (1938)	225
2.34-4.66 μ	Spec	Whitcomb	PR	55 (1939)	181
-	Potential function	Geydon	PRS	176 (1940)	505
-	Thermo	Linnett	TFS	36 (1940)	1123
-	Potential function	Pitzer	CR	27 (1940)	39
-	Emission	Clark	TFS	37 (1941)	299
-	Thermo	Gaydon	PRS	178 (1941)	61
-	Spec	Hulburt	JCP	9 (1941)	61
0.6-1 μ	Spec	Gaydon	PRS	181 (1942)	197
4.66 μ	FC	Lagermann	JCP	10 (1942)	193
-	Freq	Linnett	TFS	38 (1942)	1
-	Absorption	Barnes	IEC	15 (1943)	659
-	Anal	Nielsen	RMP	16 (1944)	307
-	Anal, Pressure broadening	O'Bryan	JOSA	35 (1945)	799
-	Spec	Coggeshall	JAP	17 (1946)	450
-	Anal	Coggeshall	JCP	15 (1947)	65
-	FC	Seyfried	IEC	19 (1947)	298
-	FC	Walsh	TFS	43 (1947)	60
-	FC	Walsh	TFS	43 (1947)	158
-	FC	Wu	PR	71 (1947)	118
15 μ	Emission, Absorption	Silverman	JCP	16 (1948)	155
-	Ident	Adel	PR	75 (1949)	1766
4.7 μ	CO in atmosphere	Adel	PR	75 (1949)	1766
-	Emission band	Herman	JCP	17 (1949)	220
1.2-2.5 μ	Spec	Herzberg	JCP	17 (1949)	1099
1-15 μ	CO-O ₂ explosion	Bullock	JCP	18 (1950)	1114
6 μ	Spec	Chapman	PR	78 (1950)	333
-	Emission	Penner	JAP	21 (1950)	685
2100-6400	Freq	Rao	JCP	18 (1950)	213
-	Absorption	Penner	JCP	19 (1951)	272
2142-4270	I	Penner	JCP	19 (1951)	807
4270	I	Penner	JCP	19 (1951)	817
-	Freq	Penner	JCP	19 (1951)	1351
-	Unpressurized line width	Penner	JCP	19 (1951)	1361
2.3-4.7 μ	Spec	Penner	JAP	21 (1951)	685

-	Spec	Plyler	JOSA	41	(1951)	867
2-6 μ	Anal	Roberts	JACS	73	(1951)	618
2.3-2.6 μ	CO-O ₂ flame	Silverman	PR	82	(1951)	337
-	Emission, Absorption	Silverman	AC	23	(1951)	1047
2142	Absorption	Weber	JCP	19	(1951)	974
2.3-2.4 μ	CO in atmosphere	Goldberg	PR	85	(1952)	140
2.3-2.33 μ	CO in atmosphere	Goldberg	PR	85	(1952)	481
2.3 μ	Telluric CO	Howard	PR	87	(1952)	679
-	Polarizability	Matossi	JCP	20	(1952)	819
-	Emission	Penner	JAP	23	(1952)	256
-	Emission	Penner	JAP	23	(1952)	825
4.1-5.5 μ	Spec	Plyler	JCP	20	(1952)	1178
-	Vibrations	Schwartz	JCP	20	(1952)	1591
2.3-4.7 μ	Absorption	Shaw	PR	86	(1952)	654
4.7 μ	Telluric CO	Shaw	PR	87	(1952)	380
2.3 μ	Spec	Silverman	PR	87	(1952)	214
4.7 μ	Double monochrome	Walsh	JOSA	42	(1952)	96
2150-2170	Spec	Benesch	JOSA	43	(1953)	1119
-	I	Bullock	JOSA	43	(1953)	389
2040-2220	Caliberation of prism	Downie	JOSA	43	(1953)	941
-	Emission	Lee	JOSA	43	(1953)	619
2143	Rotation line width	Weber	JCP	21	(1953)	1503
2053-2198	Spec	White	JCP	21	(1953)	1399
-	I	Aroeste	JCP	22	(1954)	1273
-	Line shape	Benedict	PR	94	(1954)	752
1-2.6 μ	Freq	Benedict	JHNB	52B	(1954)	57
-	Pressure broadening	Blau	PR	93	(1954)	360
4.5-6 μ	Spec	Eischeus	JCP	22	(1954)	1164
-	I	Herman	JCP	22	(1954)	481
-	I	Herman	PR	94	(1954)	752
2143	Freq	Margoshes	JCP	22	(1954)	381
-	Emission	Penner	JHNB	52B	(1954)	75
4300	Spec	Silverman	JHNB	52B	(1954)	51
-	Emission	Smith	PR	93	(1954)	361
-	I	VincentGeisse	CPR	239	(1954)	251
-	Collision detection	deWette	JCP	22	(1954)	1620
2.4 μ	Emission, Spec	Williams	PR	93	(1954)	361

	2-11.5 μ	G	Spec	Donovan	JCP	23 (1955)	1592
	-	G	I	Herman	JCP	23 (1955)	637
	-	-	Potential function	Lippincott	JCP	23 (1955)	1131
	-	-	Anal	Patterson	AC	27 (1955)	574
	2169	G	I	Penner	JCP	23 (1955)	2244
	4.67 μ	G	Mol. Const.	Plyler	JOSA	45 (1955)	102
	4-6 μ	G	Spec, Mol. Const.	Plyler	JRNB	55 (1955)	183
	1-5.5 μ	G	Emmission	Wilkinson	AC	27 (1955)	162
	2-15 μ	G	Emmission	Dickey	JCP	25 (1955)	180
	2.5-7.5 μ	-	Spec	Eischens	JPC	60 (1956)	194
	-	G	Spec	Neu	JPC	60 (1956)	320
	100-600	G	Spec	Palik	JCP	25 (1956)	1174
	2-15 μ	G	Spec	Pierson	AC	28 (1956)	1218
	-	G	FC	Baughan	TFS	53 (1957)	1046
	4.260 μ	G	Freq	Rank	JOSA	47 (1957)	686
	1700-2100	G	Spec	Eischens	JCE	35 (1958)	385
	-	-	Vibrations	Jones	DA	19 (1958)	456
	4000-4360	G	Mol. Const.	Plyler	JRNB	61 (1958)	53
	-	-	Chrometography	Smith	AC	30 (1958)	1217
	1800-2100	S	Spec	Garland	JPC	63 (1959)	1423
	-	Sol	Struct	Lascombe	BSCF	- (1959)	1175
	-	-	Band study	Singleton	DA	19 (1959)	2372
	2100-2300	G	Spec	Mould	SA	16 (1960)	479
	-	-	Band study	Rank	JMS	4 (1960)	518
	-	G	Mol. Const.	Lagemann	PR	72 (1947)	284
	4.7 μ	G	Spec	Migeotte	PR	75 (1949)	1108
	0.2-0.3 μ	G	Microwave	Gilliam	PR	78 (1950)	140
	4.7-5.1 μ	-	Spec	Eischens	JPC	60 (1956)	194
	1.58-2.35 μ	G	Spec, Mol. Const.	Plyler	JCP	20 (1952)	175
	-	G	Microwave	Bedard	PR	92 (1953)	1440
	2140	G	Spec, Mol. Const.	Mills	TFS	49 (1953)	224
	4.5-5.2 μ	G	Mol. Const.	Plyler	JOSA	43 (1953)	822
	1.58-2.35 μ	G	Spec	Plyler	JCP	20 (1952)	175
	2140	G	Spec, Mol. Const.	Mills	TFS	49 (1953)	224
	4.5-5.2 μ	G	Mol. Const.	Plyler	JOSA	43 (1953)	822
	4-6 μ	G	Spec, Mol. Const.	Plyler	JRNB	55 (1955)	183

C^{12}_{O}

$C^{12}_{O}^{16}$

$C^{12}_{O}^{18}$

$C^{13}O$	Carbon monoxide (isotopic)	-	G	Mol. Const.	Lagemann	PR	72 (1947)	284
		4.7 μ	G	Spec	Migeotte	PR	75 (1949)	1108
		0.2-0.3 μ	G	Microwave	Gilliam	PR	78 (1950)	140
		4.7-5.1 μ	-	Spec	Eischers	JPC	60 (1956)	194
$C^{13}O^{16}$	Carbon monoxide (isotopic)	1.58-2.35 μ	G	Spec	Plyler	JCP	20 (1952)	175
		2140	G	Spec, Mol. Const.	Mills	TFS	49 (1953)	224
		4.5-5.2 μ	G	Mol. Const.	Plyler	JOSA	43 (1953)	822
		4-6 μ	G	Spec, Mol. Const.	Plyler	JRNB	55 (1955)	183
CO^{17}	Carbon monoxide (isotopic)	-	G	Mol. Const., Struct	Rosenblum	JCP	27 (1957)	828
CO	Carbon monoxide ion	-	-	Morse potential	Morse	PR	34 (1929)	57
		-	-	Potential function	Linnett	TFS	36 (1940)	1123
		-	-	Potential function	Clark	TFS	37 (1941)	299
		-	-	FC	Linnett	TFS	38 (1942)	1
		-	-	FC	Wu	PR	71 (1947)	118
		-	-	Struct	Lichte	TFS	28 (1932)	698
COS	Carbonyl sulfide	-	-	Freq	Bailey	PRS	140 (1933)	605
		-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
		1-20 μ	G	Spec	Bartunek	PR	48 (1935)	516
		-	-	Thermo	Cross	JCP	3 (1935)	825
		-	-	FC	Penney	PRS	156 (1936)	654
		-	-	FC	Glockler	RMP	15 (1943)	111
		-	-	Quant. Mech.	Nielsen	JCP	11 (1943)	160
		-	-	Quant. Mech.	Glockler	JCP	13 (1945)	388
		-	-	Vib. Anal	Carter	JCP	14 (1946)	32
		-	-	FC	Glockler	JCP	14 (1946)	294
		-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	Vib. Anal	Kron	JCP	14 (1946)	19
		1 μ	-	Microwave	Townes	PR	71 (1947)	64
		-	-	Microwave	Townes	PR	72 (1947)	1266
		-	-	FC	Walsh	TFS	43 (1947)	158
		-	-	Spec	Dailey	AC	21 (1949)	540
		-	-	FC, Quant. Mech.	Duchesne	JCP	17 (1949)	586
		-	-	Microwave	Strandberg	PR	75 (1949)	270
		-	-	Doubling theory	Nielsen	PR	78 (1950)	296
		-	-	Microwave	Shullman	PR	77 (1950)	421
	2-2.5 μ	G	Freq, Assign, FC, I	Collomon	PRS	208 (1951)	341	
	-	-	Pressure broadening	Mizushima	PR	83 (1951)	94	

	G	I	AC		
$C^{12}O^{16}S^{32}$	859-2079	Mol. Const. I FC	Robinson Robinson Thomas	23 (1951) 19 (1951) 19 (1951)	1044 1162 1162
	-	Polarizability	Matossi	20 (1952)	819
	859-2064	I	McKean	20 (1952)	520
	-	Vibrations	Schwartz	20 (1952)	1591
	2079	FC, Freq	Thomas	- (1952)	2383
	-	Freq	Margoshes	22 (1954)	381
	-	Microwave	Peter	95 (1954)	622
	1.9 μ	I	Wingfield	22 (1954)	1949
	-	Microwave	Anderson	97 (1955)	1654
	-	Microwave	Law	97 (1955)	1664
	0.8-2 μ	Microwave	Burrus	101 (1956)	599
	1-5.5 μ	Microwave	Allen	26 (1957)	400
	1.25 μ	Microwave, I	Dymanus	25 (1959)	859
	-	Band study, Mol. Const.	Saksena	20 (1959)	701
	-	Mol. Const.	Saksena	31 (1959)	839
	-	FC	Verdier	30 (1959)	1372
	-	Microwave	Townes	72 (1947)	513
	-	Microwave	Townes	74 (1948)	1113
	-	Microwave	Shulman	77 (1950)	500
	-	Microwave	Burrus	93 (1954)	897
	-	Microwave	King	93 (1954)	407
	-	Microwave	Dymanus	32 (1960)	717
	-	Microwave	Townes	72 (1947)	513
	-	Microwave	Townes	74 (1948)	1113
	5 μ	Spec, Mol. Const.	Calloman	222 (1954)	431
	-	Microwave	Townes	72 (1947)	513
	-	Microwave	Townes	74 (1948)	1113
	-	Microwave	Shulman	77 (1950)	500
	-	Microwave	Townes	74 (1948)	1113
	-	Microwave	Shulman	77 (1950)	500
	-	Microwave	Townes	74 (1948)	1113
	-	Microwave	Shulman	74 (1948)	1113
	-	Microwave	Shulman	77 (1950)	500
	-	Microwave	Townes	74 (1948)	1113

$C^{14}O^{16}S^{32}$	Carbonyl sulfide (isotopic)	-	G	Microwave	Townes	PR	74 (1948)	1113
COSe	Carbonyl selenide	-	-	Quant. Mech., FC	Duchesne	JCP	17 (1949)	586
$COSe^{76}$	Carbonyl selenide (isotopic)	0.8-2 μ	G	Microwave	Burrus	PR	101 (1956)	599
$COSe^{77}$	Carbonyl selenide (isotopic)	0.8-2 μ	G	Microwave	Burrus	PR	101 (1956)	599
$COSe^{78}$	Carbonyl selenide (isotopic)	0.8-2 μ	G	Microwave	Burrus	PR	101 (1956)	599
$COSe^{79}$	Carbonyl selenide (isotopic)	0.8-2 μ	G	Microwave	Burrus	PR	101 (1956)	599
$COSe^{80}$	Carbonyl selenide (isotopic)	0.8-2 μ	G	Microwave	Burrus	PR	101 (1956)	599
$COSe^{82}$	Carbonyl selenide (isotopic)	0.8-2 μ	G	Microwave	Burrus	PR	101 (1956)	599
CO ₂	Carbon dioxide	-	-	Thermo	Tolman	JACS	45 (1923)	2277
		6.7 μ	G	Spec	Ellis	PR	26 (1925)	283
		-	G	Bunsen's flame	Ellis	Ph	26 (1925)	469
		-	G	Spec	Dickinson	Ph	34 (1929)	582
		-	G	Comparison with Raman	Langer	PR	33 (1929)	1097
		-	-	Rotator theory	Bailey	IFS	26 (1930)	197
		-	-	Vibrations	Yates	PR	36 (1930)	555
		-	-	Atmospheric temp.	Hulburt	PR	38 (1931)	1876
		15 μ	G	Spec	Sleator	PR	38 (1931)	147
		-	G	Thermo.	Badger	JACS	54 (1932)	3523
		-	-	Vibrations	Dennison	PR	41 (1932)	304
		-	-	Struct., Thermo.	Lochte	IFS	28 (1932)	698
		4.3-15 μ	G	Spec, Mol. Const.	Martin	PR	41 (1932)	291
		-	-	Thermo.	Rodebush	PR	40 (1932)	113
		-	-	Dispersion	Smallwood	PR	41 (1932)	164
		-	G	Mol. Const.	Villars	CR	11 (1932)	369

-	G	Spec	Weber	PR	40 (1932)	835
-	-	Vib	Adel	PR	44 (1933)	99
10 μ	G	Band study	Barker	PR	44 (1933)	185
-	-	Thermo	Gordon	JCP	1 (1933)	308
-	-	Perturbation theory	Kassel	JCP	1 (1933)	414
1.4-5 μ	G	Spec	Baker	PR	45 (1934)	1
-	-	Potential field	Goodeve	TFS	30 (1934)	60
-	-	Thermo	Kassel	JACS	56 (1934)	1838
-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
5-21 μ	G	Absorption	Adel	PR	47 (1935)	580
-	-	Excited electronic state	Duncan	JCP	3 (1935)	384
1.2031-1 μ	G	Band study	Herzberg	PR	48 (1935)	706
-	-	FC	Sutherland	PRS	148 (1935)	250
-	G	Refractive Index	Keys	CR	19 (1936)	195
4.2-4.3 μ	G	Anal	McAlister	PR	49 (1936)	704
-	G	FC	Penney	PRS	156 (1936)	654
-	G	FC	Thompson	JCS	- (1937)	1384
-	G	FC	Thompson	JCS	- (1937)	1396
-	-	Quant. Mech.	Weinberg	JCP	5 (1937)	517
4.3 μ	G	Rotational Anal	Cameron	PR	53 (1938)	246
1650-5000	G	Calibration	Gershinowitz	JCP	6 (1938)	197
4.2-15 μ	G	Freq	Shearin	JOSA	28 (1938)	61
-	-	Coriolis coupling theory	Jahn	PR	56 (1939)	680
-	G	Freq	Dennison	RMP	12 (1940)	175
-	G	Thermo	Pitzer	CR	27 (1940)	39
-	G	Solar Spec.	Adel	PR	59 (1941)	915
2-14 μ	G	Spec	McAlister	RSI	12 (1941)	314
-	-	Quant. Mech. freq	Redlich	JCP	9 (1941)	298
-	-	l-type doubling	Barker	RMP	14 (1942)	198
13.9-15.4 μ	G	Spec	Herzberg	RMP	14 (1942)	219
-	-	FC	Oetjen	RSI	13 (1942)	515
-	-	Quant. Mech. Spec	Glockler	RMP	15 (1943)	111
-	G	Spec	Nielsen	JCP	11 (1943)	140
-	-	Absorption	Babrovnikoff	RMP	16 (1944)	271
-	-	Vibrations	Nielsen	RMP	16 (1944)	307
-	-	Quant. Mech. Band study	Shaffer	RMP	16 (1944)	245
2300-2400	G	Band study	Glockler	JCP	13 (1945)	388
-	-	Vib. Anal	Nielsen	PR	68 (1945)	173
-	-		Carter	JCP	14 (1946)	32

-	G	Anal	Coggeshall	JAP	17 (1946)	450
-	-	FC	Gordy	JCP	14 (1946)	305
-	-	Vib. Anal	Kron	JCP	14 (1946)	19
2 μ	-	Spec	Adel	PR	72 (1947)	538
4.3-13 μ	G	Spec	Bell	BSI	18 (1947)	48
-	-	Pressure broadening	Coggeshall	JCP	15 (1947)	65
14-16 μ	-	Quant. Mech.	Kaplan	JCP	15 (1947)	809
15 μ	G	Struct	Nielsen	JOSA	37 (1947)	296
-	G	Anal, Pressure broadening	Seyfried	LEC	19 (1947)	298
-	-	I	Thornd	JCP	15 (1947)	868
-	-	FC	Walsh	TFS	43 (1947)	60
-	-	FC	Walsh	TFS	43 (1947)	158
-	-	Thermo	Crawford	JCP	16 (1948)	233
1-24 μ	G	Spec	Plyler	JRNB	40 (1948)	113
1.7-24 μ	G	Spec	Plyler	JRNB	40 (1948)	449
-	-	Absorption	Silverman	JCP	16 (1948)	155
-	G	Absorption	Adel	PR	75 (1949)	1262
2.08 μ	-	Atmosphere	Adel	PR	75 (1949)	1262
-	-	Quant. Mech., FC	Duchesne	JCP	17 (1949)	586
-	G	Emission	Giasburg	PR	75 (1949)	1317
-	-	FC	Linnett	TFS	45 (1949)	844
-	G	Performance of Cashmancell	McMath	JOSA	39 (1949)	903
-	G	Absorption	Mohler	PR	75 (1949)	520
0.8-5 μ	G	Acetylene flame	Plyler	JRNB	42 (1949)	567
2-16 μ	-	Band study	Sheline	JCP	17 (1949)	747
1286-1388	G	Absorption	Welsh	PR	76 (1949)	580
6 μ	G	Spec	Chapman	PR	78 (1950)	333
-	-	Anal	Coggeshall	AC	22 (1950)	381
-	G	Spec	Goldberg	PR	78 (1950)	74
2.7 μ	G	Freq	Jones	PR	77 (1950)	1004
15 μ	G	I	Kaplan	JCP	18 (1950)	186
9-10 μ	G	Rad. Equilibria	Plass	PR	78 (1950)	334
-	G	Spec	Shaw	PR	79 (1950)	1017
2.7 μ	G	Spec	Benedict	JRNB	46 (1951)	246
4.2 μ	G	R-Branch Heads	Benedict	JCP	19 (1951)	1325
-	G	I	Eggers	JCP	19 (1951)	1554
-	G	I	Eggers	AC	23 (1951)	1045
4 μ	G	Band study	Herrick	AC	23 (1951)	661
-	-	Caliberation of twin beam meter	Koppins	AC	23 (1951)	554

1.5 μ	G	Absorption	Plass	PR	85 (1951)	708
2-6 μ	G	Anal	Roberts	JACS	73 (1951)	618
-	-	I	Robinson	AC	23 (1951)	1044
15 μ	G	Spec	Taylor	JCP	19 (1951)	1314
-	-	FC	Thomas	JCP	19 (1951)	1162
-	G	Anal	Weigl	JACS	73 (1951)	5058
7000	G	Spec	Gailar	JRNB	48 (1952)	392
-	G	Spec, Freq	Gailar	PR	86 (1952)	586
2.7 μ	G	Spec	Goulden	JSI	29 (1952)	215
4.3-14.9 μ	G	Inst. perform.	Ham	JOSA	42 (1952)	496
1-21 μ	G	Emission	Holm	JAP	23 (1952)	1283
1-7 μ	G	Absorption	Howard	JOSA	42 (1952)	856
15-25 μ	G	Spec, Freq	Marrison	JSI	29 (1952)	233
-	-	Polarizability	Matoszi	JCP	20 (1952)	819
600-3800	S	Spec, Assign	Osberg	JCP	20 (1952)	1345
4.1-5.5 μ	G	Spec	Plyler	JCP	20 (1952)	1178
4-5 μ	G	Band study	Plyler	JOSA	42 (1952)	875
-	G	Vib.	Schwartz	JCP	20 (1952)	1591
2000-5000	G	Spec	Talley	JOSA	42 (1952)	982
4.5-25 μ	G	Atmospheric transmission	Taylor	JCP	20 (1952)	528
4-25 μ	G	Spec	Taylor	JOSA	42 (1952)	286
2.4-25 μ	G	Spec	Taylor	JCP	20 (1952)	1884
-	-	FC	Thomas	JCS	- (1952)	2383
2.8-4.3 μ	G	Spec	Tourin	JCP	20 (1952)	1651
4.3-15 μ	G	Struct	Walsh	JFS	43 (1952)	60
-	G	Anal	Watkins	AC	24 (1952)	591
618-5109	G	Absorption	Weber	JCP	20 (1952)	1820
4.3 μ	G	Spec	Yarnell	JSI	29 (1952)	352
15 μ	G	Line width	Adel	PR	90 (1953)	1024
-	G	Band study	Adel	JOSA	43 (1953)	1053
4.25 μ	G	Cathode ray tube presentation	Brown	JSI	30 (1953)	5
-	G	I	Bullock	JOSA	43 (1953)	389
280-5435	G	Calibration data for prism	Downie	JOSA	43 (1953)	941
-	-	Distributed rotation	Van Dranen	JCP	21 (1953)	1404
12.5 μ	G	Spec, Assign	Herzberg	JOSA	43 (1953)	1037
-	G	Emission	Lee	JOSA	43 (1953)	619
15 μ	G	Thermo	Plaso	PR	91 (1953)	458
4.25 μ	G	Spec	Roberts	JSI	30 (1953)	199

-	Energy exchange	Widom	JCP	21	(1953)	1670
2349	Spec	White	JCP	21	(1953)	1399
-	Line shape	Benedict	PR	94	(1954)	752
4900	Band study	Benedict	JRNB	52B	(1954)	57
-	Anal	Berton	CPR	238	(1954)	477
1.28 μ	Microwave	Birnbaum	PR	95	(1954)	622
640-700	I	Cole	JOSA	44	(1954)	741
-	Transmission	Fahrenfort	JCP	22	(1954)	1631
-	Absorption	Fahrenfort	JP	15	(1954)	617
2-7 μ	Spec	France	PR	94	(1954)	1423
-	Anal	Garvin	JACS	76	(1954)	1523
-	Ident	Haszeldine	JCS	-	(1954)	4026
-	Band freq	Johannesen	JRNB	53	(1954)	197
-	Band study	Kendrick	JOSA	44	(1954)	501
-	Emissivity calculations	Penner	JAP	25	(1954)	660
-	FC	Teranishi	JCP	22	(1954)	896
2.8-4.3 μ	Spec	Tourin	JRNB	52B	(1954)	87
-	Thermo.	Woolley	JRNB	52	(1954)	289
-	Fermi resonance	Courtoy	JCP	23	(1955)	975
2-11.5 μ	Spec	Donovan	JCP	23	(1955)	1592
2.7 μ	Anal, Spec	France	JCP	23	(1955)	471
10.4 μ	Absorption, Freq	Gaizauskas	PR	99	(1955)	1639
3-5 μ	Band study	Kostkowski	JOSA	45	(1955)	406
-	Random errors	Lord	AC	27	(1955)	327
-	Anal	Patterson	AC	27	(1955)	574
4-6 μ	Spec, Mol. Const.	Plyler	JRNB	55	(1955)	183
3-16 μ	Spec	Sloan	JOSA	45	(1955)	455
13.8-15.6 μ	Spec	Yates	JOSA	45	(1955)	192
-	Fermi resonance	Amat	JCP	24	(1956)	44
-	Spec	Neu	JPC	60	(1956)	320
2-15 μ	Spec	Pierson	AC	28	(1956)	1218
2.7-15 μ	Spec, Anal	Rossmann	JCP	24	(1956)	1007
721-742	I	Kostkowski	JCP	26	(1957)	1252
800	Spec, Freq, Assign	Dows	SA	13	(1958)	308
-	Pressure modulation	Gilfert	JOSA	48	(1958)	765
1100-2000	Spec	Binder	JACS	81	(1959)	3608
-	Absorption	Singleton	DA	19	(1959)	2372
-	Spec	Jacob	CPR	249	(1959)	523
450-3000	Absorption	Edwards	JOSA	50	(1960)	617
3-6 μ	Spec	Mould	SA	16	(1960)	479

	1020-1100	G	Struct	JPR	(1960)	24
	-	-	I	JCP	33 (1960)	1878
Carbon dioxide (isotopic)	4.5-15.8 μ	G	Anal Spec, Anal	JCP JCP	19 (1951) 22 (1954)	887 36
Carbon dioxide (isotopic)	-	G	Study of isotopes	PR	53 (1938)	983
	2 μ	G	Isotope study	PR	74 (1948)	1881
	1.5-2.5 μ	G	Spec	PR	76 (1949)	1848
	-	-	Doubling theory	JCP	20 (1952)	101
	15 μ	G	Spec	JCP	24 (1956)	103
	3500-8000	G	Anal, Mol. Const.	CJP	35 (1957)	608
	-	-	Band study	DA	19 (1958)	341
Carbon dioxide (isotopic)	2 μ	G	Isotopes	PR	74 (1948)	1881
	1.5-2.5 μ	G	Spec	PR	76 (1949)	1848
	-	-	I	JCP	27 (1957)	1405
	-	-	Freq	JCP	28 (1958)	512
Carbon dioxide (isotopic)	-	-	Quant. Mech.	JPR	68 (1945)	173
	?240-2320	G	Vibrations	JCP	17 (1949)	388
	-	-	Freq	JCP	17 (1949)	747
	-	G	Isotopes, Anal	JCP	19 (1951)	887
	4.5-15.8 μ	G	Spec, Anal	JCP	22 (1954)	36
Carbon dioxide (isotopic)	1.37 μ	G	Vib.	PR	53 (1938)	983
	2 μ	G	Isotopes	PR	74 (1948)	1881
	1.5-2.5 μ	G	Spec	PR	76 (1949)	1848
	2.7 μ	G	Freq	PR	79 (1950)	1004
	4-6 μ	G	Spec, Mol. Const.	JRNB	55 (1955)	183
Carbon dioxide (isotopic)	-	G	Freq	PR	83 (1951)	245
Carbon dioxide (isotopes)	2-16 μ	-	Freq	JCP	17 (1949)	747
	4.5-15.8 μ	G	Spec, Anal	JCP	22 (1954)	36
Carboxylate ion	-	S	Freq	JACS	75 (1953)	4870
Carbonate ion	-	-	Vib.	PR	32 (1928)	773
	-	-	Quant. Mech.	JCP	2 (1934)	432
	-	-	FC	PRS	148 (1935)	87
	-	-	Selection rule	JCP	14 (1946)	8

					FC	Heath	TFS	44 (1948)	873
					Quant. Mech.	Hornig	JCP	16 (1948)	1063
					FC	Linnett	TFS	48 (1952)	592
					FC	Venkateswarlu	JCP	23 (1955)	2368
CO ₃					Band study	Tagirov	DANS	116 (1957)	797
CP					FC	Linnett	TFS	38 (1942)	1
					FC	Wu	PR	71 (1947)	118
CS					FC	Lochte	TFS	28 (1932)	698
					FC	Badger	JCP	2 (1934)	128
					FC	Badger	PR	48 (1935)	284
					FC	Linnett	TFS	38 (1942)	1
					FC	Wu	PR	71 (1947)	118
C ¹² S ³²					Microwave	Mockler	PR	98 (1955)	1837
C ¹² S ³³					Microwave	Mockler	PR	98 (1955)	1837
C ¹² S ³⁴					Microwave	Mockler	PR	98 (1955)	1837
C ¹³ S ³²					Microwave	Mockler	PR	98 (1955)	1837
CS ₂					Spec, Ident	Wentik	JCP	29 (1958)	188
CS ₂					Microwave	Hardy	PR	95 (1954)	385
					Spec, Ident	Wentik	JCP	29 (1958)	188
CS ₂					Dispersion	Nichols	PR	1 (1893)	1
					Transparency	Hollnagel	PR	11 (1918)	505
					Refractive index	Coblentz	JOSA	4 (1920)	432
					Magnetic rotation	Ingersoll	JOSA	5 (1921)	156
					Magnetic rotation	Ingersoll	JOSA	6 (1922)	663
					Spec	Daniels	JACS	47 (1925)	2856
					Freq, Thermo.	Lecomte	TFS	25 (1929)	864
					Vibrations	Yates	PR	36 (1930)	555

25 μ	G	Assign	Dennison	PR	38 (1931)	2077
0.5-2 μ	L	Kerr Effect	Ingersoll	PR	37 (1931)	1184
6.7-33 μ	G	Transmission	Strong	PR	37 (1931)	1565
-	-	Assign	Bhagvantam	PR	39 (1932)	1020
20.7-41 μ	G	Spec	Dennison	PR	41 (1932)	304
-	-	Struct, Thermo	Lochte	TFS	28 (1932)	698
-	-	Isotope effect	Salant	PR	42 (1932)	812
20.7-41 μ	G	Spec	Strong	PR	42 (1932)	267
4.61 μ	G	Spec, Struct	Bailey	PRS	140 (1933)	605
2 μ	L	Kerr effect	Ingersoll	PR	44 (1933)	399
25.2 μ	G	Spec	Strong	PR	45 (1934)	877
-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
-	-	Thermo.	Cross	JCP	3 (1935)	829
-	-	Excited electronic state	Duncan	JCP	3 (1935)	384
-	-	Struct	Mulliken	JCP	3 (1935)	564
1-12 μ	L	Dispersion	Pfund	JOSA	25 (1935)	351
52-152 μ	L	Dispersion	Cartwright	PRS	154 (1936)	138
-	-	FC	Penney	PRS	156 (1936)	654
0.6-9.0 μ	L	Refractive index	Pfund	JOSA	26 (1936)	230
4.54-4.62 μ	G	Spec, Anal	Sanderson	PR	50 (1936)	209
1-2.5 μ	L	Spec	Kinsey	PR	51 (1937)	1074
-	L	Dispersion	Davis	JOSA	30 (1940)	488
-	-	FC	Glockler	RMP	15 (1943)	111
-	-	Absorption	Nielsen	RMP	16 (1944)	307
-	-	Quant. Mech.	Glockler	JCP	13 (1945)	388
3-20 μ	L	Spec	Torkington	TFS	41 (1945)	184
-	-	FC	Gordy	JCP	14 (1946)	305
-	-	FC	McDowell	PRS	187 (1946)	398
2-24 μ	L,G	Spec, Assign	Plyler	JRNB	39 (1947)	59
24-40 μ	-	Freq	Plyler	JCP	16 (1948)	1008
2-15 μ	-	Instrument callibration	Crooker	PR	76 (1949)	592
-	-	Quant. Mech., FC	Duchesne	JCP	17 (1949)	586
-	-	FC	Linnett	TFS	45 (1949)	844
3 μ	-	Dispersion	Lecomte	JPR	11 (1950)	67
650-1400	L	Spec	Cannon	SA	4 (1951)	373
4.7 μ	Sol	Anal	Meeks	AC	23 (1951)	792
-	I	I	Robinson	AC	23 (1951)	1044
1523	G	I	Robinson	JCP	19 (1951)	881
8-15 μ	-	Spec	Scott	JACS	73 (1951)	2599
-	-	FC	Thomas	JCP	19 (1951)	1162
2.2 μ	L	Freq	Acquista	JRNB	49 (1952)	13

	2.2 μ	G	Spec, Freq	Gailar	PR	86 (1952)	586
	-	G	Spec, Freq	Gailar	JRNB	48 (1952)	392
	-	-	Polarizability	Matossi	JCP	20 (1952)	819
	1523	G	I	McKean	JCP	20 (1952)	520
	23-27 μ	G	Prism performance	Plyler	JRNB	49 (1952)	61
	2-15 μ	L	Spec	Priester	APS	6 (1952)	29
	2-15 μ	L	Spec	Tarpley	AC	24 (1952)	315
	-	-	FC	Thomas	JCS	- (1952)	2383
	382.5-469.7	G	Spec	Hadni	CPR	236 (1953)	1761
	7-13.5 μ	L	Spec	Eckstein	JCP	22 (1954)	28
	1200-1800	Sol	Band study, I	Ketelaar	JCP	23 (1955)	749
	1500-2100	Sol	Solutes effect	Ketelaar	JCP	23 (1955)	1549
	-	Sol	Spec	Sirkar	JCP	23 (1955)	2439
	-	G	Anal, Struct	Allen	JACS	78 (1956)	4843
	-	-	FC	Baughan	TFS	53 (1957)	1046
	-	-	Depolarizing light theory	Buckingham	TFS	53 (1957)	884
	1-13 μ	L	Dispersion	Jaffe	JOSA	47 (1957)	782
	380-415	G	Spec	Lord	JOSA	47 (1957)	689
	15-150 μ	-	Spec	Lord	JOSA	47 (1957)	340
	-	-	Freq	Pinchas	AC	29 (1957)	334
	2.2 μ	G	Freq, Mol. Const.	Guenther	JCP	28 (1958)	682
	1200-2500	G	Freq	Jones	JCP	28 (1958)	995
	2-25.27 μ	G,L	Assign, Freq	Schatz	JCP	29 (1958)	959
	2-15 μ	L,G	Spec, Ident	Wentik	JCP	29 (1958)	188
	4530-4575	-	Freq, Struct, Mol. Const.	Guenther	JCP	31 (1959)	1095
	-	G	I	Smirnov	OS	7 (1959)	193
	700-1400	S	I, Assign, Spec	Whalley	CJC	38 (1960)	2105
$C^{13}S_2$	-	-	Quant. Mech.	Glockler	JCP	13 (1945)	388
Carbon disulfide (isotopic)	-	-	-	-	-	-	-
Carbon diselenide	800-2500	-	Spec	Treiber	ACS	11 (1957)	752
	2-15 μ	L,G	Spec, Ident	Wentik	JCP	29 (1958)	188
	7.6-7.9 μ	Sol,G	I	Wentik	JCP	31 (1959)	834
Silicon carbide	-	S	Emissivity	Pirani	JSI	16 (1939)	372
	-	-	Spec	Ramdas	FIAS	37 (1953)	571
	1-15 μ	-	Spec	Stewart	JRNB	59 (1957)	405
	1-25 μ	-	Freq	Spitzer	PR	113 (1959)	127
	1-15 μ	L	Anal	Spitzer	PR	113 (1959)	133

C ₂	Carbon	0.778-2.14 μ	S	Transmission	Nichols	PR	1 (1893)	1
		0.8-8 μ	-	Spec	Nichols	PR	2 (1895)	260
		2.4 μ	-	Emission	Barker	PR	7 (1916)	451
		-	-	Spec	King	PR	14 (1919)	271
		0.9-2 μ	-	Spec	Ingram	PH	33 (1929)	1092
		0.9-2 μ	-	Freq	Ingram	PR	34 (1929)	421
		-	-	Morse potential	Morse	PR	34 (1929)	57
		5-50 μ	-	Absorption	Cartwright	PR	35 (1930)	415
		6.7-33 μ	-	Transmission	Strong	PR	37 (1931)	1565
		20-130 μ	-	Spec	Barnes	PR	39 (1932)	562
		-	-	FC	Badger	JCP	2 (1934)	128
		0.5-2.2 μ	S	Transmission	Hulburt	RSI	5 (1934)	85
		-	-	Mol. Const.	Pekeris	PR	45 (1934)	98
		1-120 μ	S	Spec	Barnes	JOSA	26 (1936)	428
		-	-	Particle size	Gamble	IEC	9 (1937)	310
		0.83-1.13 μ	S	Spec	Kiess	JRNB	20 (1938)	33
		-	-	Potential function	Linnett	TFS	36 (1940)	1123
		-	-	FC	Clark	TFS	37 (1941)	293
		-	-	Potential function	Clark	TFS	37 (1941)	299
		-	-	Thermo	Hulburt	JCP	9 (1941)	61
		2-25 μ	S	Spec	Wells	JPC	45 (1941)	1055
		-	-	FC	Linnett	TFS	38 (1942)	1
		1-17 μ	S	Emissive power	Smith	RSI	13 (1942)	63
		1-2 μ	-	Solar atomic lines	McMath	PR	72 (1947)	644
		-	-	FC	Wu	PR	71 (1947)	118
		1-39 μ	S	Spec	Plyler	JOSA	38 (1948)	988
		1-16 μ	G	Oxyacetylene flame	Benedict	PR	83 (1951)	245
		2-11 μ	S	Spec	Waldock	JPC	56 (1952)	654
		1-2.6 μ	G	Band freq	Benedict	JRNB	52B (1954)	57
		-	-	Thermo.	Glockler	JCP	22 (1954)	159
		-	-	Freq, Spec	Minnhagen	AMAF	7 (1954)	413
C ₂	Dicarbon radical	7900-8300	G	Spec	Benedict	JRNB	53 (1954)	161
C ₂ N ₂	Cyanogen	20.7-152 μ	G	Spec	Strong	PR	42 (1932)	267
		-	-	Spec	Woo	PR	39 (1932)	932
		-	-	Assign	Shochoh Woo	JCP	3 (1935)	541

				Thermo	Linnett	JCS	-	(1937)	1399
				FC	Bailey	JCP	7	(1939)	859
				Spec, Assign	Burick	JCP	7	(1939)	1114
				Freq, Thermo	Thompson	TFS	37	(1941)	344
				FC	Walsh	TFS	42	(1946)	779
				FC	Walsh	TFS	43	(1947)	60
				FC	Linnett	TFS	45	(1949)	844
				I	Nixon	JCP	18	(1950)	1316
				Interaction theory	Duchesne	JCP	19	(1951)	1191
				FC	Jones	PRS	211	(1952)	285
				Polarizability	Matossi	JCP	20	(1952)	819
				Spec	Craine	TFS	49	(1953)	1273
				Spec	Pierson	AC	28	(1956)	1218
				Freq, Thermo	Rutner	JCP	24	(1956)	173
				Spec, NCA	Miyazava	JCP	29	(1958)	421
				NCA, I, FC	Schultz	JMS	2	(1958)	113
$C_2^{12}N_2^{14}$				NCA, I, FC	Schultz	JMS	2	(1958)	113
$C_2^{12}C^{13}N_2^{14}$				Spec	Nelson	JCS	-	(1960)	604
$C_2N_2S_2$				Thermo	Glockler	JCP	22	(1954)	159
C_3				Quant. Mech.	Wilson	JCP	2	(1934)	432
C_3O_2				FC, Spec	Thompson	PRS	157	(1936)	331
				Spec, Freq, Assign	Lord	JCP	5	(1937)	642
				Struct	Thompson	JCS	-	(1937)	1291
				FC	Thompson	JCS	-	(1937)	1384
				FC	Thompson	JCS	-	(1937)	1396
				Thermo	Thompson	TFS	37	(1941)	249
				FC	Walsh	TFS	43	(1947)	158
				FC	Linnett	TFS	45	(1949)	844
				Freq	O'Loane	JCP	21	(1953)	669
				Spec, FC	Long	PRS	223	(1954)	251
				Spec, Assign	Rix	JCP	22	(1954)	429
				I	Williams	JCP	22	(1954)	345
$C_3N_2O_4Si$				Freq, Assign	Widmair	ZAUA	300	(1959)	194

HD ₂ P	Phosphine-d ₂	-	G	Freq	Weston	JCP	20 (1952)	1820
		-	G	Microwave	Sirvetz	JCP	21 (1953)	898
		50-100	G	Freq	Strong	JCP	21 (1953)	2092
		-	-	Thermo	Thyagarajan	JMS	5 (1960)	307
HD ₂ As	Arsine-d ₂	-	-	Thermo	Thyagarajan	JMS	5 (1960)	307
HD ₃ FN	Ammonium fluoride-d ₃	800-3600	S	Freq, Spec	Plumb	JCP	23 (1955)	447
HD ₃ Ge	Germane-d ₃	2112	G	Spec, Freq, Anal	Lindeman	JCP	22 (1954)	1723
HD ₃ Si	Silane-d ₃	4250-4400	G	Spec, Anal	Boyd	JCP	23 (1955)	922
		2-16/μ	G	Spec, Assign, FC, Anal	Meal	JCP	24 (1956)	385
		-	-	Mol. Const.	Meal	JCP	24 (1956)	1126
HD ₃ Si ²⁹	Silane-d ₃ (isotopic)	4300	G	Rotation lines	Boyd	JCP	23 (1955)	922
HD ₃ Si ³⁰	Silane-d ₃ (isotopic)	4300	G	Rotation lines	Boyd	JCP	23 (1955)	922
HD ₅ B ₂	Diborane-d ₅	2-15/μ	G	Spec, Freq, Assign	Lehmann	JCP	29 (1958)	1248
HT	Tritium hydride	-	-	Thermo	Jones	JCP	16 (1948)	1077
HTO	Water-t ₁	-	-	Quant. Mech.	Libby	JCP	11 (1943)	101
		-	-	Thermo	Friedman	PR	94 (1954)	1423
		700-7000	G	Freq, Assign	Staats	JCP	24 (1956)	916
HTS	Hydrogen sulfide-t ₁	-	-	Thermo	Haar	PR	99 (1955)	638
HT ₂ N	Ammonia-t ₂	-	-	Thermo	Thyagarajan	JMS	5 (1960)	307
HT ₂ P	Phosphine-t ₂	-	-	Thermo	Thyagarajan	JMS	5 (1960)	307
HT ₂ As	Arsine-t ₂	-	-	Thermo	Thyagarajan	JMS	5 (1960)	307
HBr	Hydrogen bromide	-	-	Theory of harmonics	Kemble	PR	15 (1920)	95
		3.9/μ	G	Struct	Randall	PR	15 (1920)	152

-	G	Ionization potential	Kemble	PR	19 (1922)	394
-	-	Thermo	Urey	JACS	45 (1923)	1445
-	-	Freq	Rideal	TFS	25 (1929)	921
-	-	Freq, Spec	Snow	TFS	25 (1929)	930
-	L,G	Freq	Breit	PR	36 (1930)	871
-	G	I	Shearin	PR	35 (1930)	973
4850	L	Freq	Salant	PR	37 (1931)	108
-	-	Freq	Salant	PR	37 (1931)	373
-	-	Thermo	Gordon	JCP	1 (1933)	692
2-4 μ	G	Mol. Const.	Plyler	PR	44 (1933)	984
-	-	Electronic moment	Mulliken	JCP	2 (1934)	712
-	-	Spec	Plyler	JCP	2 (1934)	306
-	-	I	Kemble	JCP	3 (1935)	316
1.5-2.8 μ	-	Assign	Barr	JCP	4 (1936)	92
2300-3100	-	Solvent effect	Leberknight	PR	51 (1937)	430
5.4-5.75 μ	-	Strong, & weak acid study	Plyler	PR	51 (1937)	685
-	-	Solvent effect	Williams	PR	51 (1937)	288
-	-	Quant. Mech.	Sutherland	JCP	8 (1940)	161
-	-	FC	Sutherland	JCP	8 (1940)	161
-	-	Thermo	Hulburt	JCP	9 (1941)	61
-	Sol	FC	Warhurst	TFS	40 (1944)	26
-	-	FC	Gordy	JCP	14 (1946)	305
-	-	Quant. Mech.	Davies	JCP	17 (1949)	374
-	-	Bond study	Warhurst	TFS	45 (1949)	461
-	-	FC	Heath	TFS	46 (1950)	137
-	-	Emission	Penner	JAP	21 (1950)	685
-	-	FC	Platt	JCP	18 (1950)	927
-	-	FC	Sheline	JCP	18 (1950)	927
-	G	I	Penner	AC	23 (1951)	1048
2600	G	Spec	Bullock	JCP	20 (1952)	1808
-	-	FC	Moller	JCP	20 (1952)	203
2410-2675	G	Calibration of prism	Downie	JOSA	43 (1953)	941
40-140 μ	G	Spec	Hansler	JCP	21 (1953)	1340
-	-	Bond study	Huggins	JACS	75 (1953)	4426
-	G	I	Penner	JCP	21 (1953)	649
2559	G	Line width	Weber	JCP	21 (1953)	1503
-	-	I	Aroeste	JCP	22 (1954)	1273
1.28 μ	G	Microwave	Birnbaum	PR	95 (1954)	622
-	-	Thermo	Pennington	JCP	22 (1954)	1442
300-4000	S	Spec, Assign, Struct, FC	Hornig	JCP	23 (1955)	662

	-	-	Potential function	Lippincott	JCP	23 (1955)	1131
	G	2-15 μ	Spec	Pierson	AC	28 (1956)	1218
	-	-	FC	Baughan	TFS	53 (1957)	1046
	-	-	Spec	Coulon	CPR	245 (1957)	2247
	S	1900-2800	Spec	Horning	JCP	27 (1957)	752
	S	2-25 μ	Iso., Spec, Struct	Falk	CJC	35 (1957)	1195
	Sol	-	Struct	Lascombe	BSCF	- (1959)	1175
	G, L, S	-	Perturbation of fundamental of HBr	Vu	CPR	249 (1959)	2758
	Sol	-	Solvent effect	Grange	SA	16 (1960)	981
	-	-	Spec, Mol. Const.	Plyler	JRNB	64 (1960)	377
$H^{79}Br$	G	-	Spec, Mol. Const.	Mould	SA	16 (1960)	479
	G	-	Spec, Mol. Const.	Mould	SA	16 (1960)	479
$H^{81}Br$	-	-	Anal	Halverson	RMP	19 (1947)	87
	-	-	Freq, FC	Murata	JCP	23 (1955)	2451
	Sol	1-2.2 μ	Spec	Callow	JCS	109 (1916)	55
	-	-	Rotation	Kemble	PR	8 (1916)	689
	-	-	Theory of harmonics	Kemble	PR	8 (1916)	701
	-	-	Theory of harmonics	Kemble	PR	15 (1920)	95
	G	3.4 μ	Struct	Randall	PR	15 (1920)	152
	G	1.76-3.46 μ	Struct	Randall	PR	15 (1920)	541
	G	3-5 μ	I	Bourgin	PR	29 (1921)	794
	G	-	Ionization potential	Kemble	PR	19 (1922)	394
	-	-	I	Kemble	PR	21 (1923)	713
	G	3.5 μ	Struct	Randall	JOSA	7 (1923)	45
	G	3.2-3.85 μ	Absorption	Spence	JOSA	7 (1923)	169
	-	3.3-3.7 μ	Thermo	Tolman	JACS	45 (1923)	2277
	-	-	Thermo	Urey	JACS	45 (1923)	1445
	G	3.46 μ	Struct	Lowry	JOSA	8 (1924)	647
	-	-	Duration in upper state	Tolman	PR	23 (1924)	693
	-	3.46 μ	I	Kemble	PR	25 (1925)	1
	G	-	Thermo	Hicks	JACS	48 (1926)	1520
	-	-	Dielectric const.	Vanveleck	PR	30 (1927)	31
	-	-	Band study, I	Bourgin	PR	32 (1928)	234
	-	-	I	Dennison	PR	31 (1928)	503

-	-	Thermo	Hutchisson	JACS	50 (1928)	1859
-	3.46 μ	Spec	Barker	TFS	25 (1929)	912
G	2.5-1.8 μ	I	Colby	PR	34 (1929)	53
G	1.76 μ	I	Dunham	PR	34 (1929)	438
-	-	Quantum theory	Ellis	PR	33 (1929)	625
-	-	Spec	Langer	PR	33 (1929)	1097
G	1.8-3.5 μ	I	Meyer	PR	34 (1929)	44
-	-	Freq	Rideal	TFS	25 (1929)	921
L	-	Spec	Salant	PR	33 (1929)	1096
-	-	Freq, Spec	Snow	TFS	25 (1929)	921
G	-	Spec	Wood	PR	33 (1929)	1097
L,G	-	Freq	Breit	PR	36 (1930)	871
-	-	I	Dunham	PR	35 (1930)	1347
G	-	I	Shearin	PR	35 (1930)	973
G	-	Spec	Wood	PR	35 (1930)	1355
L	5543	Freq	Salant	PR	37 (1931)	708
-	-	Spec	Salant	PR	37 (1931)	373
G	1.71-1.75 μ	Isotope effect	Hardy	PR	41 (1932)	471
G	3.5-4.8 μ	Spec	Hardy	PR	42 (1932)	279
G	20.7-152 μ	Spec	Strong	PR	42 (1932)	267
-	-	Thermo	Gordon	JCP	1 (1933)	297
-	-	FC	Badger	JCP	2 (1934)	128
-	-	Electric moments	Mulliken	JCP	2 (1934)	400
-	-	Electric moments	Mulliken	JCP	2 (1934)	712
-	-	Mol. Const.	Pekeris	PR	45 (1934)	98
-	-	Spec	Plyler	JCP	2 (1934)	306
G	14-30 μ	Spec, Anal	Strong	PR	45 (1934)	877
-	-	FC	Badger	PR	48 (1935)	284
G	-	3rd Harmonic	Cleaves	PR	48 (1935)	850
-	-	I	Kemble	JCP	3 (1935)	316
G	1-10 μ	Dispersion	Rollefson	PR	48 (1935)	779
S	3.7 μ	Spec	Shearin	PR	48 (1935)	299
-	1.5-7.8 μ	Assign	Barr	JCP	4 (1936)	92
-	-	Quant. Mech.	Bell	TFS	32 (1936)	1013
G	-	Pressure broadening	Herzberg	PR	50 (1936)	1186
-	2-4.2 μ	Transmission curve	Williams	PR	50 (1936)	719
Sol	1.76 μ	Solvent effect	Plyler	PR	49 (1936)	215
-	-	Solvent effect	West	JCP	5 (1936)	14
-	3-4 μ	Solvent effect	West	PR	49 (1936)	405
Sol	50-150 μ	Bard study	Cartwright	JCP	5 (1937)	776
Sol	2.6-5.8 μ	Spec	Gordy	PR	52 (1937)	1075

Wavelength (μ)	Effect	Author	Year	Page
2300-3100	Solvent effect	Lebenknight	1937	430
5.4-5.75	Strong & weak acid study	Plyler	1937	685
2000-3700	Spec, H bond	Buswell	1938	2528
-	H bond	Freymann	1938	497
3.5	Spec	Randall	1938	72
1.7-3.5	Freq	Shearin	1938	61
2.6-5.4	Solvent effect	JCP	1939	99
3.5	Spec	Randall	1939	768
-	H bond	Rodebush	1939	219
5300-5000	Spec	West	1939	795
2500-3500	Spec, H bond	Buswell	1940	362
2600-2800	Spec	Lee	1940	493
-	Entropy	Linnett	1940	527
-	Quant. Mech.	Mulliken	1940	382
-	FC	Sutherland	1940	161
-	H bond	Sutherland	1940	889
-	Solvent effect	TFS	1941	215
-	Thermo	Gordy	1941	61
3	Band study	Hulburt	1941	2709
2.7	Spec	O'Brien	1941	63
3.46	FC	Smith	1942	54
3-4	Dispersion	Warhurst	1944	26
3.46	Spec	Wright	1944	22
-	Pressure broadening	Barnes	1945	77
-	FC	Foley	1946	616
-	Spec	Gordy	1946	305
2.7	Spec	Bell	1947	48
3.5	Struct	Coggeshall	1947	65
-	FC	Coggeshall	1947	65
-	Band study	Nielsen	1947	296
-	Pressure broadening	Parnell	1948	123
-	Quant. Mech.	Anderson	1949	647
-	Bond lengths	Davies	1949	374
-	FC	Warhurst	1949	461
-	FC	Warhurst	1949	476
100-600	Spec	Heath	1950	137
-	Emission	McCurbin	1950	537
-	FC	Perner	1950	685
-	FC	Platt	1950	927
100-700	Spec	Sheline	1950	932
-	Spec	McCurbin	1951	289

	1900-2800		Spec	Pressure effect	Hornig	JCP	27	(1957)	752
	-	-	line width		Cameo-BOSCO	JPR	19	(1958)	688
	1.76 μ	G	Spec		Kimel	JCP	31	(1959)	81
	-	Sol	Struct		Lascombe	BSCF	-	(1959)	1175
	-	-	Freq		Schuller	CPR	248	(1959)	2194
	-	Sol	Band shift-study		Vu	CPR	248	(1959)	2469
	5660	G	I		Atwood	CPR	250	(1960)	3816
	-	Sol	Absorption		Grange	SA	16	(1960)	981
	-	-	I		Herman	JCP	32	(1960)	1393
	1800-2800	G	Spec, Mol. Const.		Mould	SA	16	(1960)	479
	-	-	Freq		Oksengorn	CPR	250	(1960)	1016
	-	G	Mol. Const.		Plyler	ZE	64	(1960)	717
	-	Sol	Solvent effect, Freq		Schuller	SA	16	(1960)	789
	1.8-3.5 μ	G	I		Meyer	PR	34	(1929)	44
	1.71-1.75 μ	G	Isotope effect		Hardy	PR	41	(1932)	471
	3.45 μ	G	Spec, Anal		Mills	PRS	218	(1953)	29
	-	G	I		Herman	PR	98	(1955)	1550
	1000-3400	G	Spec, Mol. Const.		Stull	JOSA	50	(1960)	1279
	1.8-3.5 μ	G	I		Meyer	PR	34	(1929)	44
	1.71-1.75 μ	G	Isotope effect		Hardy	PR	41	(1932)	471
	3.45 μ	G	Spec, Anal		Mills	PRS	218	(1953)	29
	-	G	I		Herman	PR	98	(1955)	1550
	1000-3400	G	Spec, Mol. Const.		Stull	JOSA	50	(1960)	1279
	-	-	Doubling theory		Mulliken	PR	28	(1931)	85
	-	-	FC		Wu	PR	71	(1947)	118
	2.4-2.6 μ	G	Mol. Complexes		Burke	JMS	3	(1959)	381
	1-15 μ	G	Spec, Assign		Hedberg	JCP	19	(1951)	508
	-	-	H ₂ O ion study		Bethell	JCP	21	(1953)	1421
	2-25 μ	Sol	Is _o , Spec, Struct		Falk	CJC	35	(1957)	1195
	600-4000	S	Group study		Braunholtz	JCS	-	(1959)	868
	1.4-25 μ	G	Mol. Const., Assign		Moore	JACS	74	(1952)	6076
	-	-	Band study		Huggins	JACS	75	(1953)	4126
	1-15 μ	G	Anal		Nadeau	AC	32	(1960)	1480

HF	Hydrogen fluoride (dimer)	300-5000 3000-4000	Sol Sol G - Sol -	Spec, I Polymerization Spec, I Band study Solvent effect Freq	GJG CPR JMS SA SA CPR	36 (1958) 246 (1958) 2 (1958) 12 (1958) 16 (1960) 250 (1960)	1013 3339 75 224 981 1016
HF	Hydrogen fluoride (polymer)	3810-4000 3845-4000	G G	Spec Spec	JMS JOSA	3 (1959) 50 (1960)	473 1264
HF	Hydrogen fluoride (polymer)	-	-	Duration in upper state	PR	33 (1924)	693
		-	-	Spec	JCP	2 (1934)	306
		-	-	H bond	JCP	7 (1939)	856
		-	-	Thermo	JCP	7 (1939)	806
		-	-	H bond, Spec	JCP	8 (1940)	362
		-	-	Quant. Mech.	JCP	8 (1940)	382
		-	-	FC	JCP	8 (1940)	161
		-	G	H bond	JCP	36 (1940)	889
		-	-	Window material to resist HF	JCP	8 (1940)	161
		-	L, Sol	Freq	JCP	8 (1940)	349
		-	-	Thermo	JCP	9 (1941)	61
		-	-	FC	JCP	10 (1942)	606
		-	-	FC	JCP	14 (1946)	305
		-	-	Association	JCP	16 (1948)	324
		-	-	Quant. Mech.	JCP	17 (1949)	374
		-	-	H bond, Thermo	JACS	71 (1949)	1940
		3000-4250	G	Spec	JGS	19 (1951)	1312
		-	-	Bond study	JACS	75 (1953)	4126
		-	Sol	Spec	JCP	22 (1954)	781
		-	-	FC	JCP	22 (1954)	564
		2.5 μ	G	Complex study	JCP	22 (1954)	1834
		-	G	Spec	PR	99 (1955)	1624
		400-10000	L, Sol	Spec	JCP	23 (1955)	1277
		-	G	Vibration relation time	JCP	23 (1955)	1281
		16-23 μ	G	Spec	PR	99 (1955)	1624
HF ₃ Si	Trifluorosilane	- 200-2400	G G	Microwave Spec, Assign	TFS SA	50 (1954) 15 (1959)	779 793

$\text{HF}_3\text{Si}^{28}$	Trifluorosilane (isotopic)	-	1-4 μ	G	Microwave Mol. Const.	Sheridan Burrus	PR	77 (1950)	719
							JCP	26 (1957)	391
$\text{HF}_3\text{Si}^{29}$	Trifluorosilane (isotopic)	-	-	G	Microwave	Sheridan	PR	77 (1950)	719
$\text{HF}_3\text{Si}^{30}$	Trifluorosilane (isotopic)	-	-	G	Microwave	Sheridan	PR	77 (1950)	719
HI	Hydrogen iodide	-	-	-	Thermo	Urey	JACS	45 (1923)	1445
					Freq	Rideal	TFS	25 (1929)	921
					Freq	Snow	TFS	25 (1929)	930
					Thermo	Villars	JACS	52 (1930)	1733
					Freq	Salant	PR	37 (1931)	373
		4262-6262		L	Freq	Salant	PR	37 (1931)	108
					Electric moment	Mulliken	JCP	2 (1934)	400
					Electric moment	Mulliken	JCP	2 (1934)	712
					I	Kemble	JCP	3 (1935)	316
		2.5-4.5 μ		G	Spec, Mol. Const.	Nielsen	PR	47 (1935)	585
		2260-4416		G	Freq	Kirkpatrick	PR	49 (1936)	104
					Thermo	Murphy	JCP	4 (1936)	344
				G	Solvent	Williams	PR	51 (1937)	288
					I	Mulliken	JCP	7 (1939)	20
					Quant. Mech.	Mulliken	JCP	8 (1940)	382
					FC	Sutherland	JCP	8 (1940)	161
					Thermo	Hulburt	JCP	9 (1941)	61
				Sol	FC	Warhurst	TFS	40 (1944)	26
		260-1020		G	Calibration check	Cooley	PR	67 (1945)	296
					FC	Gordy	JCP	14 (1946)	305
					Quant. Mech.	Davies	JCP	17 (1949)	374
					Bond study	Warhurst	TFS	45 (1949)	461
					FC	Heath	TFS	46 (1950)	137
				G	Emission	Penner	JAP	21 (1950)	685
					FC	Platt	JCP	18 (1950)	932
					FC	Sheline	JCP	18 (1950)	927
		4 μ			FC	Boyd	SA	5 (1952)	308
					FC	Moller	JCP	20 (1952)	203
					Bond study	Huggins	JACS	75 (1953)	4126
				G	Ident	Green	JACS	76 (1954)	2127
		300-4000		S	Spec, Assign, Struct,	Hornig	JCP	23 (1955)	662
					FC				

$\text{HNO}_3 \cdot \text{H}_2\text{O}$	Nitric acid monohydrate	550-4000	S, L	Ion study	Bethell	JCP	21 (1953)	1421
HN_3	Hydrazoic acid	2000-3800 2-21 μ	Sol G G	Spec, H bond Spec, Struct, FC Freq, Assign, Quant. Mech.	Buswell Davies Eyster	JACS TFS JCP	61 (1939) 35 (1939) 8 (1940)	2809 1184 135
		2-20 μ 2 μ	G	Freq, Assign, Thermo Freq	Eyster	JCP	8 (1940)	369
		-	-	FC, Freq	Lieber	AC	23 (1951)	1594
		-	-	FC	Thomas	JCS	- (1952)	2383
		-	S, Sol	Study of unstable species	Thomas	TFS	49 (1953)	855
		400-3500	G, S, Sol	Spec, Anal, Assign, Thermo	Whittle	JCP	22 (1954)	1943
		2-15 μ	S	Spec	Dows	JCP	23 (1955)	1258
		-	-	Band freq	Dows	JCP	23 (1955)	1606
		-	-	FC	Sawicki	JACS	77 (1955)	957
		1900-2100	S	Freq	Gray	TFS	53 (1957)	901
		-	-	Microwave	Fujita	JACS	78 (1956)	3295
$\text{HN}^{15}\text{N}^{14}\text{N}^{14}$	Hydrazoic acid (isotopic)	-	-	Microwave	Amble	JCP	18 (1950)	1422
$\text{HN}^{14}\text{N}^{15}\text{N}^{14}$	Hydrazoic acid (isotopic)	-	-	Microwave	Amble	JCP	18 (1950)	1422
$\text{HN}^{14}\text{N}^{14}\text{N}^{15}$	Hydrazoic acid (isotopic)	-	-	Microwave	Amble	JCP	18 (1950)	1422
HN_3^{14}	Hydrazoic acid (isotopic)	-	-	Microwave	Amble	JCP	18 (1950)	1422
HO	Hydroxy radical	0.8-5 μ	G	Acetylene flame FC	Plyler	JRNB	42 (1949)	567
		-	-	FC	Platt	JCP	18 (1950)	932
		7450-7900	G	Spec	Sheline	JCP	18 (1950)	927
		-	-	Freq	Hornbeck	JCP	19 (1951)	512
		-	-	Doubling theory	Mecke	TFS	25 (1929)	936
		-	-	FC	Mulliken	PR	38 (1931)	85
		-	-	Mol. Const.	Badger	JCP	2 (1934)	128
		-	-	Thermo	Pekeris	PR	45 (1934)	98
		-	-	FC	Hulburt	JCP	9 (1941)	61
		-	-	FC	Wu	PR	71 (1947)	118

				Spec	Penner	JCP	20	(1952)	522
				Spec	Plyler	JCP	20	(1952)	1178
				Anal	Benedict	JCP	21	(1953)	398
				Band study	Dejardin	PR	90	(1953)	359
				Rotational temp.	Penner	JCP	21	(1953)	31
				Freq	Benedict	JRNB	52B	(1954)	57
				Rotational temp.	Elliott	JCP	22	(1954)	101
				Thermo	Haar	PR	95	(1954)	614
				FC	Mitra	JCP	22	(1954)	564
				Emission	Penner	JRNB	52B	(1954)	35
				Microwave	Dousmanis	PR	100	(1955)	1735
				Spec	Dows	JCP	23	(1955)	499
				Thermo	Haar	JCP	23	(1955)	869
				Spec	Jones	PR	99	(1955)	1637
				Potential function	Lippincott	JCP	23	(1955)	1131
				Spec	Madden	JCP	23	(1955)	408
				Freq	Makinley	JCP	23	(1955)	784
				Spec	Rogge	JCP	33	(1960)	453
HO ₂	Hydrogen dioxide radical	1035	S	Evidence for existence	Giguere	JCP	22	(1954)	2085
HB	Boronhydride	-	-	Doubling theory	Mulliken	PR	38	(1931)	85
				FC	Platt	JCP	18	(1950)	932
				FC	Sheline	JCP	18	(1950)	927
				FC	Mitra	JCP	22	(1954)	564
HP	Phosphorous monohydride	-	-	FC	Platt	JCP	18	(1950)	932
				FC	Sheline	JCP	18	(1950)	932
				FC	Mitra	JCP	22	(1954)	564
HS	Sulfur hydride	-	-	FC	Platt	JCP	18	(1950)	932
				FC	Sheline	JCP	18	(1950)	927
				FC	Mitra	JCP	22	(1954)	564
				Thermo	Haar	JCP	23	(1955)	869
HAs	Arsenic hydride	-	-	FC	Sheline	JCP	18	(1950)	927
HHe	Helium hydride molecule ion	-	-	Quant. Mech.	Mulliken	JCP	7	(1936)	20
				I	Beach	JCP	4	(1939)	353
				Freq, Quant. Mech.	Evett	JCP	23	(1955)	1169

HSe	Selenium hydride	-	-	FC	Sheline	JCP	18	(1950)	927
HSi	Silicon monohydride	-	-	Doubling theory	Mulliken	PR	38	(1931)	85
		-	-	FC	Wu	PR	71	(1947)	118
		-	-	FC	Platt	JCP	18	(1950)	932
		-	-	FC	Sheline	JCP	18	(1950)	927
		-	-	FC	Mitra	JCP	22	(1954)	564
		-	G	Mol. Const.	Douglas	CJP	35	(1957)	71
H ₂	Hydrogen	-	-	Specific heat theory	Kemble	PR	11	(1918)	156
		-	-	Specific heat	Tolman	PR	22	(1923)	470
		-	-	Thermo	Urey	JACS	45	(1923)	1445
		-	-	Emission	Pfund	JOSA	9	(1924)	193
		-	-	Combustion rate	David	TFS	22	(1926)	273
		10.7 μ	G	Spec	Poetker	PR	30	(1927)	418
		1.00-4.9 μ	G	Spec	Babcock	PR	32	(1928)	327
		-	-	I	McAlister	PR	31	(1928)	917
		-	-	Quant. Mech.	Wang	PR	31	(1928)	579
		1-7 μ	G	Freq	Bailey	TFS	25	(1929)	29
		1-9 μ	G	Freq	Bailey	JCS	-	(1929)	51
		8000-9000	G	Spec, I	Morse	PR	34	(1929)	57
		-	-	Electronic levels	Richardson	TFS	25	(1929)	686
		1-4 μ	G	Emission curves	Garner	TFS	26	(1930)	36
		-	-	Thermo	Villars	JACS	52	(1930)	1733
		-	-	Doubling theory	Mulliken	PR	38	(1931)	85
		-	-	Wave mechanics	Rosen	PR	38	(1931)	2099
		-	-	Rotating vibrator theory	Dunham	PR	41	(1932)	721
		8.7 μ	G	Dispersion	Korff	RMP	4	(1932)	471
		-	-	Freq	Rosen	PR	43	(1933)	5
-	-	FC	Badger	JCP	2	(1934)	128		
-	-	Thermo	Johnston	JCP	2	(1934)	389		
-	-	Anal	Dieke	PR	47	(1935)	261		
-	-	Quant. Mech.	Mulliken	JCP	3	(1935)	375		
-	-	Pressure broadening	Watson	JPC	41	(1937)	61		
1.175 μ	G	Anal	Richardson	PRS	164	(1938)	316		
-	-	I	Mulliken	JCP	7	(1939)	20		
-	G	Thermo	Pitzer	CR	27	(1940)	39		
-	G	Spec, Anal	Ginsburg	PR	59	(1941)	632		
-	-	Thermo	Hulburt	JCP	9	(1941)	61		
0.6-1 μ	G	Spec	Gaydon	PRS	181	(1942)	197		

-	-	-	FC	Glockler	JCP	10 (1942)	606
-	-	Sol	FC	Warhurst	TFS	40 (1944)	26
-	-	-	Quant. Mech.	Coulson	TFS	41 (1945)	141
-	-	-	FC	Gordy	JCP	14 (1946)	305
-	-	-	Spec	Coggeshall	JCP	15 (1947)	65
-	-	-	Interatomic distance	Wu	PR	71 (1947)	111
-	-	-	Collision excitation	Wu	PR	71 (1947)	118
-	-	-	Decomposition product	Simard	JCP	16 (1948)	836
-	-	G	Spec	Herzberg	N	163 (1949)	170
3500-5500	-	G	Absorption	Welsh	PR	76 (1949)	580
3600-5200	-	G	Absorption	Crawford	PR	80 (1950)	469
-	-	G	Absorption	Mizushima	PR	77 (1950)	150
-	-	G	Anal	D'Neal	AC	22 (1950)	991
-	-	-	FC	Platt	JCP	18 (1950)	932
-	-	-	FC	Sheline	JCP	18 (1950)	927
8000-9000	-	G	Spec, I	Welsh	PR	83 (1951)	1264
3500-5500	-	G	Absorption	Chisholm	PR	88 (1952)	957
-	-	G	Absorption	Crawford	PR	91 (1953)	1569
-	-	-	Bond study	Huggins	JACS	75 (1953)	4126
-	-	G	Absorption	Chisholm	CJP	15 (1954)	511
3500-5500	-	G	Absorption	Chisholm	CJP	32 (1954)	291
6505	-	G	Transmission	Fahrenfort	JCP	22 (1954)	1631
-	-	-	Potential energy function	Frost	JCP	22 (1954)	1017
-	-	L,S	Absorption	Allin	PR	98 (1955)	554
3500-5500	-	L,S,G	Spec	Allin	PR	99 (1955)	1639
4000-5500	-	L,S	Spec	Hare	PR	99 (1955)	1887
8-15 μ	-	G	Spec	Ketelaar	JCP	23 (1955)	413
-	-	-	Potential function	Lippincott	JCP	23 (1955)	603
-	-	-	Potential function	Lippincott	JCP	23 (1955)	1131
-	-	-	Vibrations	Penney	JCP	23 (1955)	1281
1-2 μ	-	G	Emission	Porto	JOSA	45 (1955)	447
-	-	L,S	Spec	Allin	JCP	24 (1956)	1116
-	-	-	Potential function	Baekel	JCP	24 (1956)	553
-	-	-	Electric-nuclear motion coupling	Wu	JCP	24 (1956)	48
-	-	-	FC	Baughan	TFS	53 (1957)	1046
420-1300	G	Spec	Colpa	MP	1 (1957)	14	
4000-5000	G	Spec, Struct	Gush	CJP	35 (1957)	712	
4130-4760	S	Spec, Freq, Assign	Gush	PR	106 (1957)	1101	

H_2^+	Hydrogen molecule ion	-	-	Morse potential	Morse	PR	34 (1929)	57
		-	-	I	Mulliken	JCP	7 (1939)	20
		-	-	FC	Glockler	JCP	10 (1942)	606
		-	-	Quant. Mech.	Coulson	TFS	41 (1945)	141
		-	-	Potential energy function	Frost	JCP	22 (1954)	1017
		-	-	Potential function	Lippincott	JCP	23 (1955)	603
		-	-	Electric-muclear motion coupling	Wu	JCP	24 (1956)	48
H_2DN	Ammonia-d ₁	-	-	Freq	Howard	JCP	3 (1935)	207
		800-1000	G	Spec	Migoette	PR	50 (1936)	418
		-	-	Quant. Mech.	Wall	JCP	5 (1937)	314
		-	-	Anal	Halverson	RMP	19 (1947)	87
		-	-	Group study	Burgess	PR	76 (1949)	1267
		-	-	Criticism	Bigeleisen	JCP	20 (1952)	1495
		733-982	G	Isotope properties	Stedman	JCP	20 (1952)	718
		800-3500	S	Spec, Assign, NCA	Reding	JCP	23 (1955)	1053
		30-2000	-	Spec, Mol. Const.	Palik	JCP	26 (1957)	1093
		10-80 μ	G	Spec	Loewenstein	JOSA	50 (1960)	1163
H_2DO_2P	Deutero hypophosphorous acid	-	L	Freq	Hammond	JACS	77 (1955)	2444
H_2DP	Phosphine-d ₁	-	G	Freq	Weston	JCP	20 (1952)	1820
		-	-	Microwave	Sirvetz	JCP	21 (1953)	898
		50-100	G	Freq	Stroup	JCP	21 (1953)	2092
		-	-	Thermo	Thyagarajan	JMS	5 (1960)	307
H_2DAs	Arsine-d ₁	-	-	Thermo	Thyagarajan	JMS	5 (1960)	307
H_2DAs^{75}	Arsine-d ₁ (isotopic)	-	-	Microwave	Jashe	PR	95 (1954)	299
H_2D_2Si	Silane-d ₂	2-16 μ	G	Spec, Assign, FC, Anal	Meal	JCP	24 (1956)	385
$H_2D_4NO_4P$	Ammonium dihydrogen phosphate-d ₄	300-3000	S	Freq, Spec	Blinc	MP	1 (1959)	381
$H_2D_4B_2$	Diborane-d ₄	2-15 μ	G	Spec	Lehmann	JCP	29 (1958)	1248

H_2 TN	Ammonia- t_1	-	-	Thermo	Thyagarajan	JWS	5 (1960)	307
H_2 TP	Phosphine- t_1	-	-	Thermo	Thyagarajan	JMS	5 (1960)	307
H_2 TAs	Arsine- t_1	-	-	Thermo	Thyagarajan	JMS	5 (1960)	307
H_2 Br ₂ Si	Dibromosilane	-	-	Freq, Assign Spec, Assign, Thermo Freq, FC	Hawkins Mayo Murata	JCP JCP JCP	21 (1953) 23 (1955) 23 (1955)	1122 1344 2451
H_2 ClN	Chloroamine	-	1.4-25 μ	Quant. Mech. Spec, Assign	Wilson Moore	JCP JACS	2 (1934) 74 (1952)	432 6076
H_2 Cl ₂ Si	Dichlorosilane	-	400-5000	Spec, Assign, Thermo Freq, Assign, Thermo Freq, Struct	Hawkins Hawkins Smith	JCP JCP SA	21 (1953) 21 (1953) 15 (1959)	360 1122 412
H_2 Cl OSi ₂	1,1,3,3-Tetrachloro- disiloxane	-	2050	Spec, Freq Freq, Struct	West Smith	JACS SA	75 (1953) 15 (1959)	1002 412
H_2 F ₂ Si ²⁸	Difluorosilane (isotopic)	-	2050-2250	Spec, Mol. Const.	Laune	JCP	26 (1957)	1359
H_2 F ₂ Si ²⁹	Difluorosilane (isotopic)	-	12000-38000	Spec, Mol. Const.	Laurie	JCP	26 (1957)	1359
H_2 N	Amine free radical	-	-	Struct	Mulliken	JCP	1 (1933)	492
H_2 N ₂	Diimide	-	2-15 μ	Spec	Dows	JCP	23 (1955)	1606
H_2 O	Water	-	0.77-2.82 μ 9 μ	Transmission curves Spec Absorption	Nichols Rubens Rubens	PR AP AP	1 (1893) 300 (1898) 300 (1898)	1 584 602
		-	2-4 μ 1-6 μ 0.6-1.35 μ	Spec Freq Activity vs concentration	Angstrom Coblentz Hulburt	PR PR JPC	3 (1914) 10 (1917) 21 (1917)	47 96 150
		-	1-3 μ	Spec	Gromtham	PR	18 (1921)	339

0.4-1.3 μ	L	Polarization	Ingersoll	JOSA	5	(1921)	156
0.7-2.1 μ	L	Temperature effect	Collins	PR	20	(1922)	486
0.75-18 μ	G	Scattering loss	Fowle	JOSA	6	(1922)	99
0.8-2.0 μ	L	Magnetic rotation	Ingersoll	JOSA	6	(1922)	663
6 μ	G	Spec	Sleator	PR	19	(1922)	394
-	L,S,G	Absorption	Brown	PR	21	(1923)	103
0.4-2.7 μ	L	Refractive index	Tear	PR	21	(1923)	611
310 μ	L	Transmission	Weniger	JOSA	7	(1923)	517
-	-	Freq	Ellis	JOSA	8	(1924)	1
0.75-1.4 μ	S	Optical properties	Plyler	JOSA	9	(1924)	545
0.8-2.3 μ	L,G	Spec	Collins	PR	26	(1925)	771
-	G	Bumens flame	Ellis	PR	26	(1925)	283
0.7-1.4 μ	L	Photochemistry	Franklin	JPC	29	(1925)	713
0.3-7 μ	S	Reflectivities	Hulbert	JOSA	17	(1928)	23
0.9727 μ	L	Freq	Lamby	PR	31	(1928)	706
-	G	Freq	Bailey	TFS	25	(1929)	29
5-8 μ	G	Freq	Bailey	TFS	25	(1929)	32
0.4-3 μ	G	Transmission of fog	Granath	PR	33	(1929)	1073
0.4-3 μ	G	Absorption curves	Granath	PR	34	(1929)	140
-	L	for fog					
-	-	Spec	Lecomte	TFS	25	(1929)	864
-	-	Freq	Mecke	TFS	25	(1929)	936
-	-	Mol. Const.	Rideal	TFS	25	(1929)	921
-	-	Water of crystallization	Schaefer	TFS	25	(1929)	841
-	-	Electric moment	Williams	CR	6	(1929)	589
-	-	Freq	Bailey	TFS	26	(1930)	197
-	G	Spec	Bailey	TFS	26	(1930)	203
3-4 μ	G	Absorption	Barnes	PR	36	(1930)	296
1.4-1.9 μ	G	Spec	Brackett	RSI	1	(1930)	181
0.7-1.05 μ	L	Spec	Collins	PR	36	(1930)	305
0.2-2.4 μ	L	Body fluids	Forsythe	JOSA	20	(1930)	693
0.3-2.6 μ	G	Transmission	Anderson	PR	37	(1931)	1012
-	G	Atmospheric temp.	Hulburt	PR	38	(1931)	1876
1.13-1.45 μ	G	Spec, Ident	McAlister	PR	37	(1931)	1012
7-9 μ	G	Band study	Nielsen	PR	37	(1931)	1012
1.87-6.26 μ	G	Spec, Freq	Plyler	PR	37	(1931)	1493
1.4-1.9 μ	G	Band study	Plyler	PR	38	(1931)	1784
6.7 μ	G	Spec	Firestone	RSI	3	(1932)	163
0-8.7 μ	-	Dispersion	Korff	TFS	46	(1932)	137
1.4-1.9 μ	G	Spec, Freq, Assign	Plyler	PR	39	(1932)	77
6.26 μ	G	Band study	Silverman	PR	41	(1932)	486

20.7-152 μ	G	Spec	Strong	PR	42 (1932)	267
-	G	Spec	Villars	CR	11 (1932)	369
10-25 μ	G	Spec	Weber	PR	40 (1932)	835
0.7-2.7 μ	G	Spec	Ellis	RSI	4 (1933)	123
-	-	Thermo	Gordon	JCP	1 (1933)	308
-	-	Struct	Mulliken	JCP	1 (1933)	492
-	-	Quant. Mech.	VanVleck	JCP	1 (1933)	357
60-125 μ	G	Spec	Wright	PR	44 (1933)	391
-	G	FC	Bonner	PR	46 (1934)	458
1-7 μ	L	Spec	Casselman	PR	45 (1934)	221
1-10 μ	-	Assign	Ellis	JCP	2 (1934)	559
-	G	Thermo	Gordon	JCP	2 (1934)	65
0.4-7 μ	G	Absorption	Hulbert	P	5 (1934)	101
-	-	Freq	Mecke	TFS	30 (1934)	200
-	-	Electronic moment	Mulliken	JCP	2 (1934)	400
2.5-6.5 μ	L	Spec	Plyler	JCP	2 (1934)	303
-	-	Spec	Rank	JCP	2 (1934)	464
13-22 μ	G	Spec	Strong	PR	45 (1934)	877
-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
5-21 μ	G	Absorption	Adel	PR	47 (1935)	580
-	-	Comparison	Barker	JCP	3 (1935)	660
38-170 μ	G	Absorption	Barnes	PR	47 (1935)	918
-	-	Vibrations	Duncan	JCP	3 (1935)	384
1.2-7.5 μ	Sol	Spec	Gordy	JCP	3 (1935)	664
-	-	Anal	Plyler	JCP	3 (1935)	679
1.5-2.8 μ	-	Assign	Barr	JCP	4 (1936)	92
50-200 μ	L	Absorption	Cartwright	PR	49 (1936)	101
15-150 μ	L	Struct	Cartwright	PR	49 (1936)	470
5.2-152 μ	S,Sol, L	Dispersion	Cartwright	PRS	154 (1936)	138
-	-	H bond	Gordy	JCP	4 (1936)	749
2.5-6.5 μ	L	H bond	Gordy	JCP	4 (1936)	769
1-2.5 μ	L	Spec	Kinsey	PR	49 (1936)	105
-	-	FC	Penney	PRS	156 (1936)	654
4-10 μ	L	Freq	Williams	PR	49 (1936)	869
4-5 μ	Sol	Quant. Anal	Williams	JCP	4 (1936)	251
2.7-6.3 μ	L,Sol	Spec	Williams	JCP	4 (1936)	154
-	-	Thermo	Wilson	JCP	4 (1936)	526
9000-11000	L	Spec, H bond	Badger	JCP	5 (1937)	839
-	G	Pressure effect	Collins	PR	51 (1937)	88
1.79 μ	L	Absorption	Cornell	PR	51 (1937)	1074
-	L,S	Struct	Cross	JACS	59 (1937)	1134

-	-	Absorption	Gordy	JCP	5	(1937)	202
0.98-1.7 μ	L	Spec	Kellner	PRS	159	(1937)	410
-	-	Theoretical	King	JCP	5	(1937)	405
-	-	Theoretical	King	JCP	5	(1937)	413
1.25-3 μ	L	Rotation	Kinsey	PR	51	(1937)	1074
18-75 μ	G	Spec	Randall	PR	52	(1937)	160
2-8 μ	L	Spec	Williams	JACS	59	(1937)	1422
2.8-6.2 μ	L,Sol	Spec, Freq	Williams	JPC	41	(1937)	645
-	-	Quant. Mech.	Badger	JCP	6	(1938)	711
2.6-3.8 μ	Sol	Spec	Borst	JCP	6	(1938)	61
1.875-1.399 μ	G,L	Rotation	Ellis	PR	54	(1938)	599
-	-	Spec	Ellis	JCP	6	(1938)	316
-	-	Freq	Ellis	JCP	6	(1938)	723
-	-	Absorption	Elaasser	PR	53	(1938)	768
3250-3600	Sol	Stray light correction	Errera	JFS	34	(1938)	728
2.5-3.5 μ	L,Sol	Spec, H bond	Gordy	JACS	60	(1938)	605
3-5.4 μ	-	Spec	Plyler	JCP	6	(1938)	316
63-98 μ	G	Spec	Randall	RSI	9	(1938)	404
18-80 μ	G	Spec	Randall	RMP	10	(1938)	72
2.6-23.8 μ	L	Freq	Shearin	JOSA	28	(1938)	61
2.6-3.5 μ	L	Spec, Freq	Buswell	JPC	43	(1939)	1181
2-2.65 μ	L	Absorption	Collins	PR	55	(1939)	470
1.5-2 μ	L	Group study	Ellis	PR	55	(1939)	597
-	-	Heat transfer	Elsasser	PR	56	(1939)	855
23-135 μ	G	Study of D ₂ O	Fuson	PR	56	(1939)	982
4.7 μ	L	Solute effect	Gautier	PR	56	(1939)	616
-	-	Coriolis coupling	Jahn	PR	56	(1939)	680
-	-	theory					
0.5-1.2 μ	L	Optical filters	Pfund	JOSA	29	(1939)	56
-	-	H bond, Freq	Rodebush	JPC	43	(1939)	219
53-106	L	Dispersion	Skolil	PR	55	(1939)	880
-	-	Statistical mechanics	Stephenson	JCP	7	(1939)	614
10410-10480	-	Spec	Zumwalt	JCP	7	(1939)	235
-	-	H bond, Freq	Badger	JCP	8	(1940)	288
-	-	Vibration-Rotation	Darling	PR	57	(1940)	128
-	-	Theory					
-	G	Freq	Demison	RMP	12	(1940)	175
3 μ	Sol	Spec, H bond	Errera	JCP	8	(1940)	63
2.5-7.5 μ	-	Spec	Fox	PRS	174	(1940)	234
-	G	Thermo	Pitzer	CR	27	(1940)	39
1-12 μ	G	Transmission	Sanderson	JOSA	30	(1940)	405

1-10 μ	G	Transmission	Smith	JOSA	30	(1940)	332
-	G	Spec	Adel	PR	59	(1941)	915
2.8-3.3 μ	Sol	Reflection	Buswell	JCP	45	(1941)	543
0.3-15 μ	L	Dispersion	Centeno	JOSA	31	(1941)	244
3.3-6.26 μ	G	Spec, Anal	Elsasser	PR	59	(1941)	218
6 μ	G	Spec	McAlister	RSI	12	(1941)	314
-	G	Emission	Nielsen	PR	59	(1941)	565
-	-	Quant. Mech.	Redlich	JCP	9	(1941)	278
-	-	Freq	Barker	RMP	14	(1942)	198
0.6-1 μ	G	Spec	Gaydon	PRS	181	(1942)	197
1.4-1.87 μ	G	Absorption	Haworth	PR	62	(1942)	298
3 μ	-	H ₂ O in crystal	Lyon	PR	61	(1942)	482
1.4-2.7 μ	G	Spec, Anal	Nielsen	PR	62	(1942)	422
5-18 μ	G	Spec	Oetjen	RSI	13	(1942)	515
-	-	Quant. Mech.	Schaffer	JCP	10	(1942)	405
7 μ	G	Spec	Smith	RSI	13	(1942)	54
-	-	FC	Glockler	RMP	15	(1943)	111
-	-	Ratio Rule	Noether	JCP	11	(1943)	97
-	G	Spec	Bobrovnikoff	RMP	16	(1944)	271
-	G	Absorption	Nielsen	RMP	16	(1944)	307
-	-	Quant. Mech.	Schaffer	JCP	12	(1944)	504
1-7 μ	L	Transmission	Williams	PR	66	(1944)	6
6 μ	G	Spec	Barnes	JAP	16	(1945)	77
0.4-1.1 μ	G	Spec	Foster	JOSA	35	(1945)	601
-	-	Quant. Mech.	Glockler	JCP	13	(1945)	388
-	-	FC	Linnett	TFS	41	(1945)	223
5.7-6.7 μ	G	Resolving power	Oetjen	JOSA	35	(1945)	743
6.25 μ	G	Amplifier performance	Roess	RSI	16	(1945)	172
1 μ	G	Microwave	Becker	PR	70	(1946)	300
-	-	FC	Gordy	JCP	14	(1946)	315
-	-	Quant. Mech.	King	JCP	14	(1946)	35
-	-	FC	Simpson	JCP	14	(1946)	294
1 μ	G	Microwave	Townes	PR	70	(1946)	558
16-18.6 μ	G	Line width	Adel	PR	71	(1947)	806
3-5 μ	G	Spec	Bell	RSI	18	(1947)	48
-	Sol	Anal	Penning	IAC	19	(1947)	867
-	-	Refractive index	Brown	PR	72	(1947)	534
-	-	Anal	Halverson	RMP	19	(1947)	87
1.5-24 μ	L	Vibrations	Johnson	PR	72	(1947)	158
-	-	Microwave	King	PR	71	(1947)	433
-	-	Moment of Inertia	King	JCP	15	(1947)	85
2.6-4.2 μ	Sol	Spec	Martin	N	159	(1947)	403

-	Microwave	Vanvleck	PR	71 (1947)	425
1.9 μ	Spec	Badger	RSI	19 (1948)	861
1.35 μ	Anal	Benedict	PR	74 (1948)	1264
-	Rotational levels	Ginsburg	PR	74 (1948)	1052
-	Spec, Microwave	Golden	PR	73 (1948)	92
-	FC	Heath	TFS	44 (1948)	556
6 μ	Spec	Hovorka	RSI	19 (1948)	915
1.42-25 μ	Absorption	Mohler	PR	74 (1948)	702
-	Anal	Nelson	PR	74 (1948)	703
1-24 μ	Spec	Plyler	JRNB	40 (1948)	113
1.7-24 μ	Spec	Plyler	JRNB	40 (1948)	125
22-40 μ	Spec	Plyler	JRNB	40 (1948)	449
-	FC	Richards	TFS	44 (1948)	40
-	Microwave	Townes	PR	74 (1948)	1113
-	Config.	Benedict	PR	75 (1949)	1317
500-4000	Spec	Gore	AC	21 (1949)	382
-	FC	Linnett	TFS	45 (1949)	844
-	Pressure broadening	Matossi	PR	76 (1949)	1845
0.8-5 μ	Acetylene flame	Plyler	JRNB	42 (1949)	567
1.25 μ	Absorption	Saxton	N	163 (1949)	871
-	Quant. Mech.	Torkington	JCP	17 (1949)	357
-	Thermo	Westrum	JACS	71 (1949)	1940
1.35-1.85 μ	Experimental check of theory	Chapman	PR	77 (1950)	741
-	FC	Heath	TFS	46 (1950)	137
-	Stratospher radiation equilibria	Flass	PR	78 (1950)	334
6 μ	Spec	Wood	RSI	21 (1950)	764
-	Anal	Badin	JACS	73 (1951)	1550
1.7-2.2 μ	Emission	Bass	AC	23 (1951)	1047
2.43-2.87 μ	Spec	Benedict	JRNB	46 (1951)	246
0.7-2.5 μ	Spec	Curcio	JOSA	41 (1951)	302
2800-4200	Spec	Coulson	JCS	- (1951)	2125
-	Bond interaction theory	Duchesne	JCP	19 (1951)	1191
1-14 μ	Transmission	Gebbie	PRS	206 (1951)	87
100-700 μ	Spec	McCurbin	JOSA	41 (1951)	298
2.7 μ	Anal	Meeks	AC	23 (1951)	792
35-75 μ	Transmission	Wisser	PR	82 (1951)	765
50 μ	Absorption	Flass	PR	85 (1951)	708
-	Freq, Spec	Plyler	JOSA	41 (1951)	867

8-13 μ	G	Spec	Shaw	PR	82 (1951)	559
6 μ	G	Spec	Tetlow	JSI	28 (1951)	161
4.9-6.2 μ	G	Spec	Tilton	JRNB	47 (1951)	25
4.5-13 μ	G	Spec, Assign	Benedict	JRNB	49 (1952)	91
0.9-2 μ	G	H ₂ O in atmosphere	Calfee	PR	88 (1952)	157
2.7 μ	G	Spec	Goulden	JSI	29 (1952)	215
6 μ	G	Instrument performance	Ham	JOSA	42 (1952)	496
1.87 μ	G	Pressure dependency	Howard	JOSA	42 (1952)	423
0.93-1.13 μ	G	Freq, I	Kiess	JRNB	48 (1952)	377
0.7-2.5 μ	L	Spec	Lauer	APS	6 (1952)	29
15-25 μ	G	Spec, Freq	Marrison	JSI	29 (1952)	233
100-700 μ	G	Spec	McCubbin	JCP	20 (1952)	668
16-120 μ	G	Freq, Spec	McCubbin	JOSA	42 (1952)	113
0.4-22.5 μ	G, L	Freq	McCubbin	JOSA	42 (1952)	876
-	-	Chemical binding	Mecke	JCP	20 (1952)	1935
-	-	FC	Moller	JCP	20 (1952)	203
44-110 μ	G	Spec	Oetjen	JOSA	42 (1952)	559
1-2 μ	G	Spec, Freq	Plyler	JRNB	48 (1952)	221
23.6-37.5 μ	G	Freq, Spec	Plyler	JRNB	49 (1952)	61
6.5-7.5 μ	G	Spec	Roberts	JSI	29 (1952)	134
0.1 μ	G	Spec	Sinton	PR	86 (1952)	424
-	G	Emission	Talbey	JOSA	42 (1952)	982
4.5-25 μ	G	Spec, Transmission	Taylor	JCP	20 (1952)	578
4-25 μ	G	Spec	Taylor	JOSA	42 (1952)	286
2.4-25 μ	G	Spec	Taylor	JCP	20 (1952)	1884
-	-	Struct	Torkington	JPC	56 (1952)	336
2.7-3.3 μ	Sol	H bond	Tsuboi	BCSJ	25 (1952)	160
6 μ	G	Instrument performance	Walsh	JOSA	42 (1952)	96
6.3 μ	G	Spec	Yarnell	JSI	29 (1952)	352
25-52 μ	-	Calibration of prism	Acquista	JOSA	43 (1953)	333
200-440	G	Spec	Acquista	JOSA	43 (1953)	977
-	G	Band study	Adel	JOSA	43 (1953)	1053
0.6 μ	G	Dispersion	Birnbaum	JCP	21 (1953)	57
600-2000	G	Spec	Blout	JOSA	43 (1953)	1093
130-440	G	Spec	Bohn	JCP	21 (1953)	719
2.8 μ	G	Spec	Cole	JOSA	43 (1953)	807
280-5435	G	Calibration data for prism	Downie	JOSA	43 (1953)	941

-	Spec	Fraser	JOSA	43 (1953)	929
6 μ	Resolution	Fraser	JOSA	43 (1953)	929
-	Band study	Huggins	JACS	75 (1953)	4126
1170-8700	Spec	Innes	JCP	21 (1953)	545
-	Microwave	Jen	JCP	21 (1953)	520
-	Band study	Lee	JOSA	43 (1953)	619
1-15 μ	Reflection	McAlister	JOSA	43 (1953)	823
2.6-6 μ	Spec	Menzies	JSI	30 (1953)	441
38-52 μ	Spec	Plyler	JOSA	43 (1953)	212
6 μ	Spec	Roberts	JSI	30 (1953)	199
-	Struct	Hundle	JCP	21 (1953)	1311
-	Anal	Smith	AC	25 (1953)	528
-	Vibration interaction theory	Torkington	JCP	21 (1953)	83
-	Anal	Trenner	APS	7 (1953)	166
800-3600	Spec, Struct, Freq	Waldron	JACS	75 (1953)	6079
2.7 μ	Spec	Walsh	JOSA	43 (1953)	989
1.7-2.2 μ	Spec, Assign, I	Benedict	JRNB	52 (1954)	161
1-2.6 μ	Band study, I	Benedict	JRNB	52 (1954)	57
-	Anal	Burton	CPR	238 (1954)	477
-	Thermo.	Blue	JCP	22 (1954)	28
6.3 μ	Absorption	Burch	PR	94 (1954)	1424
1550-1800	Instrument performance	Cole	JOSA	44 (1954)	741
3650-3950	Instrument performance	Cole	JOSA	44 (1954)	741
-	Ident	Cox	JCS	- (1954)	3183
2.7-6 μ	Spec	Dalby	PR	94 (1954)	1423
-	Absorption	Daw	PR	94 (1954)	1424
2.8-6 μ	Thermo.	Friedman	PR	94 (1954)	1423
2.8-6 μ	Spec	Gaunt	JSI	31 (1954)	315
1300-1800	Spec	Holiday	JSI	31 (1954)	261
2600-3800	Spec, Freq	Jones	JCP	22 (1954)	217
-	Spec	Kaye	SA	6 (1954)	254
5-7.5 μ	Spec	Kendricks	JOSA	44 (1954)	501
0.1-0.2 μ	Microwave	King	PR	93 (1954)	407
-	Ident	Maley	AC	26 (1954)	435
-	Thermo.	Pennington	JCP	22 (1954)	1442
2-42 μ	Spec	Plyler	JOSA	44 (1954)	505
-	Centrifugal distortion theory	Posener	PR	95 (1954)	374
15-27 μ	Freq, Spec	Roberts	JSI	31 (1954)	226
0-60 μ	Microwave, Spec	Rogers	PR	95 (1954)	622
-	Ident	Tobin	JACS	76 (1954)	3249

2 μ	S	Crystal forms	Vanderberg	AC	26	(1954)	428
0.6-2.7 μ	S	Dispersion	Vanderberg	JCP	22	(1954)	3249
2-8 μ	G	Spec	Ahlers	JSI	32	(1955)	61
2-11.5 μ	G	Spec	Donovan	JCP	23	(1955)	1592
1400-2100	G	Spec	Dows	JCP	23	(1955)	499
-	-	Transmission	Johnson	JOSA	45	(1955)	451
-	S	H bond	Lippincott	JCP	23	(1955)	1099
523-540	G	Spec	Madden	JCP	23	(1955)	408
202.8-420	G	Calibration for prism	Mills	JOSA	45	(1955)	785
-	-	Vibration	Morino	JCP	23	(1955)	737
-	-	Anal	Patterson	AC	27	(1955)	574
100-450	G	Spec	Plyler	JCP	23	(1955)	752
3-16 μ	G	Spec	Sloan	JOSA	45	(1955)	455
-	G	FC	Slowiroski	JCP	23	(1955)	1933
2.5-11 μ	L	Spec	Wright	APS	9	(1955)	105
-	G	Mol. Const.	Benedict	JCP	24	(1956)	1139
0.9-3 μ	Sol	Spec	Holman	AC	28	(1956)	1533
1330-2100	G	Spec, Freq	Jones	JCP	24	(1956)	1250
-	-	Coriolis coupling theory	Meal	JCP	24	(1956)	1126
-	-	Spec	Neu	JPC	60	(1956)	320
-	S	H bond	Pimental	JCP	24	(1956)	639
-	-	Vibrations	Polo	JCP	24	(1956)	1133
2.5-12 μ	L	Spec	Potts	AC	28	(1956)	1255
-	-	FC	Smith	TFS	52	(1956)	891
0.08-.36 μ	G	Absorption	Theissing	JAP	27	(1956)	538
1.4 μ	Sol	Spec	White	AC	28	(1956)	1538
1.8-2.1 μ	Sol	Anal	Cordes	AC	29	(1957)	485
9.68-9.46 μ	G	Alcohols in water	Friedel	AC	29	(1957)	1362
1-18 μ	L	Dispersion	Jaffe	JOSA	47	(1957)	782
55-1600	-	Spec	Lord	JOSA	47	(1957)	689
15-150 μ	-	Spec, Struct	Lord	JOSA	47	(1957)	340
2.8 μ	Sol	Quant. Anal	Matsuyama	AC	29	(1957)	196
-	Sol	Anal	Spell	AC	29	(1957)	166
60-120 μ	-	Spec	Strong	JOSA	47	(1957)	354
1500-3500	-	H bond, Spec, Struct	Thiel	JCP	27	(1957)	486
-	-	Zero potential energy difference	Whalley	TFS	53	(1957)	1578
-	-	Thermo, Anal	Zenchelsky	AC	29	(1957)	167
-	-	H bond, Freq	Drinkard	JPC	62	(1958)	1494
0.5-3800	G,S	Spec	Ockman	PRS	247	(1958)	434

	100-300 μ	G	Spec	Plyler	JENB	60 (1958)	55
	2800-3600	S	Spec	Price	PRS	247 (1958)	467
	-	-	Freq	Sartori	JINC	8 (1958)	119
	3350-3800	Sol	Band shift	Saumagne	BSCF	- (1958)	813
	50-1500	G	Freq	Yaroslavskii	IANS	22 (1958)	1145
	50-1500	-	Spec	Yaroslavskii	OS	5 (1958)	384
	1500-1700	S	Struct, Freq, Spec	Catalano	JCP	30 (1959)	45
	5.8-7.1 μ	Sol	Anal	Cirillo	AC	31 (1959)	959
	-	-	Mol. Const., Spec	Kachkuruzov	OS	6 (1959)	463
	-	S	Spec	Mutter	ZFC	19 (1959)	83
	-	G	I vs Temp.	Smirnov	OS	7 (1959)	193
	40-2500	G	Spec	Yaroslavskii	OS	6 (1959)	799
	4-500	G	Spec	Yaroslavskii	OS	7 (1959)	676
	50-2500	G	Spec	Decamps	CPR	250 (1960)	1827
	3200-3700	L	Band study, Solute effect	Fabbri	ANCR	50 (1960)	3
	-	S	Struct	Haas	JCP	32 (1960)	1763
	700-4000	S	Struct	Lippincott	JCP	32 (1960)	612
H_2O_2	-	-	Freq	Mecke	TFS	30 (1934)	200
	-	-	Struct	Penney	TFS	30 (1934)	898
	-	G	Anal	Frost	JCP	4 (1936)	781
	2-12 μ	L,G	Spec, FC	Bailey	TFS	34 (1938)	1131
	10150-10400	G	Spec, Quant. Mech.	Zumwalt	JCP	9 (1941)	458
	-	-	Quant. Mech.	Decius	JCP	16 (1948)	1025
	-	-	Hindered rotation	Lasette	JCP	17 (1949)	317
	2-21 μ	G,L	Spec, Assign	Badin	JACS	72 (1950)	1550
	-	G	Anal	Giguere	JCP	18 (1951)	898
	400-3800	S,L	Anal	Taylor	JCP	18 (1951)	88
	660-1029	G	FC, Freq	Giguere	JCP	56 (1952)	340
	-	-	Bond study	Huggins	JACS	75 (1953)	4126
	-	G	Microwave	Massey	JCP	22 (1954)	442
	-	L,Sol	Spec	Taylor	JCP	24 (1956)	41
	900-3500	G	Freq, Struct	Hirota	JCP	28 (1958)	839
	2.5-25 μ	S	H bond, Freq	Giguere	JMS	3 (1959)	36
H_2O_3	2-30 μ	S	Struct, Assign	Falk	CJC	36 (1958)	1680
	-	S	Spec, Struct, FC	Simon	ZAUA	301 (1959)	246
Selenious acid	-	-	-	-	-	-	-
$H_2O_3Si_3 \cdot xH_2O$	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
	2-16 μ	S	Spec, Anal	Miller	AC	24 (1952)	1253
	2200-2750	S	Spec	Pimental	JACS	75 (1953)	803

H_2O_4S	Sulfuric acid	1-13 μ	Sol	Spec	Lecoate	TFS	25 (1929)	864
		-	Sol	Freq	Taylor	TFS	25 (1929)	830
		8.7 μ	L	Dispersion	Korif	RMP	4 (1932)	471
		-	Sol	Spec	Plyler	JCP	2 (1934)	306
		-	-	H bond	Bernal	PRS	151 (1935)	384
		50-150 μ	L, Sol	Spec	Cartwright	JCP	4 (1936)	413
		9000-11000	L	Spec, H bond	Badger	JCP	5 (1937)	369
		-	-	Spec	Badger	JCP	5 (1937)	839
		50-150 μ	Sol	Band study	Cartwright	JCP	5 (1937)	776
		2-25 μ	Sol	Spec	Falk	CJC	35 (1957)	1195
		700-4000	-	Spec	Marcus	JCP	27 (1957)	564
		800-4000	S	Group study	Braunholtz	JCS	- (1959)	868
		2-30 μ	Sol	Spec, Struct	Giguere	CJC	38 (1960)	2467
$H_2O_4S \cdot H_2O$	Sulfuric acid monohydrate	2-30 μ	Sol	Spec, Struct	Giguere	CJC	38 (1960)	2467
$H_2O_4S \cdot 2H_2O$	Sulfuric acid dihydrate	2-30 μ	Sol	Spec, Struct	Giguere	CJC	38 (1960)	2467
H_2S	Hydrogen sulfide	3.7 μ	G	Spec	Barker	TFS	25 (1929)	912
		4.2-8 μ	G	Spec, Freq	Rollefson	PR	34 (1929)	604
		1-10 μ	G	Spec, Anal	Nielsen	PR	37 (1931)	727
		7-9 μ	G	Band study	Nielsen	PR	37 (1931)	1183
		20-33 μ	G	Transmission	Strong	PR	37 (1931)	1003
		6.7-33 μ	G	Transmission	Strong	PR	37 (1931)	1565
		-	-	Isotope effect	Salant	PR	42 (1932)	812
		20.7-15.2 μ	G	Spec	Strong	PR	42 (1932)	267
		1.9-3.8 μ	G	Spec	Sprague	PR	43 (1933)	375
		-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
		-	G	Thermo	Cross	JCP	3 (1935)	168
		-	G	Anal, Mol. Const.	Cross	PR	47 (1935)	7
		1-15 μ	G	Freq, Assign	Barker	JCP	4 (1936)	625
		-	-	FC	Penney	PRS	156 (1936)	654
		-	-	Thermo	Wilson	JCP	4 (1936)	526
		-	G	Assign	Caroin	JCP	5 (1937)	159
		9875-9975	-	Spec	Crawford	JCP	5 (1937)	371
		-	-	Freq, Assign	Crawford	JCP	5 (1937)	691
		-	-	Quant. Mech.	Cross	JCP	5 (1937)	370
		1.5-12 μ	G	Spec, Freq, Assign	Nielsen	JCP	5 (1937)	277
		7.2-8.3 μ	G	Spec, Freq, Assign	Sprague	JCP	5 (1937)	85

-	-	-	Quant. Mech.	Badger	JCP	6 (1938)	711
-	-	-	Freq	Redlich	JCP	9 (1941)	298
-	-	-	FC	Glockler	EMP	15 (1943)	111
-	-	-	Ratio rule	Noether	JCP	11 (1943)	97
-	-	-	Quant. Mech.	Glockler	JCP	13 (1945)	388
-	-	-	FC	Linnett	TFS	41 (1945)	223
-	-	-	FC	Gordy	JCP	14 (1946)	305
-	-	-	FC	King	JCP	14 (1946)	35
-	-	-	Quant. Mech.	Simpson	JCP	14 (1946)	294
-	-	-	Moment of Inertia	Hainer	JCP	15 (1947)	89
-	-	-	Anal	Halverson	RMP	19 (1947)	87
-	-	-	Microwave	King	PR	71 (1947)	433
-	-	-	Assign	Noble	PR	71 (1947)	484
1290-5140	-	-	Spec	Wilson	JCP	15 (1947)	687
3.5-4.5 μ	-	-	Anal	King	PR	74 (1948)	1247
2.6 μ	-	-	Emission	Ginsburg	PR	75 (1949)	1317
10070-10270	-	-	Mol. Const.	Grady	PR	75 (1949)	1450
-	-	-	FC	Linnett	TFS	45 (1949)	844
6140-6420	-	-	Band anal	Allen	JCP	18 (1950)	691
6140-6420	-	-	Spec, Struct	Allen	JCP	18 (1950)	691
-	-	-	Vibrational energy	Allen	JCP	18 (1950)	1412
-	-	-	FC	Heath	TFS	46 (1950)	137
800-2800	-	-	Freq, Assign	Lohman	PR	79 (1950)	235
3.6-4.5 μ	-	-	Spec	Noble	JCP	18 (1950)	667
-	-	-	Band study	Allen	JCP	19 (1951)	252
-	-	-	Bond interaction	Duchesne	JCP	19 (1951)	1191
-	-	-	theory				
1190-2550	-	-	Spec	Lohman	JCP	19 (1951)	252
100-700 μ	-	-	Spec	McCurbin	JOSA	41 (1951)	289
3.8 μ	-	-	I	Nielsen	PR	83 (1951)	838
1183	-	-	Band study	Noble	JCP	19 (1951)	799
5000-5250	-	-	Anal	Allen	JCP	20 (1952)	1709
65-250	-	-	Anal	Bell	PR	88 (1952)	174
100-700 μ	-	-	Spec	McCurbin	JCP	20 (1952)	668
-	-	-	FC	Moller	JCP	20 (1952)	203
0.1-0.2 μ	-	-	Microwave	Burrus	PR	92 (1953)	274
-	-	-	Band study	Huggins	JACS	75 (1953)	4126
8700-1100	-	-	Spec, Anal	Immes	JCP	21 (1953)	545
2 μ	-	-	Spec, Freq	Allen	JCP	22 (1954)	1104
6140-6430	-	-	Spec, Freq, Assign	Allen	JRNB	52 (1954)	205
-	-	-	Thermo	Haar	PR	99 (1955)	638
7480-7880	-	-	Spec, Anal	Orday	JCP	23 (1955)	541

	2200-2800	G	Spec, Anal	Allen	JCP	24 (1956)	35
	7.5-12 μ	G	Spec, Mol. Const.	Allen	JCP	25 (1956)	1132
	2-15 μ	G	Spec	Pierson	AC	28 (1956)	1218
	-	-	FC	Smith	TFS	52 (1956)	891
	-	-	Dipole moment	Rao	TFS	53 (1957)	1160
	2500-2700	L	Spec, Struct, Freq	Reding	JCP	27 (1957)	1024
	3730-4030	-	Spec, Assign	Savage	JCP	27 (1957)	179
	-	-	I, Freq	Emerson	DA	19 (1959)	1577
H ₂ S ₂							
			Hydrogen disulfide				
				Gordy	JCP	14 (1946)	305
	1.5-15 μ	-	Spec, Assign	Wilson	JCP	17 (1949)	1232
	-	-	Freq, Assign	Hooge	KJC	77 (1958)	902
	290-5000	S	Spec, Freq assign	Zengin	CJC	37 (1959)	632
H ₂ B							
			Boron dihydride	Linnett	TFS	41 (1945)	223
H ₂ Se							
			Hydrogen selenide	Sears	PR	53 (1938)	330
	2300-2380	-	Struct	Cameron	JCP	7 (1939)	994
	4-12 μ	G	Spec, Freq, Assign	Noether	JCP	11 (1943)	97
	-	-	Ratio rule	Gordy	JCP	14 (1946)	305
	-	-	FC	Halverson	RMP	19 (1947)	87
	-	-	Anal	King	PR	71 (1947)	443
	-	-	Microwave	Linnett	TFS	45 (1949)	844
	-	-	FC	Heath	TFS	46 (1950)	137
	-	-	FC	Moller	JCP	20 (1952)	203
	950-1140	G	Assign, I, Spec, Mol. Const.	Lefevre	AJC	6 (1953)	341
	-	-	Band study	Huggins	JACS	75 (1953)	4126
	50-250 μ	G	Spec, Mol. Const.	Palik	JCP	23 (1955)	980
	-	-	FC	Slowinski	JCP	23 (1955)	1933
	-	-	FC	Smith	TFS	52 (1956)	891
	40-250 μ	G	Spec, Config., Mol. Const.	Palik	JMS	1 (1957)	223
H ₃ DBrNO							
			Deuterohydroxylammonium bromide	Frasco	DA	19 (1958)	1219
	400-4000	S	Spec, Freq, NCA	Frasco	JCP	30 (1959)	1124
H ₃ DClNO							
			Deuterohydroxylammonium chloride	Frasco	DA	19 (1958)	1219
H ₃ DINO							
			Deuterohydroxylammonium iodide	Frasco	JCP	30 (1959)	1124

H_3DSi	Silane-d ₁	1600	G	Spec, Anal Vibrations	Polo Meal	JCP JCP	22 (1954) 24 (1956)	1559 1126
H_3DB_2	Diborane-d ₃	2-15 μ	G	Spec	Lehmann	JCP	79 (1958)	1248
H_3BrO	Oxonium bromide	500-4000 500-4000	S S	Spec, Freq Spec, Assign	Ferriso Ferriso	JACS JCP	75 (1953) 23 (1955)	4113 1464
H_3BrSi	Bromosilane	2-25 μ	G	Spec, Assign, Thermo. Freq, FC	Mayo	JCP	23 (1955)	1344
		400-4000	G	Spec, Assign, Struct Mol. Const.	Murata Newman	JCP JCP	23 (1955) 25 (1956)	2451 855
$H_3Br^{79}Si$	Promosilane (isotopic)	-	-	Microwave	Mays	JCP	20 (1952)	1695
H_3ClO	Oxonium chloride	500-4000 500-4000	S S	Spec, Freq Spec, Assign	Ferriso Ferriso	JACS JCP	75 (1953) 23 (1955)	4113 1464
H_3ClSi	Monochlorosilane	-	-	FC	Gordy	JCP	14 (1946)	305
		650-2200	G	Freq, Assign, Mol. Const.	Monfils	JCP	19 (1951)	138
		-	-	Freq, FC	Monfils	CPR	236 (1953)	795
		-	-	Freq, Mol. Const., FC	Anderson	ACS	8 (1954)	738
		-	-	Freq	Lord	JCP	22 (1954)	542
		510-2400	G	Spec, Assign	Newman	JCP	25 (1956)	855
		-	-	Assign	Newman	SA	10 (1959)	793
$H_3Cl^{35}Si$	Monochlorosilane (isotopic)	-	-	Microwave	Mays	JCP	20 (1952)	1703
$H_3Cl^{35}Si^{28}$	Monochlorosilane (isotopic)	-	-	Microwave	Mays	PR	76 (1949)	136
$H_3Cl^{35}Si^{30}$	Monochlorosilane (isotopic)	-	-	Microwave	Mays	PR	76 (1949)	136
$H_3Cl^{37}Si^{28}$	Monochlorosilane (isotopic)	-	-	Microwave	Dailey	PR	76 (1949)	136
$H_3ClN_2P_2$	B-trichloroborazole	-	Sol	NCA, I, Assign, Freq	Nakagawa	SA	16 (1960)	78

-	-	Spec	Weber	PR	40	(1932)	855
-	-	Secular equation	Eyring	JCP	1	(1933)	777
-	-	Struct	Mulliken	JCP	1	(1933)	492
1-2 μ	G	Spec	Unger	PR	43	(1933)	123
-	-	Quant. Mech.	Vanveleck	JCP	1	(1933)	219
60-125 μ	G	Spec	Wright	PR	44	(1933)	391
-	-	Vibrations	Andrews	JCP	2	(1934)	624
1-4 μ	G	Spec	Cluton	PR	45	(1934)	234
-	-	Freq	Mecke	TFS	30	(1934)	200
-	-	Quant. Mech.	Wilson	JCP	2	(1934)	432
40-170 μ	G	Spec	Barnes	PR	47	(1935)	658
-	-	Vibrations	Duncan	JCP	3	(1935)	384
-	-	Vibrations, Freq	Howard	JCP	3	(1935)	207
-	-	Rotational spacing	Johnston	PR	48	(1935)	868
-	-	Symmetrical double mln.	Mauning	JCP	3	(1935)	136
-	-	Quant. Mech.	Wilson	JCP	3	(1935)	276
-	G	Freq, Anal	Chao	PR	50	(1936)	27
1025-1085	G	Spec	Migeotte	PR	50	(1936)	418
-	-	Thermo	Wilson	JCP	4	(1936)	526
-	G	Pressure effect	Cornell	PR	51	(1937)	739
-	G	Pressure broadening theory	Margenon	PR	51	(1937)	748
40-75 μ	G	Spec	Randall	RMP	10	(1938)	72
6 μ	G	Perpendicular vibrations	Barker	PR	55	(1939)	657
10-16 μ	G	Band study	Barker	PR	56	(1939)	854
-	-	Thermo	Haupt	JCP	7	(1939)	925
-	-	Freq	Lee	TFS	35	(1939)	1366
-	-	Thermo	Pitzer	JCP	7	(1939)	251
-	-	Quant. Mech.	Slawsky	JCP	7	(1939)	509
3400	-	Freq	Sutherland	PR	56	(1939)	836
-	-	Struct	Sutherland	TFS	35	(1939)	1373
-	-	Freq	Dennison	RMP	12	(1940)	175
232-298 μ	G	Spec	Foley	PR	59	(1941)	171
10 μ	G	Spectromete ter calibration	McAlister	RSI	12	(1941)	314
10-16 μ	G	Spec, Anal	Sheng	PR	60	(1941)	786
-	-	Freq, Thermo	Thompson	TFS	37	(1941)	344
7.8-14 μ	G	Spectromete ter calibration	Oetjen	RSI	13	(1942)	515
-	G	Spec	Bobrovnikoff	RMP	16	(1944)	271

Wavelength	Author	Year	Journal	Page
-	Nielsen	16	RMP	307
3-10 μ	Barnes	16	JAP	77
-	Edgell	13	JCP	539
-	Linnett	41	TFS	223
10-12 μ	Roess	16	RSI	164
-	Bleaney	70	PR	775
0.08 μ	Good	70	PR	213
-	Gordy	14	JCP	305
-	Hadley	70	PR	780
-	Ogg	14	JCP	295
1.25 μ	Townes	70	PR	665
0.79-2.5 μ	Adel	72	PR	538
2-16 μ	Baird	37	JOSA	754
1.1-1.6 μ	Bleaney	189	PRS	358
-	Feld	72	PR	1116
1.25 μ	Gordy	71	PR	640
-	Halverson	19	RMP	87
-	Jauch	72	PR	715
2-16 μ	Muller	19	AC	25
9.7-14 μ	Nielsen	37	JOSA	296
-	Williams	72	PR	974
2-14 μ	Wright	37	JOSA	211
-	Carter	73	PR	1053
2 μ	Mohler	74	PR	352
-	Newton	16	JCP	310
-	Richards	44	TFS	40
-	Anderson	76	PR	647
-	Anderson	75	PR	1450
790-2600	Burgess	76	PR	1267
-	Burgess	76	PR	1261
-	Duchesne	17	JCP	1354
-	Duchesne	17	JCP	1354
-	Ginsburg	71	JACS	1245
-	Gordon	75	PR	1317
-	Margenau	76	PR	121
920-975	Migoette	75	PR	1611
-	Wood	75	PR	1113
-	Anderson	80	PR	511
-	Duchesne	11	JPR	119
-	Heath	46	TFS	137

528-3380	S	Band study, Freq	Hornig	PR	78 (1950)	348
100-600 μ	G	Spec	McCurbin	JOSA	40 (1950)	537
9.5-122 μ	G	Band study	Muller	AC	22 (1950)	19
-	-	Pressure shift	Nethercot	PR	79 (1950)	225
100-700 μ	-	Spec	McCurbin	JOSA	41 (1951)	289
-	-	Microwave, Pressure broadening theory	Mezushima	PR	83 (1951)	94
300-5000	S	Spec, Assign, FC	Reding	JCP	19 (1951)	594
10 μ	G	Spectrometer performance	Tellow	JSI	28 (1951)	161
-	-	Criticism	Bigeleisen	JCP	20 (1952)	1495
-	G	FC	Costain	JPC	56 (1952)	321
10 μ	G	Instrument performance	Ham	JOSA	42 (1952)	496
10 μ	G	Band study	McCurbin	N	169 (1952)	977
100-700 μ	G	Spec	McCurbin	JCP	20 (1952)	668
-	-	FC	Moller	JCP	20 (1952)	203
-	G	Spec	Oetjen	JOSA	42 (1952)	559
733-982	G	Properties of deuterated products	Stedman	JCP	20 (1952)	718
17.10-3 μ	G	Spec, I	Adel	JOSA	43 (1953)	1053
-	G	Spec, Microwave	Birnbaum	JCP	21 (1953)	1744
3 μ	G	Cathode ray tube presentation	Brown	JSI	30 (1953)	5
720-3510	G	Calibration data for prism	Downie	JOSA	43 (1953)	941
-	-	Bond study	Hansler	JCP	21 (1953)	1340
4-140 μ	G	Spec	Huggins	JACS	75 (1953)	4126
-	-	Vibrations	Torkington	JCP	21 (1953)	83
-	S	Spec, Struct, H bond, Freq	Waldron	JACS	75 (1953)	6079
-	G	Ident	Brown	JACS	76 (1954)	2645
-	G	Anal	Chapman	AC	26 (1954)	435
9-11 μ	G	Instrument performance	Cole	JOSA	44 (1954)	741
2-15 μ	G	Spec, Freq	French	JPC	58 (1954)	805
-	G	Vibrations	Gamo	CPR	239 (1954)	1478
2-15 μ	G	Spec	Katayama	JCP	22 (1954)	1373
-	-	Polarization theory	Kendrick	JOSA	44 (1954)	501
2.5-7.5 μ	-	Spec	Mapes	JPC	58 (1954)	1059
-	G	Anal	Morrow	JACS	76 (1954)	4522
-	S	Spec, Assign	Reding	JCP	22 (1954)	1926
-	-	Freq	Weston	JACS	76 (1954)	2645

	S	Study of instable species	Whittle	JCP	22 (1954)	1943
	G	Freq, Mol. Const.	Cumming	GJP	33 (1955)	635
3/μ	G	Spec, Absorption	Dows	JCP	23 (1955)	499
600-4000	S	Spec	Dows	JCP	25 (1955)	1606
2-15 μ	G	Spec	Golay	JOSA	45 (1955)	430
5-6 μ	-	Freq	Kabayashi	JCP	23 (1955)	1354
	G	Calibration of prism	Mills	JOSA	45 (1955)	785
177-254	S	Spec, Assign	Reding	JCP	23 (1955)	1053
800-3500	-	Line width reduction	Romer	PR	99 (1955)	532
	G	Spec, H bond	Yates	JCP	23 (1955)	1980
2000-4000	G	Spec	Yates	JOSA	45 (1955)	192
8-12.5 μ	G	Stretching	Benedict	JCP	24 (1956)	904
2.15-2.47 μ	S	Spec, Assign	Flyta	JACS	78 (1956)	3295
500-3500	G	Spec, I	McKean	JCP	24 (1956)	316
	-	Vibrations	Meal	JCP	24 (1956)	1126
	G	Spec	Pierson	AC	28 (1956)	1218
2-15 μ	G	Mol. Const., Spec	Benedict	GJP	35 (1957)	1235
1750-7100	G	Pressure broadening	Feeny	JCP	27 (1957)	898
	G	Spectrometer performance	Greenler	JOSA	47 (1957)	642
10 μ						
780-1100	G	Spec	Lord	JOSA	47 (1957)	689
2373-3080	G	Anal, I	Benedicts	JCP	29 (1958)	829
2.15-2.48 μ	G	Spec, Freq, Mol. Const.	Benedict	JRNB	61 (1958)	123
2600-3500	G, L	Spec, H bond	Cromwell	JACS	80 (1958)	4573
	L, Sol	Freq, Band study	Demidenkova	IANS	22 (1958)	1122
2-15 μ	G	Freq, Mol. Const.	Tsuboi	SA	13 (1958)	80
730-1200	G	Assign, Spec	Coates	SA	15 (1959)	820
1450-1850	G	Mol. Const., Spec, Absorption	Garing	JMS	3 (1959)	496
510-1840						
	-	Spec	Givaudon	CPR	248 (1959)	1494
600-4000	G	Spec, Pressure broadening	Kaye	AC	31 (1959)	1127
	G	Freq, Mol. Const.	Mould	SA	15 (1959)	313
700-1300	G	Spec	Plyler	JRNB	62 (1959)	7
1600-3500	S	Spec	Staats	JCP	31 (1959)	553
2-15 μ	G	Temp. effect, Struct	Benedict	JCP	32 (1960)	32
3060-3580	G	Pressure effect on line	Genzel	ZE	64 (1960)	594
500	G	Spec	Loewenstein	JOSA	50 (1960)	1163
10-80 μ	-	Energy distribution	Nicholson	N	186 (1960)	630
	G	Mol. Struct	Nielsen	JPR	21 (1960)	24
515-1260						

H_3N^{14}	Ammonia (Isotopic)	-	G	Microwave	Dailey	PR	70 (1946)	984
		-	-	Microwave	Good	PR	71 (1947)	383
		-	G	Microwave	Jownes	PR	74 (1948)	1113
H_3N^{15}	Ammonia (Isotopic)	-	G	Microwave	Dailey	PR	70 (1946)	984
		-	-	Microwave	Good	PR	71 (1947)	383
		-	-	Quant. Mech.	Newton	JCP	16 (1948)	310
		1500-4000	G	Freq	Morgan	JCP	27 (1957)	1212
H_3NO	Hydroxylamine	-	-	Bond Dist.	Huggins	JACS	75 (1953)	4126
		500-4000	S	Ident	Nightingale	JACS	75 (1953)	4092
		500-4000	S	Spec, Assign	Nightingale	JCP	22 (1954)	203
H_3NO_3	Sulphamic acid	2.7-3.7 μ	S	H bond	Buswell	JACS	62 (1940)	2759
		-	-	Freq	Bicelli	AC	47 (1957)	1380
		500-4000	S	Assign	Vuagnat	JCP	26 (1957)	77
		350-1600	S	Assign, FC	Nakagawa	SA	12 (1958)	239
H_3O^+	Hydronium ion	-	-	Freq, Assign	Gordy	JCP	14 (1946)	305
		550-4000	-	Freq	Bethell	JCP	21 (1953)	1421
H_3O_3P	Hypophosphorous acid	-	L	Group freq	Hammond	JACS	77 (1955)	2444
	Boric acid	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
H_3O_3P		500-3600	S, Sol	Spec, Assign	Bethell	TFS	51 (1955)	9
		600-3400	S	Spec	Horning	JCP	26 (1957)	637
		400-3000	S	Spec, Assign	Servoss	JCP	26 (1957)	1175
		-	-	Ident	Bader	JPC	62 (1958)	331
		2-15 μ	S	Freq, Struct	Krogh-Mol	ARK	12 (1958)	1958
		250-4000	-	Spec, Assign	Goubeall	ZPC	20 (1959)	1959
H_3O_4P	Orthophosphoric acid	9000-11000	L	Spec, H bond	Miller	SA	16 (1960)	135
		2-25 μ	Sol	Spec	Badger	JCP	5 (1937)	839
		-	-	FC	Folk	CJC	35 (1957)	1195
		-	-	-	Pistorious	JCP	28 (1958)	514

$H_3O_3^{10}$	Metaboric acid	250-4000	-	Spec, Assign	Goubeau	ZPC	20 (1959)	15	
		430-4000	S	Assign	Parsons	JCP	33 (1960)	1860	
H_3As^{10}	Metaboric acid (isotopic)	430-4000	S	Assign	Parsons	JCP	33 (1960)	1860	
	Arsine	1.63 μ	G	Freq, Struct	Norris	PR	45 (1934)	68	
		500-2500	G	Freq	Howard	JCP	3 (1935)	207	
		-	G	Struct	Lee	TFS	35 (1939)	1366	
		-	-	Struct	Sutherland	TFS	35 (1939)	1373	
		-	-	FC	Gordy	JCP	14 (1946)	305	
		-	-	Anal	Halverson	RMP	19 (1947)	87	
		-	-	Spec	McConaghie	PR	73 (1948)	1250	
		-	-	Quant. Mech.	Duchesne	JCP	17 (1949)	1354	
		-	-	Theory	Duchesne	JCP	17 (1949)	1354	
		1523-2116	G	Anal	McConaghie	PR	73 (1949)	623	
	H_3As^{75}		-	-	Theory	Duchesne	JPR	11 (1950)	119
		-	-	FC	Heath	TFS	46 (1950)	137	
		-	G	Theory	Costain	JPC	56 (1952)	321	
		-	-	FC	Moller	JCP	20 (1952)	203	
		-	-	Struct	Nielsen	JCP	20 (1952)	759	
		-	-	Anal	Nielsen	JCP	20 (1952)	1955	
		-	G,S	Group freq	Emeleus	JCS	- (1953)	1552	
		-	-	Bond Dist.	Huggins	JACS	75 (1953)	4126	
50-150		-	G	Spec	Strong	JOSA	43 (1953)	1096	
-		-	-	Vib.	Torkington	JCP	21 (1953)	83	
-		-	G	Table, Freq	Gamo	CPR	239 (1954)	1478	
-		-	-	Freq	Weston	JACS	76 (1954)	2645	
-		-	G	Spec	Stroup	DA	20 (1957)	336	
		-	-	Microwave	Blevins	PR	97 (1955)	684	
Arsine (isotopic)		-	-	Theory	Castellan	JCP	22 (1954)	536	
H_3B		Borine	-	-	Theory	Wright	PR	44 (1933)	391
		Phosphine	60-125 μ	G	Spec	Fung	PR	45 (1934)	238
H_3P			4.3-10 μ	G	Spec, Assign	Howard	JCP	3 (1935)	207
			-	-	Freq	Lee	TFS	35 (1939)	1366
		-	-	Freq	Slawsky	JCP	7 (1939)	509	
		-	-	Quant. Mech.	Sutherland	TFS	35 (1939)	1373	
		-	-	Struct	Stevenson	JCP	9 (1941)	403	

	-		Rot.	Plumb	JCP	21 (1953)	366
	-		Disk	Ford	JSI	31 (1954)	338
	-		Quant. Mech.	Gutowaky	JCP	22 (1954)	643
	-	S	Freq	Plumb	JCP	23 (1955)	947
	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
	300-880	S	Spec	Miller	SA	16 (1960)	135
	400-4000	S	Spec, Freq, NCA	Frasco	DA	19 (1958)	1219
	400-4000	L	Spec	Frasco	JCP	30 (1959)	1124
	-	S	Spec	Dasent	JCS	- (1960)	2429
	-	-	Freq	Siebert	ZAUA	- (1960)	303
	400-4000	S	Spec	Martiney	JCP	27 (1957)	1110
	-	-	Freq	Schaefer	TFS	25 (1929)	841
	-	-	Theory	Mulliken	JCP	1 (1933)	492
	-	-	FC	Linnett	TFS	41 (1945)	223
	-	-	Theory	Gordy	JCP	14 (1946)	305
	-	-	Force field	Heath	TFS	44 (1948)	561
	-	-	Quant. Mech.	Horwath	JCP	16 (1948)	857
	-	-	FC	Heath	TFS	46 (1950)	137
	1400-3200	S	Band freq	Waldron	JACS	75 (1953)	6079
	-	-	Freq	Kobayashi	JCP	23 (1955)	1354
	500-3500	S	Spec	Fujita	JACS	78 (1956)	3295
	-	-	Bond length	Woodward	TFS	52 (1956)	1458
	-	-	FC	Pistorius	JCP	27 (1957)	965
	-	S,Sol	I, Bond moment	Ferrico	JCP	32 (1960)	1240
	1500-4000	-	Freq	Morgan	JCP	27 (1957)	1212
	-	-	Freq	Edsall	JCP	5 (1937)	225
	-	-	Struct	Mecke	TFS	30 (1934)	200
	-	-	Group freq	Penney	TFS	30 (1934)	898
	-	-	Thermo	Scott	JACS	71 (1949)	2293
	7300	L,S	Rotational Iso	Wagner	JCP	19 (1951)	1210
	1.5-25 μ	G,L,S	Spec	Giguere	JCP	20 (1952)	136
H_4INO							
H_4IP							
H_4N^+							
H_4NO^+							
H_4N							

1930

H_4N_2O	-	-	Freq	Tobin	JCP	20 (1952)	1980			
	2-15 μ	G	Spec	Pierson	AC	28 (1956)	1218			
	1.9 μ	Sol	Ident	Cardes	AC	29 (1957)	485			
	-	G	Microwave	Oka	JPSJ	13 (1958)	321			
	260-460	G	Thermo	Cotton	JCS	- (1960)	1882			
250-750	G	Assign	Yamaguchi	SA	16 (1960)	1471				
$H_4N_2O_2$	250-4000	S	Freq, Assign	Waddington	JCS	- (1958)	4340			
	Ammonium nitrate	Sol	Spec	Collins	PR	20 (1922)	486			
			Freq	Harvath	JCP	16 (1948)	857			
			Temp.	Keller	JCP	17 (1949)	26			
			Spec	Halford	PR	78 (1950)	348			
			Assign	Neman	JCP	18 (1950)	1276			
			Spec	Neman	JCP	18 (1950)	1291			
			Low temp. spec	Walsh	JCP	18 (1950)	552			
			Spec	Miller	AC	24 (1952)	1253			
			Spec	Plumb	JCP	23 (1955)	947			
			Spec	Meloche	JINC	6 (1958)	104			
			Spec, Assign	Waddington	JCS	- (1958)	4340			
			Spec	Miller	SA	16 (1960)	135			
			H_4N_4	Ammonium azide	S	Theory	Whittle	JCP	22 (1954)	1943
						Spec	Dows	JCP	23 (1955)	1475
Spec	Dows	JCP				23 (1955)	1606			
Freq	Fujita	JACS				78 (1956)	3295			
H bond	Pimental	JCP				24 (1956)	639			
Spec	Gray	TFS				53 (1957)	901			
Spec	Waddington	JCS				- (1958)	4340			
H_4NS	Cyclotetrasulfur tetraimine	S				Band freq	Lippincott	JACS	73 (1951)	4990
						Spec	Lippincott	JCP	21 (1953)	1559
						Spec	Mutschin	ZAC	160 (1958)	8d
H_4OP	Pyrophosphoric acid	Sol				Spec	Woodward	TFS	52 (1956)	1458
			Bond length	Pistorius	JCP	27 (1957)	965			
H_4B^-	Borohydride ion	-	Bond length							
H_4P^+	Phosphonium ion	-	FC							

H_5NO_2	Ammonium hydroperoxide	800-2400	S	H bond	Knop	CJC	37 (1959)	1794
H_5NO_4	Ammonium bisulfate	2-16 μ 300-880	S	Spec	Miller	AC	24 (1952)	1253
H_5N^+	Hydrazine ion	-	-	FC	Linnett	TFS	41 (1945)	223
$H_5N_2O_2P$	Diamido phosphoric acid	-	-	Bond	Steiger	ZE	61 (1957)	1004
H_5PSi	Silyl phosphine	300-4000	G	Assign	Linton	SA	15 (1959)	146
$H_6Cl_2N_2$	Hydrazine dihydrochloride	400-3500	S	Assign	Snyder	SA	13 (1959)	280
H_6FN_2Si	Silicon tetrafluoride ammonia	2-15 μ	S	Spec	Piper	JACS	76 (1954)	4318
H_6F_6	Hydrogen fluoride (hexamer)	900-4000	G	Spec	Smith	JCP	28 (1958)	1040
H_6NO_4P	Ammonium dihydrogen phosphate	2-16 μ 1-25 μ 2-15 μ 400-10000 300-3000 300-880	S	Spec	Miller	AC	24 (1952)	1253
			S	Reflection	Oberly	JCP	20 (1952)	740
			S	Group freq	Carbridge	JCS	- (1954)	493
			S	Assign	Murphy	JCP	22 (1954)	1322
			S	Group freq	Blinc	MP	1 (1957)	391
			S	Spec	Miller	SA	16 (1960)	135
H_6NO_4As	Ammonium dihydrogen arsenate	1-25 μ 350-10000 300-3000	S	Reflection	Oberly	JCP	20 (1952)	740
			S	Assign	Murphy	JCP	22 (1954)	1332
			S	Spec	Blinc	MP	1 (1957)	391
H_6N_3OP	Phosphoryl triamide	-	-	Bond	Steiger	ZE	61 (1957)	1004
H_6N_3OS	Thiophosphoric triamide	-	-	Bond	Steiger	ZE	61 (1957)	1004
$H_6N_3B_3$	Borazole	2.5-24.5 μ	L	Spec	Grawford	JCP	7 (1939)	223
		-	-	Assign	Baner	CR	31 (1942)	43
		-	-	Freq	Bell	TFS	41 (1945)	293
		-	-	Freq	Price	JCP	17 (1949)	1044
		-	-	FC	Spurr	JCP	19 (1951)	518

H_6OSi_2	Disiloxane	640-5000	L	Spec, Freq	JACS	78	(1956)	1327
		600-4000	-	Spec	JACS	80	(1958)	2371
		600-1200	S,G	FC	SA	13	(1958)	38
		50-100/ μ	G	Spec	JCP	33	(1960)	1004
H_6Si_2	Disilyl sulphide	200-4000	-	Assign	DA	19	(1958)	687
		400-4000	L,G,S	Spec	JCP	29	(1958)	921
		400-4000	G	Spec	TFS	55	(1959)	211
		400-4000	G	Spec	JCP	9	(1941)	780
		-	-	Assign	CR	31	(1942)	43
		-	-	Struct	JCS	-	(1943)	250
		-	-	Struct	Bell	183	(1945)	328
		-	-	Freq, Assign	PRS	183	(1945)	357
		-	-	FC	JCP	14	(1946)	305
		-	-	Struct	CR	41	(1947)	207
		-	-	Assign	JCP	15	(1947)	614
		-	-	Quant. Mech.	JCP	16	(1948)	781
		1.5-15/ μ	-	Spec	JCP	16	(1948)	894
H_6B_2	Diborane	3.7-3/ μ	G	Spec	JCP	76	(1949)	177A
		-	-	Anal	JCP	17	(1949)	218
		-	-	Freq	JCP	17	(1949)	217
		-	-	Freq	JCP	17	(1949)	1044
		-	-	Thermo	JCP	17	(1949)	1007
		3.7-30/ μ	G	Spec	JCP	18	(1950)	698
		250-3800	G	Spec	JCP	19	(1951)	1
		2-15/ μ	G	Spec	JACS	74	(1952)	5292
		974	G	Study	JCP	21	(1953)	742
		-	-	Thermo	JACS	75	(1953)	785
		-	-	Theory	JCP	22	(1954)	536
		2-13/ μ	G	Spec	AC	26	(1954)	1027
		-	-	Thermo	JACS	76	(1954)	265
		4500-10500	L	Spec	JCP	23	(1955)	2168
		-	-	Freq	JCP	24	(1956)	1108
		2-15/ μ	G	Spec	JCP	29	(1958)	1248
		1500-2850	-	Group freq	JCP	29	(1958)	237
1-15/ μ	G	Anal	AC	32	(1960)	1480		
$H_6B^{10}_2$	Diborane-isotopic	250-3800	G	Spec	JCP	19	(1951)	1
		-	-	FC	PIAS	48A	(1958)	344
$H_6B^{11}_2$	Diborane-isotopic	-	-	FC	PIAS	48A	(1958)	344

H_6SeSi_2	Disilyl selenide	400-4000	G	Spec	Ebsworth	TFS	55 (1959)	211
H_6Si_2	Disilane	-	-	FC	Gordy	JCP	14 (1946)	305
		350-4000	G	Spec, Assign	Gutowsky	JCP	22 (1954)	939
		2-16 μ	G	Anal	White	JACS	76 (1954)	3897
		200-3200	G	Assign	Bethke	JCP	26 (1957)	1107
$H_7N_2O_3P$	Monoammonium phosphoramidate	2-15 μ	S	Group freq	Corbridge	JCS	- (1954)	493
H_8BrB_5	Bromopentaborane	400-3000	Sol	Struct	Figgis	SA	15 (1959)	331
$H_8F_2O_3P_2H_2O$	Diammonium mono fluorophosphate monohydrate	-	S	Group freq	Corbridge	JCS	- (1954)	4555
H_8FN_2Si	Diammonium silicon hexafluoride	-	S	Band freq	Cox	JCS	- (1954)	1798
$H_8N_2O_3S_2H_2O$	Ammonium sulfite monohydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$H_8N_2O_3S_2$	Ammonium thiosulfate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$H_8N_2O_4S$	Ammonium sulphate	-	-	Quant. Mech.	Horvath	JCP	16 (1948)	857
		2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
		300-880	S	Spec	Miller	SA	16 (1960)	135
$H_8N_2O_4S_2$	Ammonium hyposulfite	-	-	Quant. Mech.	Horvath	JCP	16 (1948)	857
$H_8N_2O_4Se$	Ammonium selenate	2-16 μ 220-3500 300-880	S S S	Spec Spec Spec	Miller Duval Miller	AC ZE SA	24 (1952) 64 (1960) 16 (1960)	1253 582 135
$H_8N_2O_5Se_2$	Ammonium pyroselenite	-	S	Freq	Simon	ZAUA	303 (1960)	39
$H_8N_2O_8S_2$	Ammonium peroxy disulfate	300-880	S	Spec	Miller	SA	16 (1960)	135
$H_8N_2O_8S_2$	Ammonium persulfate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253

$H_9N_2O_4P$	Diammonium hydrogen phosphate	2-16 μ 2-15 μ 600-4000	S S S	Spec Group freq Discuss	Miller Corbridge Braunholtz	AC JCS JCS	24 - -	(1952) (1954) (1959)	1253 493 868
$H_9N_2O_4P \cdot 12H_2O$	Ammonium hydrogen phosphate dodecahydrate	300-880	S	Spec	Miller	SA	16	(1960)	135
$H_9N_3Si_3$	Trisilyl amine	400-4000 - 600-1200 60-4000	G G,Sol S,G G	Assign Assign, Struct FC Freq, Assign	Ebsworth Kiregsmann McKean Robinson	SA ZAUA SA JACS	13 298 13 80	(1958) (1958) (1958) (1958)	202 212 38 5924
H_9B_5	Pentaborane	3-25 μ 568-3285 - 2-15 μ - 5.14 μ - 400-3000	G G G G G G - Sol	Spec Spec Microwave Spec Spec Exchange Study Struct	Taylor Hrostowski Hrostowski McCarty Baden Kaufman Baden Piggis	PR JACS JCP AC JPC JCP JPC SA	79 76 22 26 59 24 62 15	(1950) (1954) (1954) (1954) (1955) (1956) (1958) (1959)	234 998 262 1027 287 403 331 331
$H_{10}N_2O_6P_2$	Diammonium dihydrogen hypophosphate	694-3200	S	Group freq	Corbridge	JCS	-	(1954)	4555
$H_{10}N_2O_6P_2 \cdot XH_2O$	Diammonium dihydrogen pyrophosphate (x-hydrate)	2-15 μ	S	Group freq	Corbridge	JCS	-	(1954)	493
$H_{10}B_4$	Tetaborane	2-15 μ	G	Spec	McCarty	AC	26	(1954)	1027
$H_{10}B_6$	Hexaborane	2-15 μ	G	Spec	Gibbins	JCP	30	(1959)	1483
$H_{11}N_2O_6I$	Ammonium trihydrogen periodate	-	-	H bond	Rundle	JCP	20	(1952)	1487
$H_{11}N_2O_6I$	Diammonium paraperiodic acid	700-3000	-	Group freq	Blinc	MP	1	(1957)	391
$H_{11}B_5$	Dihydropentaborane	2-15 μ	G	Spec	McCarty	AC	26	(1954)	1027
$H_{12}N_2Si_4$	Tetrasilyl hydrazine	400-5000	G,S	Spec, Freq	Aylett	SA	16	(1960)	747

$H_{14}N_6O_8P_4$	Diammonium tetraphospho- nitrate	785-3125	S	Group freq	Corbridge	JCS -	(1954)	4555
$H_{14}B_{10}$	Decaborane	2-25 μ	S, Sol	Thermo	Keller	JCP	20 (1952)	1749
$H_{16}N_4O_7P_2$	Tetra ammonium pyrophosphate	2-15 μ -	S Sol	Group freq Struct	Corbridge Simon	JCS ZAUA	(1954) 301 (1959)	493 154
$H_{16}N_4O_{12}P_4$	Ammonium tetra metaphosphate	-	-	Struct	Steiger	ZAUA	294 (1958)	1
DT	Tritium deuteride	-	-	Thermo	Jones	JCP	17 (1949)	1062
DFO	Water-d ₁ , t ₁	-	-	Thermo	Friedman	PR	94 (1954)	1423
DTS	Hydrogen sulphide-d ₁ , t ₁	700-7000	G	Freq, Assign	Staats	JCP	24 (1956)	916
DT ₂ N	Ammonia-d ₁ , t ₂	-	-	Thermo, Freq	Thyagarajan	JMS	5 (1960)	307
DT ₂ P	Phosphine-d ₁ , t ₂	-	-	Thermo, Freq	Thyagarajan	JMS	5 (1960)	307
DT ₂ As	Arsine-d ₁ , t ₂	-	-	Thermo, Freq	Thyagarajan	JMS	5 (1960)	307
DBr	Hydrobromic acid-d ₁	0.1 μ 45-170 μ 0.93-1.18	G G G G	Microwave Freq, Mol. Const. Dipole moment Spec, Mol. Const.	Gordy Palik Burrus Mould	PR JCP JCP SA	93 (1954) 23 (1955) 31 (1957) 16 (1960)	419 217 1270 479
DBr ⁷⁹	Hydrobromic acid-d ₁ (isotopic)	1850-3650	G	Mol. Const., Spec Freq, Mol. Const.	Keller Cowan	PR PR	91 (1953) 111 (1958)	235 209
DBr ⁸¹	Hydrobromic acid-d ₁ (isotopic)	1850-3650	G	Mol. Const., Spec Freq, Mol. Const.	Keller Cowan	PR PR	91 (1953) 111 (1958)	235 209
DBr ₃ Si	Tribromosilane-d ₁	-	-	Anal	Halverson	RMP	19 (1947)	87
DCl	Hydrogen chloride-d ₁	-	-	Quant. Mech. Spec	Bell Williams	TFS JACS	32 (1936) 59 (1937)	1013 319

	1940-2000	S	Speo	Lee	PRS	176 (1940)	493
	-	S	H bond	Sutherland	TFS	36 (1940)	889
	2700	S	Isotopic dilution technique	Hiebert	JCP	20 (1952)	918
	40-140 μ	S	Freq	Hansler	JCP	21 (1953)	1340
	2-25 μ	Sol	Spec	Falk	CJC	35 (1957)	1195
	0.93-1.5 μ	G	Dipole moment	Burrus	JCP	31 (1959)	1270
	-	-	I, Band study	Herman	JCP	32 (1960)	1393
	1800-2200	-	Spec, Mol. Const.	Mould	SA	16 (1960)	479
	4.8 μ	G	Speo	Hardy	PR	42 (1932)	279
	5 μ	G	Speo, Anal	Pickworth	PRS	218 (1953)	37
	-	-	I	Herman	PR	98 (1955)	1550
	1.6-2.4 μ	G	Spec, Freq, Anal	VanHome	JCP	25 (1956)	56
	-	G	Mol. Const., Spec	Cowan	PR	111 (1958)	209
	1000-3400	G	Speo, Mol. Const.	Stull	JOSA	50 (1960)	1279
	4.8 μ	G	Speo	Hardy	PR	42 (1932)	279
	5 μ	G	Speo, Anal	Pickworth	PRS	218 (1953)	37
	-	-	I	Herman	PR	98 (1955)	1550
	1.6-2.4 μ	G	Speo, Freq, Anal	VanHorne	JCP	25 (1956)	56
	-	G	Mol. Const., Spec	Cowan	PR	111 (1958)	209
	1000-3400	G	Speo, Mol. Const.	Stull	JOSA	50 (1960)	1279
	1-15 μ	G	Speo, Assign	Hedberg	JCP	19 (1951)	508
	1.4-25 μ	G	Mol. Const., Assign	Moore	JACS	74 (1952)	6076
	-	-	Anal	Halverson	RMP	19 (1947)	87
	2900-5700	G	Mol. Const.	Talley	PR	77 (1950)	529
	-	G	Microwave	Heath	TFS	50 (1954)	779
	275-1725	G	Spec, Anal	Newman	SA	10 (1959)	793
	0.1-0.2 μ	G	Microwave	Burrus	PR	92 (1953)	1437
	45-170 μ	G	Freq, Mol. Const.	Palik	JCP	23 (1955)	217
	1500-1700	G	Spec, Mol. Const.	Jones	JMS	1 (1957)	179
	0.11-0.26 μ	G	Spec, Mol. Const.	Burns	JCP	28 (1958)	427
	0.093-0.15 μ	G	Stark effect	Burrus	JCP	31 (1959)	1270

D ₁ ¹²⁷	Deuterium iodide (isotopic)	-	G	Spec, Mol. Const.	Cowan	PR	111 (1958)	209
D ₁₀ ³	Iodic acid-d ₁	-	S	Spec, Struct	Dasent	JCS	- (1960)	2429
D ₁₀ ³	Nitric acid-d ₁	700-3000	G	Spec, Freq, Thermo	Cohn	JCS	- (1952)	4272
		8000-35000 Mc/sec	G	Mol. Const., Assign	Palm Millen	JCP JCS	23 - (1960)	1562 1523
D ₁₁ ³	Hydrazoic acid-d ₁	400-3500	G,S	Spec, Anal, Assign	Dows	JCP	23 (1955)	1258
D ₁₁ ¹⁴	Hydrazoic acid-d ₁ (isotopic)	2000-2500	Sol	Spec, H bond	Buswell	JACS	61 (1939)	2809
		-	-	Microwave, Struct	Amble	JCP	18 (1950)	1422
D ₁₁	Hydroxy-d-radical	-	-	Microwave Thermo	Dousmanis Haar	PR JCP	100 (1955) 23 (1955)	1735 869
D ₁₁	Sulfur deuteride radical	-	-	Thermo	Haar	JCP	23 (1955)	869
D ₂	Deuterium	-	-	Thermo	Johnston	JCP	2 (1934)	389
		-	G	Anal, Mol. Const.	Dieke	PR	47 (1935)	261
		-	-	Thermo	Halburt	JCP	9 (1941)	61
		-	-	FC	Glockler	JCP	10 (1942)	686
		-	-	Anal	Halverson	EMP	19 (1947)	87
		1-2μ	G	Spec	Proto	JOSA	45 (1955)	447
D ₂ IN	Ammonia-d ₂ -t ₁	-	-	Potential function	Beckel	JCP	24 (1956)	553
D ₂ IN	Ammonia-d ₂ -t ₁	-	-	Freq, Thermo	Thyagarajan	JMS	5 (1960)	307
D ₂ IP	Phosphine-d ₂ -t ₁	-	-	Freq, Thermo	Thyagarajan	JMS	5 (1960)	307
D ₂ TAs	Arsine-d ₂ -t ₁	-	-	Freq, Thermo	Thyagarajan	JMS	5 (1960)	307
D ₂ F ₂ Si ²⁸	Difluorosilane-d ₂ (isotopic)	12000-38000 Mc/Sec	G	Struct	Laurie	JCP	26 (1957)	1359
D ₂ F ₂ Si ²⁹	Difluorosilane-d ₂ (isotopic)	12000-38000 Mc/Sec	G	Struct	Laurie	JCP	26 (1957)	1359

$D_2F_2Si^{30}$	Difluorosilane- d_2 (isotopic)	12000-38000 Mc/Sec	G	Struct	Laurie	JCP	26 (1957)	1359
D_2O	Water- d_2	-	-	Freq	Bonner	PR	46 (1934)	458
		1-7 μ	L	Spec	Casselman	PR	45 (1934)	221
		1-10 μ	-	Assign	Ellis	JCP	2 (1934)	559
		-	-	Spec	Rank	JCP	2 (1934)	464
		1075-2900	-	Spec, Assign	Barker	JCP	3 (1935)	660
		15-150 μ	L	Struct	Cartwright	PR	49 (1936)	470
		52-152 μ	L, Sol	Transmission	Cartwright	PRS	154 (1936)	138
		1.5-2.91 μ	G	Band study	Norris	PR	49 (1936)	272
		-	L	FC	Penney	PRS	156 (1936)	654
		2.6-6.6 μ	L	Spec	Plyler	JCP	4 (1936)	157
		-	L, S	Struct	Cross	JACS	59 (1937)	1134
		1.2-2.1 μ	L	Spec, Assign	Kellner	FES	159 (1937)	410
		-	-	Theoretical	King	JCP	5 (1937)	405
		-	L	Quant. Mech.	King	JCP	5 (1937)	413
		2-9 μ	L	Spec	Williams	JACS	59 (1937)	319
		2.6-3.8 μ	Sol	Spec	Borst	JCP	6 (1938)	61
		-	-	Spec	Ellis	JCP	6 (1938)	723
		1.985 μ	L, G	Rotation in solution	Ellis	PR	54 (1938)	599
		3.3-6.1 μ	Sol, L	Spec, H bond	Gordy	JACS	60 (1938)	605
		3-12 μ	L	Bond study	Gordy	PR	53 (1938)	851
		3.76-4.18 μ	L, Sol	Band study	Gordy	JCP	7 (1939)	93
		23-135 μ	G	Spec, Anal	Fuson	PR	56 (1939)	982
		31-38 μ	L	Spec	Randall	JAP	10 (1939)	768
		-	L	Association	Shearin	PR	56 (1939)	845
		-	-	Vibration-rotation theory	Darling	PR	57 (1940)	128
		-	-	Solvent effect on band	Gordy	JCP	9 (1941)	215
		-	-	Quant. Mech.	Shatter	JCP	10 (1942)	405
		-	-	Ratio rule	Moether	JCP	11 (1943)	97
		-	-	Quant. mech.	Shatter	JCP	12 (1944)	504
		-	-	Quant. Mech., FC, Freq	Glockler	JCP	13 (1945)	388
		12138-2787	G	Freq	Dickey	PR	70 (1946)	109
		-	-	Anal	Halverson	RMP	19 (1947)	87
		1.5-24 μ	L	Vibrations	Johnson	PR	72 (1947)	158
		8.5 μ	-	Moment of inertia	King	JCP	15 (1947)	85
		-	-	Microwave	King	PR	71 (1947)	433
		-	G	Spec	Dickey	PR	73 (1948)	1164
		-	-	Rotational levels	Ginsburg	PR	74 (1948)	1052

	-		Vibration theory	Heath	TFS	44	(1948)	556
	-		Centrifugal stretching	Benedict	PR	75	(1949)	1317
	400-4000	L	Spec	Gore	AC	21	(1949)	382
	-	-	Quant. Mech.	Forkington	JCP	17	(1949)	357
	3.7 μ	G	Spec	Chapman	PR	78	(1950)	74
	-	-	FC	Heath	TFS	46	(1950)	137
	-	-	Anal	Brown	AC	23	(1951)	673
	2787-5373	G	Spec	Innes	JCP	19	(1951)	1086
	6533	G	Freq	Dickey	JCP	20	(1952)	375
	1.25-4.2 μ	G	Spec	Benedict	JCP	21	(1953)	1301
	600-2000	L	Spec	Blout	JOSA	43	(1953)	1093
	-	-	Microwave	Jen	JCP	21	(1953)	520
	2200-2750	L	Spec	Pimentel	JACS	75	(1953)	803
	-	L	Anal	Trenner	APS	7	(1953)	166
	-	S	Thermo	Blue	JCP	22	(1954)	280
	2-14 μ	L	Spec	Ehrlich	JACS	76	(1954)	5263
	-	-	Thermo	Friedman	PR	94	(1954)	1423
	-	L	Anal	Gaunt	JSI	31	(1954)	315
	-	-	Freq	Jones	JCP	22	(1954)	217
	-	Sol	Anal	Patterson	AC	26	(1954)	1391
	-	-	Centrifugal distortion theory	Posener	PR	95	(1954)	374
	56-67 μ	-	Spec	Randall	JOSA	44	(1954)	97
	-	-	Anal	Trenner	JACS	76	(1954)	1196
	1180	G	Anal, Spec	Dickey	JCP	23	(1955)	1718
	-	-	Freq	Slowinski	JCP	23	(1955)	1933
	1.25-4.1 μ	G	Spec, Mol, Const.	Benedict	JCP	24	(1956)	1139
	-	Sol	Anal	Pollock	PRS	235	(1956)	149
	-	-	FC	Smith	TFS	52	(1956)	891
	4 μ	-	D content of water	Ward	TFS	53	(1957)	1406
	-	-	Zero point energy	Whalley	TFS	53	(1957)	1578
	3350-3800	Sol	Band shift	Saumagne	BSCF	-	(1958)	813
	1000-7000	Sol	Freq	Haas	JCP	32	(1960)	1763
D_2O^{18}	1100-3700	G,L	Freq, Assign	Pinchas	JCP	31	(1959)	1692
D_2O_2	400-3800	L	Freq, Assign	Taylor	JCP	18	(1950)	898
	-	G	FC, Freq	Giguere	JPC	56	(1952)	340
	-	G	Microwave, Freq	Massey	JMS	5	(1960)	405
D_2S	1-15 μ	G	Freq assign	Bailey	JCP	4	(1936)	625
	1.5-12 μ	G	Spec, Freq assign	Nielsen	JCP	5	(1937)	277

D_3P	Phosphine- d_3	500-2500	G	Spec, FC Struct	Lee Sutherland	TFS	35 (1939)	1366
		-	-	Anal	Halverson	TFS	35 (1939)	1373
		-	-	FC	Heath	RMP	19 (1947)	87
		-	-	Freq, FC	Weston	JCP	46 (1950)	137
		-	G	Mol. Const.	Stroup	JOSA	20 (1952)	1820
		0.1-0.2 μ	G	Microwave	Burnes	PR	43 (1953)	1096
		-	G	Spec, Mol. Const.	Stroup	DA	95 (1954)	706
		-	-	-	Stroup	DA	20 (1959)	336
D_3As	Arsine- d_3	500-2500	G	Spec, FC Struct	Lee	TFS	35 (1939)	1366
		-	-	Anal	Sutherland	TFS	35 (1939)	1373
		-	-	Spec	Halverson	RMP	19 (1947)	87
		1523-2116	G	Anal	McConaghie	PR	73 (1948)	1250
		-	-	FC	McConaghie	PR	75 (1949)	633
		-	-	FC	Heath	TFS	46 (1950)	137
		50-90 KMc/sec	G	Spec, Mol. Const.	Costain	JPC	56 (1952)	321
		-	G	Spec, Mol. Const.	Stroup	JOSA	43 (1953)	1096
D_3As^{75}	Arsine- d_3 (isotopic)	-	-	Microwave	Stroup	DA	20 (1959)	336
D_4BrN	Ammonium bromide- d_4	3-10 μ	S	Spec, Assign Band study	Blevins	PR	97 (1955)	684
D_4ClN	Ammonium chloride- d_4	-	-	Anal	Wagner	JCP	18 (1950)	305
		3-10 μ	S	Spec, Assign Band width	Plumb	JCP	23 (1955)	947
		-	-	Vibration	Wagner	JCP	17 (1949)	105
D_4FN	Ammonium fluoride- d_4	-	S	Spec, Assign, Struct	Wagner	JCP	18 (1950)	296
D_4IP	Phosphonium iodide- d_4	400-4000	Sol	Spec, Assign	Plumb	JCP	23 (1955)	947
D_4N	Ammonium ion- d_4	-	-	FC	Marshall	TFS	52 (1956)	19
D_4B^{10}	Borohydride ion- d_4 (isotopic)	3000	Sol	Spec, NCA, Assign	Plumb	JCP	23 (1955)	947
		-	-	FC	Martinez	JCP	27 (1957)	1110
D_4B^{11}	Borohydride ion- d_4 (isotopic)	3000	Sol	Spec, NCA, Assign	Pistorius	JCP	27 (1957)	965
		-	-	FC	Emery	JCP	28 (1958)	1029
		3000	Sol	Spec, NCA, Assign	Emery	JCP	28 (1958)	1029
		3000	Sol	Spec, NCA, Assign	Emery	JCP	28 (1958)	1029

D_4Si	Silane-d ₄	2-16 μ	G	Spec, Assign, FC	Meal	JCP	24 (1956)	385
D_5BrN_2	Hydrazinebromide-d ₅	400-3500	S	Spec, H bond	Decius	JACS	75 (1953)	2436
D_5ClN_2	Hydrazinechloride-d ₅	670-3500	S	Spec, H bond	Decius	JACS	75 (1953)	2436
$D_6NO P_4$	Ammonium dihydrogen phosphate-d ₆	700-3300	S	Quant. Mech.	Blinc	MP	1 (1958)	391
D_6N_2	Hydrazine ion-d ₆	-	-	FC	Linnett	TFS	41 (1945)	223
D_6OSi	Disiloxane-d ₆	640-5000	G,L	Freq assign, Spec	Lord	JACS	78 (1956)	1327
D_6SSi_2	Disilylsulfide-d ₆	200-4000 350-3150 400-4000	- S,G G	Mol. Const. Spec, Freq assign Spec, Struct	Linton Linton Ebsworth	DA JCP TFS	19 (1958) 29 (1958) 55 (1959)	687 921 211
D_6B_2	Diborane-d ₆	2-15 μ 974 5-14 μ 2-15 μ	G G - G - G	Spec, Assign Exchange study Assign, Thermo Exchange reaction Freq Spec	Webb Maybury Shepp Kaufman Simpson Lehman	JCP JCP JACS JCP JCP JCP	17 (1949) 21 (1953) 76 (1954) 24 (1956) 24 (1956) 29 (1958)	1007 742 265 403 1108 1248
$D_6B_2^{10}$	Diborane-d ₆ (isotopic)	250-3800	L,G	Spec, Assign	Lord	JCP	19 (1951)	1
D_6Si_2	Disilane-d ₆	200-3200	G	Spec, Assign	Bethke	JCP	26 (1957)	1107
D_9MSi_3	Trisilylamine-d ₉	400-4000 60-4000	G G	Freq assign, FC Freq assign, Spec	Ebsworth Robinson	SA JACS	13 (1958) 80 (1958)	202 5924
D_9B_5	Pentaborane-d ₉	430-2600	G G	Microwave Spec, I, Assign	Hrostowski Hrostowski	JCP JACS	22 (1954) 76 (1954)	262 998
$D_{12}N_2Si_4$	Tetrasilyl hydrazine-d ₁₂	400-500	G,S	Spec, Freq, Config	Aylett	SA	16 (1960)	747
TBr	Tritium bromide	1400-1600	- G	Microwave Spec, Anal	Rosenblum Jones	PR JCP	97 (1955) 24 (1956)	84 1246

μ Br ⁷⁹	Tritium bromide (isotopic)	0.136-0.174 μ	G	Microwave	Burnes	PR	97 (1955)	1661
μ Br ⁸¹	Tritium bromide (isotopic)	0.136-0.174 μ	G	Microwave	Burnes	PR	97 (1955)	1661
TCl ³⁵	Tritium chloride (isotopic)	- 1600-1850	G G	Microwave Spec	Burnes Jones	PR JCP	97 (1955) 24 (1956)	1661 1246
TCl ³⁷	Tritium chloride (isotopic)	- 1600-1850	G G	Microwave Spec	Burrus Jones	PR JCP	97 (1955) 24 (1956)	1661 1246
TF	Tritium fluoride	2200-5000	G	Spec, FC, Mol. Const.	Jones	JMS	1 (1957)	43
TO	Hydroxy-t ₁ radical	-	-	Thermo.	Haar	JCP	23 (1955)	869
TS	Sulfur tritium radical	-	-	Thermo.	Haar	JCP	23 (1955)	869
T ₂	Tritium	-	-	Thermo. Potential function	Jones Beckel	JCP JCP	16 (1948) 24 (1956)	1077 553
T ₂ O	Water-t ₂	- 700-7000	- G	Thermo. Freq assign	Friedman Staats	PR JCP	94 (1954) 24 (1956)	1423 916
T ₂ S	Tritium sulfide	-	-	Thermo.	Haar	PR	99 (1955)	638
T ₃ N	Ammonia-t ₃	-	-	Mol. Const., Thermo.	Sundaram	JMS	5 (1960)	61
T ₃ P	Phosphine-t ₃	-	-	Mol. Const., Thermo.	Sundaram	JMS	5 (1960)	61
T ₃ As	Arsine-t ₃	-	-	Mol. Const., Thermo.	Sundaram	JMS	5 (1960)	61
T ₄ ClN	Ammonium chloride-t ₄	800-3000	L	Ident, Freq	Morgan	JCP	27 (1957)	1212
BrCl	Bromine chloride	1.5-16 μ 439.5 439.5	L G G	Spec Freq I Thermo.	Marvin Clark Matraw Brooks Baughan	PR TFS JCP JCP TFS	34 (1912) 33 (1937) 22 (1954) 23 (1955) 53 (1957)	161 1390 1117 363 1046

BrF ₂ ^{B11}	Boron bromide difluoride (isotopic)	300-3000	G	Spec	Lindeman	JCP	24 (1956)	242
BrF ₃	Bromine trifluoride	2.5-9.5μ 400-1100 400-1400	G, L G G	Freq Spec Spec	Haendler Claassen Stein	JCP JCP JACS	22 (1954) 28 (1958) 81 (1959)	1939 285 1273
Br ⁷⁹ F ₃ Si ²⁸	Trifluoro bromo silane (isotopic)	-	G	Microwave	Sheridan	PR	77 (1950)	719
Br ⁸¹ F ₃ Si ²⁸	Trifluoro bromo silane (isotopic)	-	G	Microwave	Sheridan	PR	77 (1950)	719
BrF ₅	Bromine pentafluoride	400-700 - 2-25μ 2.5-9.5μ - 350-1400	L, G - G G, L - G	Spec Spec Spec Freq Struct Spec	Burke Stephenson Akers Haendler Mellish Stein	JCP JCP PR JCP TFS JACS	19 (1951) 20 (1952) 95 (1954) 22 (1954) 51 (1955) 81 (1959)	1611 1830 300 1939 1311 1273
BrI	Iodine monobromide	- - - - - -	G G - - - G G	Thermo Anal Coupling FC FC Spec Struct	Badger Brown Mulliken Gordy Baughan Jaseja Selin	PR PR PR JCP TFS JMS NWS	37 (1931) 42 (1932) 46 (1934) 14 (1946) 53 (1957) 5 (1960) 47 (1960)	1548 355 549 305 1046 445 104
BrNO	Nitrosyl bromide	400-5303 - - -	G - - G, Sol	Spec Freq Group freq Group freq	Burns Woltz Jander O'Sullivan	JCP JCP JCS JCS	18 (1950) 20 (1952) - (1954) - (1957)	1669 378 919 4144
Br ⁷⁹ NO	Nitrosyl bromide (isotopic)	-	G	Microwave	Williams	PR	98 (1955)	1159
Br ⁸¹ NO	Nitrosyl bromide (isotopic)	-	G	Microwave	Williams	PR	98 (1955)	1159
BrO	Bromine monoxide	2600-3100	G	Spec	Durie	CJP	36 (1958)	35

Chemical	Bromate ion	Wavenumber	State	FC	Shen	PR	Year	Page
BrO_3^-		-	-	FC			51 (1937)	235
Br_2	Bromine	0.93-137 μ	-	Spec	Kiess	JRNB	4 (1930)	667
		-	-	FC	Lochte	TFS	28 (1932)	698
		-	-	Thermo	Gordon	JCP	1 (1933)	297
		-	-	Thermo	Gordon	JCP	1 (1933)	692
		-	-	FC	Badger	JCP	2 (1934)	128
		-	-	Coupling theory	Mulliken	PR	46 (1934)	549
		-	-	FC	Pekeris	PR	45 (1934)	98
		-	-	FC	Badger	PR	48 (1935)	284
		-	-	Morse eqn	Aston	JCP	4 (1936)	474
		-	-	Quant. Mech.	Mulliken	JCP	4 (1936)	620
		-	-	Freq	Clark	TFS	33 (1937)	1394
		-	-	Freq	Clark	TFS	33 (1937)	1398
		-	G	Freq	Darbyshire	PRS	159 (1937)	93
		-	-	Theory	Mulliken	JCP	7 (1939)	20
		-	-	Quant. Mech.	Mulliken	JCP	8 (1940)	234
		-	-	Quant. Mech.	Mulliken	JCP	8 (1940)	382
		-	-	Electronic transition	Mulliken	PR	57 (1940)	500
		1200-1800	-	FC	Sutherland	JCP	8 (1940)	161
		-	-	Thermo	Hulburt	JCP	9 (1941)	61
		-	-	FC	Linnett	TFS	38 (1942)	1
		-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	Freq	Huggins	JACS	75 (1953)	4126
		-	Sol	Bond dist	Ketelaar	JCP	23 (1955)	749
		-	-	Thermo	Baughan	TFS	53 (1957)	1046
		275-350	Sol	Spec	Person	JCP	27 (1957)	1211
		-	-	Reaction	Morcillo	ARS	55B (1959)	629
Br_2ClP	Phosphorus chloride dibromide	-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
$\text{Br}_2\text{ClB}^{10}$	Boron dibromide chloride (isotopic)	300-3000	G	Spec	Lindeman	JCP	24 (1956)	242
$\text{Br}_2\text{ClB}^{11}$	Boron dibromide chloride (isotopic)	300-3000	G	Spec	Lindeman	JCP	24 (1956)	242
$\text{Br}_2\text{FB}^{10}$	Boron dibromide fluoride (isotopic)	300-3000	G	Spec	Lindeman	JCP	24 (1956)	242
$\text{Br}_2\text{FB}^{11}$	Boron dibromide fluoride (isotopic)	300-3000	G	Spec	Lindeman	JCP	24 (1956)	242

Br ₂ S ₂	Sulfur monobromide	-	-	-	Freq, Assign	Hooge	RTC	77 (1958)	902
Br ₃ OP	Phosphoryl tribromide	2-21 μ	S	Spec	Daasch	AC	23 (1951)	853	
		-	-	Freq	Daasch	JCP	19 (1951)	22	
		-	-	Group freq	Bell	JACS	76 (1954)	5185	
		1100-1300	S	Band freq	Sheldon	JACS	80 (1958)	4775	
Br ₃ P	Phosphorous tribromide	-	-	Freq	Howard	JCP	2 (1934)	630	
		-	-	Thermo	Stevenson	JCP	9 (1941)	403	
		-	-	FC	Gordy	JCP	14 (1946)	305	
		-	-	Freq	Daasch	JCP	19 (1951)	22	
		-	-	Freq	Weston	JACS	76 (1954)	2645	
		1500-2100	Sol	Transition	Ketelaar	JCP	23 (1955)	1549	
		-	-	Freq	Hahn	JCP	24 (1956)	921	
		85-550	L	Assign	Davies	JMS	2 (1958)	253	
Br ₃ SP	Thiophosphoryl bromide	-	-	Freq	Daasch	JCP	19 (1951)	22	
Br ₃ B	Boron tribromide	-	-	Thermo	Anderson	JCP	4 (1936)	703	
		-	-	Assign	Spencer	JCP	14 (1946)	729	
		-	-	Force field	Heath	TFS	44 (1948)	873	
		-	-	Force field	Linnett	TFS	48 (1952)	592	
		-	-	FC	Venkateswarlu	JCP	23 (1955)	2368	
		2-24 μ	G,L, Sol	Spec, Freq	Wentink	JCP	28 (1958)	826	
Br ₃ B ¹⁰	Boron tribromide (isotopic)	300-3000	G	Spec	Lindeman	JCP	24 (1956)	242	
Br ₃ B ¹¹	Boron tribromide (isotopic)	300-3000	G	Spec	Lindeman	JCP	24 (1956)	242	
Br ₄ Si	Silicon tetrabromide	-	-	FC	Gordy	JCP	14 (1946)	305	
		-	-	Force field	Heath	TFS	44 (1948)	561	
		-	-	Force field	Heath	TFS	44 (1948)	878	
		-	-	FC, Freq	Simanouti	JCP	17 (1949)	848	
		-	-	Force field	Linnett	TFS	48 (1952)	592	
		-	-	FC	Gaunt	TFS	50 (1954)	546	
		-	-	FC	Murata	JCP	23 (1955)	2451	
		-	-	FC	Pistorius	JCP	28 (1958)	514	

1950

Br_6P_3	Trimeric phospho- nitrilic bromide	1150-1350	-	Freq	Shaw	CIL	-	(1959)	54
Br_8P_4	Tetrameric phospho- nitrilic bromide	1150-1350	-	Freq	Shaw	CIL	-	(1959)	54
ClF	Chlorine fluoride	-	-	Freq	Clark	TFS	33	(1937)	1390
		-	-	Thermo	Parkinson	PR	76	(1949)	199
		2-15 μ	-	Spec	Potter	JCP	17	(1949)	957
		2-15 μ	G, L	Spec	Jones	JCP	18	(1950)	235
		-	-	FC	Baughan	TFS	53	(1957)	1046
Cl^{35}F	Chlorine monofluoride (isotopic)	-	G	Microwave	Gilbert	PR	76	(1949)	1723
Cl^{37}F	Chlorine monofluoride (isotopic)	-	G	Microwave	Gilbert	PR	76	(1949)	1723
$\text{Cl}^{35}\text{F}^{19}$	Chlorine monofluoride (isotopic)	725-1550	G	Spec	Nielsen	JCP	19	(1951)	1117
$\text{Cl}^{37}\text{F}^{19}$	Chlorine monofluoride (isotopic)	725-1550	G	Spec	Nielsen	JCP	19	(1951)	1117
ClFO_3	Perchloryl fluoride	600-3000	-	Spec	Engelbrecht	JINC	2	(1956)	348
$\text{Cl}^{35}\text{F}_2\text{OP}$	Phosphoryl difluoro chloride (isotopic)	-	G	Spec	Goll	DA	19	(1959)	1930
$\text{Cl}^{37}\text{F}_2\text{OP}$	Phosphoryl difluoro chloride (isotopic)	-	G	Spec	Goll	DA	19	(1959)	1930
$\text{ClF}_2\text{B}^{10}$	Boron chloride difluoride (isotopic)	300-3000	G	Spec	Lindeman	JCP	24	(1956)	242
$\text{ClF}_2\text{B}^{11}$	Boron chloride difluoride (isotopic)	300-3000	G	Spec	Lindeman	JCP	24	(1956)	242

ClF_3	Chlorine trifluoride	2-25 μ	G	Spec Thermo	Jones Weber	JCP	17 (1949)	501
		-	-	Complex study	Pemster	JCP	20 (1952)	1497
		2-5 μ	G	Spec	Claassen	JCP	22 (1954)	1834
		300-1500	G			JCP	28 (1958)	285
$Cl^{35}F_3$	Chlorine trifluoride (isotopic)	-	G	Microwave	Smith	JCP	21 (1953)	609
$Cl^{37}F_3$	Chlorine trifluoride (isotopic)	-	G	Microwave	Smith	JCP	21 (1953)	609
ClF_3NOB	Nitrosyl chloro trifluoro borate	400-4000	S	Struct	Waddington	JCS	- (1960)	2339
$Cl^{35}F_3Si^{28}$	Trifluorochlorosilane (isotopic)	-	G	Microwave	Sheridan	PR	77 (1950)	719
$Cl^{37}F_3Si^{28}$	Trifluorochlorosilane (isotopic)	-	G	Microwave	Sheridan	PR	77 (1950)	719
ClF_3IP	Phosphorous chloride iodide trifluoride	-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
ClF_3B^-	Chlorotrifluoro borate ion	400-4000	-	Struct	Waddington	JCS	- (1960)	2339
ClF_3NOB	Nitrosyl boron trifluorochloride	400-4000	-	Struct, Assign	Waddington	JCS	- (1960)	2339
ClF_5S	Sulphur chloride pentafluoride	2-20 μ	G	Spec	Cross	TFS	56 (1960)	945
		-	G	Microwave	Kewley	TFS	56 (1960)	1732
ClI	Iodine monochloride	1.5-16 μ	L	Spec	Marvin	PR	34 (1912)	161
		-	G	Spec	Darbyshire	PR	40 (1932)	366
		-	-	FC, Bond dist	Badger	JCP	2 (1934)	128
		-	-	Coupling theory	Mulliken	PR	46 (1934)	549
		-	-	Coupling constant	Pekeris	PR	45 (1934)	198
		-	-	FC, Bond dist	Badger	PR	48 (1935)	284
		-	-	I	Mulliken	PR	57 (1940)	500
		-	-	FC	Sutherland	JCP	8 (1940)	161
		-	-	Thermo	Hulburt	JCP	9 (1941)	61

ClNO	Nitryl chloride	2-16 μ	G	Reaction study	Ogg	JCP	18 (1950)	900
		300-4000	G	Assgn, Spec	Ryason	JCP	22 (1954)	2000
		-	-	Freq, Assgn	Dodd	TFS	52 (1956)	145
		-	G	Microwave	Millen	JCS	- (1958)	350
		-	-	Anal	Weatherly	JCP	30 (1959)	1328
ClO	Chlorine monoxide	-	G	Spec	Durie	CJF	36 (1958)	35
		-	-	Microwave	Jackson	PRCS	- (1959)	10
ClO ₂	Chlorine dioxide	-	-	Theory	Salant	PR	42 (1932)	812
		1-19 μ	-	Freq, FC	Bailey	PR	140 (1933)	605
		-	-	Freq, FC	Ku	PR	44 (1933)	376
		-	-	Vib	Duncan	JCP	3 (1935)	384
		-	-	Assgn	Coon	JCP	14 (1946)	665
		-	-	FC	McDowell	PRS	187 (1946)	398
		-	-	Quant. Mech.	Torkington	JCP	17 (1949)	357
		1-15 μ	G	Freq, FC	Hedberg	JCP	19 (1951)	509
		-	-	Pot func	Duchesne	JCP	20 (1952)	1968
		2-40 μ	G	Spec, Assgn	Nielsen	JCP	20 (1952)	1878
		-	-	Pot const	Ward	PR	96 (1954)	845
		-	-	Theory	Smith	TFS	52 (1956)	891
		-	G	Microwave	Baird	BAPS	2 (1956)	99
		-	G	Microwave	Curl	PR	121 (1961)	1119
Cl ³⁵ O ₂	Chlorine dioxide (isotopic)	-	-	Vib	Duchesne	JCP	21 (1953)	2005
ClO ₃ ⁻	Chlorate ion	-	L	Spec, FC	Shen	PR	51 (1937)	235
ClO ₄ ⁻	Perchlorate ion	-	-	Freq	Taylor	TFS	25 (1929)	314
		-	-	Vib	Urey	PR	38 (1931)	1969
		-	-	Vib	Rosenthal	PR	46 (1934)	730
		-	-	Force field	Heath	TFS	44 (1948)	884
		-	-	Force field	Linnett	TFS	48 (1952)	592
		-	-	FC	Venkateswarlu	JCP	23 (1955)	2365
		935	-	Freq	Hahn	JCP	24 (1956)	921
		-	-	FC	Pistorius	JCP	28 (1958)	514
Cl ₂	Chlorine	-	-	Thermo	Urey	JACS	45 (1923)	1445
		0.4-0.97 μ	-	Spec	Klless	JRNB	2 (1929)	1117
		-	-	Theory	Villars	JACS	52 (1930)	1733

Cl ₂ F ₃ P	Phosphorous dichloride trifluoride		Quant. Mech.	Wilson	JCP	22 (1934)	432
Cl ₂ O	Chlorine Oxide	-	Thermo Spec, FC FC Assign FC Quant. Mech. Spec, FC Struct FC FC, Theory	Villars Bailey Penney Sutherland Gordy Torkington Hedberg Torkington Slowinski Smith	JACS PRS PRS PRS JCP JCP JCP JCP JCP TFS	52 142 156 156 14 17 19 56 23 52	(1930) (1933) (1936) (1936) (1946) (1949) (1951) (1952) (1955) (1956)
Cl ₂ OS	Thionyl chloride	-	Mol. Const. Spec Spec, Freq Iso. Assign Freq	Villars Schreiber Martz Ketelaar Haszeldine Rolfe	CR AC JCP JCP JCS TFS	11 21 22 23 - 51	(1932) (1949) (1954) (1955) (1955) (1955)
Cl ₂ OSe	Selenium oxychloride	-	Freq	Rolfe	TFS	51	(1955) 778
Cl ₂ O ₂ S	Sulphuryl chloride	-	Quant. Mech. Spec Spec, Assign Assign	Shatter Schreiber Martz Haszeldine	JCP AC JCP JCS	12 21 22 -	(1944) (1949) (1954) (1955)
Cl ₂ S	Sulphur dichloride	-	FC, Bond dist Thermo Spec Freq Freq, Assign	Gordy McDowell Herndon Stammreich Hooge	JCP PRS PR JCP RTC	14 187 99 23 77	(1946) (1946) (1955) (1955) (1958)
Cl ₂ S ₂	Sulfur monochloride	-	Spec Freq Spec, Assign Thermo Study Freq assign	Marvin McDowell Bernstein Luft Ketelaar Hooge	PR PRS JCP JCP JCP RTC	34 187 18 21 23 77	(1912) (1946) (1950) (1953) (1955) (1958)

1956

Cl ₃ F ₃ OPB	Phosphorous oxychloride boron trifluoride	400-4000	S,L	Struct, Assign	Waddington	JCS	-	(1960)	2339
Cl ₃ N	Nitrogen trichloride	1.4-25 μ	G	Assign	Moore	JACS	74	(1952)	6076
Cl ₃ OP	Phosphorous oxychloride	-	-	Thermo	Stevenson	JCP	9	(1941)	403
		2-21 μ	L	Spec, Anal	Daasch	AC	23	(1951)	853
		-	-	Freq	Daasch	JCP	19	(1951)	22
		-	-	Group freq	Bell	JACS	76	(1954)	5185
		-	-	Freq	Ziomek	PR	98	(1954)	243
		-	-	Group freq	Downs	JACS	77	(1955)	2098
		-	-	Group freq	Emeleus	JCS	-	(1955)	563
		1160-2998	Sol	H bond, I	Halforn	JACS	77	(1955)	4472
		1100-1300	L	Band freq	Sheldon	JACS	80	(1958)	4775
Cl ₃ ³⁵ OP	Phosphoryl chloride (isotopic)	-	G	Microwave	Williams	JCP	20	(1952)	164
Cl ₃ ³⁷ OP	Phosphoryl chloride (isotopic)	-	G	Microwave	Williams	JCP	20	(1952)	164
Cl ₃ P	Phosphorous trichloride	1.5-16 μ	L	Spec	Marvin	PR	34	(1912)	161
		-	-	Freq	Howard	JCP	2	(1934)	630
		-	-	Quant. Mech.	Wilson	JCP	2	(1934)	432
		-	-	Vib.	Deansan	JCP	3	(1935)	384
		-	-	Raman, Thermo	Anderson	JCP	4	(1936)	529
		-	-	Thermo	Stevenson	JCP	9	(1941)	403
		-	-	FC	Gordy	JCP	14	(1946)	305
		-	-	Band freq	Daasch	AC	23	(1951)	853
		-	-	Freq	Daasch	JCP	19	(1951)	22
		161-192 μ	G	Freq	O'Loane	JCP	21	(1953)	669
		1500-2100	Sol	Study	Weston	JACS	76	(1954)	2645
		-	-	Freq	Ketelaar	JCP	23	(1955)	1549
		85-550	L	Freq	Hahn	JCP	24	(1956)	921
		20-45 μ	G	Assign	Davies	JMS	2	(1958)	253
		-	-	Assign	Lovenzelli	CPR	248	(1959)	1980
Cl ₃ ³⁵ PS ³⁴	Thiophosphoryl chloride (isotopic)	-	G	Microwave	Williams	JCP	20	(1952)	164
Cl ₃ ³⁵ PS ³²	Thiophosphoryl chloride (isotopic)	-	G	Microwave	Williams	JCP	20	(1952)	164

$Cl_3^{37}P^{32}$	Thiophosphoryl chloride (isotopic)	-	G	Microwave	Williams	JCP	20 (1952)	164
Cl_3PS	Thiophosphoryl chloride	400-1600	-	Thermo Freq Band freq Freq Freq	Stevenson Cilento Daasch Daasch Ziomek	JCP JACS AC JCP PR	9 (1941) 71 (1949) 23 (1951) 19 (1951) 98 (1955)	403 2753 853 22 243
Cl_3As	Arsenic trichloride	1.5-16 μ	L	Spec Freq Quant. Mech. FC Freq Assign	Marvin Howard Wilson Gordy Hahn Davies	PR JCP JCP JCP JCP JMS	34 (1912) 2 (1934) 2 (1934) 14 (1946) 24 (1956) 2 (1958)	161 630 432 305 921 253
Cl_3B	Boron trichloride	1-18 μ	G	Spec Spec Thermo Force field Spec, Assign Spec Force field Reaction Vib FC FC Freq Assign	Cassie Anderson Spencer Heath Scruby Lacher Linnett Huggins Morino Santhamma Venkateswarlu Lehmann Nadeau	PRS JCP JCP TFS JCP JACS TFS JCP JCP CS JCP JCP AC	148 (1935) 4 (1936) 14 (1946) 44 (1948) 19 (1951) 74 (1952) 48 (1952) 23 (1955) 23 (1955) 24 (1955) 23 (1955) 30 (1959) 32 (1960)	87 703 729 873 386 5292 592 1544 737 262 2368 1219 1480
Cl_3B^{10}	Boron trichloride (isotopic)	300-3000	G	Spec	Lindeman	JCP	24 (1956)	242
Cl_3B^{11}	Boron trichloride (isotopic)	300-3000	G	Spec	Lindeman	JCP	24 (1956)	242
Cl_4S	Sulfur tetrachloride	-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
Cl_4B^-	Tetrachloroborate ion	400-4000	-	Struot	Waddington	JCS	- (1960)	2339

Cl_4B_2	Tetrachloro diborine	20-50 μ	G	Spec., Assign	Mann	JCP	26 (1957)	1665
Cl_4Si	Silicon tetrachloride	1.5-16 μ	L	Spec Assign	Marvin	PR	34 (1912)	161
		-	-	Vib.	Marvin	PR	33 (1929)	952
		-	-	Freq	Urey	PR	38 (1931)	1969
		-	-	Vib.	Villars	CR	11 (1932)	369
		-	-	Quant. Mech.	Rasenthal	PR	46 (1934)	730
		-	-	FC	Wilson	JCP	2 (1934)	432
		-	-	Thermo	Rasenthal	PR	49 (1936)	535
		-	-	FC	Herman	JCP	6 (1938)	406
		-	-	Force field	Gordy	JCP	14 (1946)	305
		-	-	Force field	Heath	TFS	44 (1948)	561
		-	-	FC	Heath	TFS	44 (1948)	878
		-	-	Assign	Simonouti	JCP	17 (1949)	848
		8-15 μ	Sol	Spec	Shimanouchi	JCP	18 (1950)	1306
		-	-	Force field	Scott	JACS	73 (1951)	2599
		-	-	FC	Linnett	TFS	48 (1952)	592
		2-25 μ	G	Spec, Assign	Bowers	JCP	21 (1953)	1117
		-	-	FC	Smith	JCP	21 (1953)	1997
		424	-	Band freq	Gaunt	TFS	50 (1954)	546
		-	-	Freq	Johannessen	JRNB	53 (1954)	197
		-	-	Assign	Hahn	JCP	24 (1956)	921
		-	-	FC	Forneris	ZE	62 (1958)	1130
		-	-		Pistorius	JCP	28 (1958)	514
Cl_5F_3PB	Tetrachloro phosphonium chloro trifluoroborate	400-4000	S	Struct, Assign	Waddington	JCS	- (1960)	2339
Cl_5O_3SP	Tetrachloro phosphonium chlorosulphate	400-4000	S	Struct, Assign	Waddington	JCS	- (1960)	2339
Cl_5P	Phosphorous pentachloride	-	-	Thermo, Raman	Anderson	JCP	4 (1936)	529
		-	-	Thermo	Stevenson	JCP	9 (1941)	403
		-	-	Group freq	Downes	JACS	77 (1955)	2098
		300-1400	G,Sol	Assign, FC	Wilmshurst	JCP	27 (1957)	661
Cl_6N_3P	Trimeric phosphonitric chloride	2-21 μ	Sol	Spec	Daasch	AC	23 (1951)	853
		-	-	Assign, FC	Iribarne	JCP	20 (1952)	346
		4-33 μ	S,Sol	Spec, I	Daasch	JACS	76 (1954)	3403
		1150-1350	-	Freq, Struct	Shaw	CIL	- (1959)	54

Cl_6OSi_2	Hexachlorodisiloxane	2-16 μ	L	Spec	JACS	76 (1954)	2091
Cl_6Si_2	Hexachlorodisilane	-	G, L, S, Sol	Config.	JPC	56 (1952)	324
		2-16 μ	L	Spec	JACS	76 (1954)	2091
		-	-	Diffusion	JCP	23 (1955)	1499
		15-25 μ	G	Struct	JCP	24 (1956)	164
$Cl_8N_4P_4$	Phosphonitric chloride tetramer	2-21 μ 4-31 μ	Sol S, Sol	Spec	AC	23 (1951)	853
		1150-1350	-	Spec, I Freq	JACS	76 (1954)	3403
$Cl_{10}OSi_4$	3-Oxadecachloro-pentasilane	2-16 μ	L	Spec, Group freq	JACS	76 (1954)	2091
$Cl_{18}O_3Si_8$	3,6,9-Trioxaoc-tadecachlorohendeca-silane	2-16 μ	L	Spec, Group freq	JACS	76 (1954)	2091
FI	Iodine fluoride	-	-	Freq	TFS	33 (1937)	1390
FNO	Nitrosyl fluoride	1844-766	G	Spec, Mol. Const. FC, Thermo	JCP	20 (1952)	380
		2-30 μ	G	Spec, Freq, Assign Freq	JCP	20 (1952)	135
		-	-	Freq	JCS	- (1954)	378
		-	G, Sol	Freq	JCS	- (1957)	919
		-	-	Freq	JCS	- (1957)	4144
FNO_2	Nitryl fluoride	400-5000	G	Spec, Assign	TFS	52 (1956)	145
FNS	Thionitrogen fluoride	2-15 μ	G	Assign	JPC	64 (1960)	395
FB	Boron monofluoride	-	-	FC	TFS	38 (1942)	1
FSi	Silicon fluoride	-	G	Spec, FC	TFS	38 (1942)	1
		-	G	Spec	PRS	71 (1958)	476
F_2	Fluorine	-	-	Morse potential FC	PR	34 (1929)	57
		-	-	FC	TFS	28 (1932)	698
		-	-	FC	JCP	2 (1934)	128
		-	-	I	JCP	7 (1939)	20
		-	-	Thermo	JCP	7 (1939)	806

1960

				Quant. Mech.		Mulliken	JCP	8 (1940)	234
				FC		Mulliken	PR	57 (1940)	500
				I		Sutherland	JCP	8 (1940)	161
				FC		Gordy	JCP	14 (1946)	305
				FC		Wu	PR	71 (1947)	118
F_2N_2			300-3400	I, Assign, NCA	G	Sanborn	JCP	33 (1960)	1855
F_2N_2			300-3400	I, Assign, NCA	G	Sanborn	JCP	33 (1960)	1855
F_2N_2			2-15 μ	Assign	G	Gallup	JPC	64 (1960)	395
F_2O				FC		Penney	PRS	156 (1936)	654
				Assign		Sutherland	PRS	156 (1936)	678
				FC		Gordy	JCP	14 (1946)	305
				Thermo		Patter	JCP	17 (1949)	957
				Quant. Mech.		Torkington	JCP	17 (1949)	357
			2.5-25 μ	Band study	G	Bernstein	JCP	18 (1950)	685
				Bond-bond interaction		Duchesne	JCP	19 (1951)	1191
			2-25 μ	Spec, Assign	G	Jones	JCP	19 (1951)	337
				Anal, FC		Linnett	TFS	48 (1952)	592
			3-13 μ	Spec	G	Schnizlein	JPC	56 (1952)	233
				Collisional excitation		Aroeste	JCP	21 (1953)	870
				Band study		Huggins	JACS	75 (1953)	4126
				FC		Slowinski	JCP	23 (1955)	1933
				FC		Smith	TFS	52 (1956)	891
F_2OS				Freq	L	Bender	JCP	23 (1955)	1316
			7-10 μ	Assign	G	Haszeldine	JCS	- (1955)	2901
			240-5000	Spec, Assign, Thermo	G	O'Loane	JCP	23 (1955)	1313
				Freq		Rolfe	TFS	51 (1955)	778
F_2OSe				Freq, Assign		Rolfe	TFS	51 (1955)	778
F_2O_2S			240-4000	Spec, Assign, FC	G	Perkins	JCP	20 (1952)	1791
				Spec	G,L	Bender	JCP	23 (1955)	1316
			6-9 μ	Assign	G	Haszeldine	JCS	- (1955)	2901
$F_2O_2S^{32}$				Microwave	G	Fristrom	JCP	20 (1952)	1
				Spec, Assign, Struct	G	Lide	JCP	26 (1957)	734

$F_2O_2S^{34}$		G	Microwave	Fristrom	JCP	20 (1952)	1
Sulfuryl fluoride (isotopic)	-	-					
F_2O_3S	2-40 μ	G	Spec	Dudley	JACS	78 (1956)	290
F_2S_2	-	-	Freq, Assign	Hooge	RTC	77 (1958)	902
F_3Br	-	-	Spec	Magnuson	JCP	27 (1957)	223
F_3N	-	-	Freq, Assign	Bailey	JCP	5 (1937)	274
	-	-	Microwave	Sheridan	PR	79 (1950)	513
	250-5000	G	Spec, Assign, Thermo	Wilson	JCP	20 (1952)	1716
	400-3000	G	Spec, Assign	Pace	JCP	23 (1955)	1248
	-	-	Thermo	Pierce	JCP	23 (1955)	551
	400-1050	G	Assign	Schatz	JCP	24 (1958)	475
F_3N^{14}	-	-	Microwave	Sheridan	PR	79 (1950)	513
F_3N^{15}	-	-	Microwave	Sheridan	PR	79 (1950)	513
F_3OP	-	-	Freq	Daasch	JCP	19 (1951)	22
	-	-	Band study	Daasch	AC	23 (1951)	853
	-	-	Freq	Cutowsky	JCP	20 (1952)	1652
	-	-	Freq	Bell	JACS	76 (1954)	5185
	-	-	Freq	Emeleus	JCS	- (1955)	563
	-	-	Freq	Ziomek	PR	98 (1955)	243
	472-1433	G	Freq	Pemslar	JCP	24 (1956)	920
	0.1-0.4 μ	-	Mol. Const.	Burrus	JCP	26 (1957)	391
$F_3O^{16}P$	-	G	Microwave	Williams	JCP	20 (1952)	164
$F_3O^{18}P$	-	G	Microwave	Williams	JCP	20 (1952)	164
F_3P	-	-	Freq	Howard	JCP	2 (1934)	630
	-	-	Thermo	Stevenson	JCP	9 (1941)	403

F_3PS	Thiophosphoryl trifluoride	-	-	FC	Gordy	JCP	14	(1946)	305
		-	-	Spec	Dailley	AC	21	(1949)	540
		-	-	Microwave	Gilliam	PR	75	(1949)	1014
		-	-	Vib.	Burnette	JCP	18	(1950)	1300
		-	-	Band study	Daasch	AC	23	(1951)	853
		-	-	Freq	Daasch	JCP	19	(1951)	22
		-	-	Pressure broadening	Mizushima	PR	83	(1951)	94
		486-891	G	Spec, Assign, FC	Gutowky	JCP	20	(1952)	1652
		250-5000	G	Spec, Assign, FC,	Wilson	JCP	20	(1952)	1716
		-	-	Freq	Weston	JACS	76	(1954)	2645
		890	-	Freq	Hahn	JCP	24	(1956)	921
		-	-	Freq	Ziomek	PR	98	(1955)	243
		F_3PS^{32}	Thiophosphoryl trifluoride (isotopic)	-	G	Microwave	Williams	JCP	20
-	G			Microwave	Williams	JCP	20	(1952)	164
F_3PS^{33}	Thiophosphoryl trifluoride (isotopic)	-	G	Microwave	Williams	JCP	20	(1952)	164
		-	G	Microwave	Williams	JCP	20	(1952)	164
F_3PS^{34}	Thiophosphoryl trifluoride (isotopic)	-	-	Freq	Howard	JCP	2	(1934)	630
		-	-	Quant. Mech.	Wilson	JCP	2	(1934)	432
		-	-	FC	Gordy	JCP	14	(1946)	305
		-	-	Vib.	Burnette	JCP	18	(1950)	1300
		-	-	Bond study	Huggins	JACS	75	(1953)	4126
		-	-	Microwave	Kisliuk	JCP	21	(1953)	828
		707	-	Freq	Hahn	JCP	24	(1956)	921
		-	-	Freq assign	Anderson	JCP	4	(1936)	703
		-	-	Freq assign	Bailey	JCP	5	(1937)	274
		-	-	Spec, Assign, FC	Bailey	PRS	161	(1937)	107
F_3B	Boron trifluoride	-	G	Assign	Yost	JCP	6	(1938)	424
		400-3000	-	Freq, Assign	Gage	JCP	7	(1939)	455

	-	-	-	Ratio rule	Edgell	JCP	13	(1945)	539
	-	-	-	Thermo	Spencer	JCP	14	(1946)	729
	-	-	-	FC	Heath	TFS	44	(1948)	873
	-	-	-	Quant. Meoh.	Nielsen	JCP	17	(1949)	659
	-	-	-	FC	Linnett	TFS	48	(1952)	592
	-	-	-	FC	Heslop	TFS	49	(1953)	1262
	-	-	-	NCA, FC	Santhamma	CS	22	(1953)	298
	1500	-	G	Spec	Nightingale	JCP	22	(1954)	1468
	-	-	-	FC	Venkateswarlu	JCP	23	(1955)	2368
	-	-	-	Vib.	Meal	JCP	24	(1956)	1126
	-	-	-	Bond study	Wilmshurst	JPC	63	(1958)	631
	470-1500	S	S	Freq, Assign	Dows	JCP	31	(1959)	1637
	1450-3300	S	S	Freq, Assign	Vanderryn	JCP	30	(1959)	331
F_3B^{10}	-	-	-	FC, Freq	Bailey	PRS	161	(1937)	107
Boron trifluoride (isotopic)	-	-	-	FC	Heslop	TFS	49	(1953)	1262
	670-750	G	G	Spec	Nielsen	JCP	22	(1954)	659
	300-3000	G	G	FC, Spec, Freq, Assign	Lindeman	JCP	24	(1956)	242
	482-1505	G	G	I, FC	McKean	JCP	24	(1956)	1002
F_3B^{11}	-	-	-	FC, Freq	Bailey	PRS	161	(1937)	107
Boron trifluoride (isotopic)	-	-	-	FC	Heslop	TFS	49	(1953)	1262
	650-750	G	G	Spec	Nielsen	JCP	22	(1954)	659
	300-3000	G	G	Spec, Assign, FC	Lindeman	JCP	24	(1956)	242
	480-1454	G	G	I, FC	McKean	JCP	24	(1956)	1002
F_4N_2	-	-	G	Microwave, Struct	Lide	JCP	31	(1959)	1129
Tetrafluoro hydrazine	-	-	G	Spec, Assign	Dodd	TFS	52	(1956)	1052
F_4S	400-5000	G	G	Bond study	Wilmshurst	JPC	62	(1958)	631
Sulfur tetrafluoride	-	-	-	Assign	Edwards	JACS	77	(1955)	266
	-	-	S	Spec	Ketelaar	ZE	64	(1960)	641
Fluoroborate ion	400-4000	-	-	Struct, Assign	Waddington	JCS	-	(1960)	2339
F_4Si	-	-	-	Freq	Yost	JCP	4	(1936)	325
Silicon tetrafluoride	-	-	-	Freq, Assign	Bailer	JCP	5	(1937)	274
	2-16 μ	G	G	Spec, Freq	Bailey	PRS	167	(1938)	555
	-	-	-	FC	Gordy	JCP	14	(1946)	305
	-	-	-	FC	Heath	TFS	44	(1948)	561
	-	-	-	Freq, FC	Simanouti	JCP	17	(1949)	848

I ₂	Iodine	-	Morse potential	Morse	PR	34	(1929)	57
		G	Fluorescence	Loomis	PR	35	(1930)	662
		-	Thermo	Villars	JACS	52	(1930)	1733
		G	Spec	Brown	PR	38	(1931)	1187
		-	Vib.	Oldenberg	PR	37	(1931)	194
		-	FC	Lochte-Holmgren	TFS	28	(1932)	698
		-	FC	Badger	JCP	2	(1934)	128
		-	Coupling theory	Mulliken	PR	46	(1934)	549
		-	Coupling constant	Pekeris	PR	45	(1934)	98
		-	Thermo	Mulliken	JCP	4	(1936)	620
		-	Quant. Mech.	Murphy	JCP	4	(1936)	344
		-	Freq	Clark	TFS	33	(1937)	1394
		-	Spec	Plum	JCP	5	(1937)	172
		Sol	I	Mulliken	JCP	7	(1939)	20
		-	Filters	Pfund	JOSA	29	(1939)	56
		-	I	Mulliken	PR	57	(1940)	500
		-	Quant. Mech.	Mulliken	JCP	8	(1940)	234
		-	Quant. Mech.	Mulliken	JCP	8	(1940)	382
		-	FC	Sutherland	JCP	8	(1940)	161
		-	Thermo	Hulburt	JCP	9	(1941)	61
		-	FC	Linnett	TFS	38	(1942)	1
		-	FC, Bond distances	Gordy	JCP	14	(1946)	305
		-	Spec	Ham	JCP	20	(1952)	1336
		Sol	Bond distance	Huggins	JACS	75	(1953)	4126
		-	I	Eshbach	JOSA	44	(1954)	868
		G	Spec	Ham	JACS	76	(1954)	3886
		-	Band study	Haszeldine	JCS	-	(1954)	4145
		Sol	Band study	Ketelaar	JCP	23	(1955)	749
		-	Potential function	Lippincott	JCP	23	(1955)	1131
		-	FC	Baughan	TFS	53	(1957)	1046
		-	Interaction study	Morcillo	ARS	55B	(1959)	629
I ₃	Boron Triiodide	-	Spec, Freq	Wentink	JCP	28	(1958)	826
		G, Sol,						
		S						
NO	Nitric oxide	-	Thermo	Tolman	JACS	45	(1923)	2277
		-	Thermo	Urey	JACS	45	(1923)	1445
		-	Morse potential	Morse	PR	34	(1929)	57
		-	Freq	Rideal	TFS	25	(1929)	921
		-	Freq	Snow	TFS	25	(1929)	930
		-	Freq	Snow	PR	35	(1930)	563

	l-type doubling theory	Mulliken	PR	38	(1931)	85
-	Thermo	Badger	JACS	54	(1932)	3523
-	Spec	Strong	PR	42	(1932)	267
20.7-152 μ	Thermo	Gordon	JCP	1	(1933)	297
-	FC	Badger	JCP	2	(1934)	128
-	Freq	Mecke	TFS	30	(1934)	200
-	Mol. Const.	Pekeris	PR	45	(1934)	98
-	Double separation	Witmer	PR	46	(1934)	629
1800-1950	Spec, Anal	Gillette	PR	56	(1939)	1113
2.7-5.3 μ	Spec, Mol. Const.	Nielsen	PR	56	(1939)	781
-	Potential function	Linnett	TFS	36	(1940)	1123
-	FC	Sutherland	JCP	8	(1940)	161
-	Potential function	Clark	TFS	37	(1941)	299
-	Thermo	Hulbert	JCP	9	(1941)	61
-	FC	Linnett	TFS	38	(1942)	1
-	FC	Wu	PR	71	(1947)	118
-	Emission	Benitez	JAP	21	(1950)	907
-	I	Penner	AC	23	(1951)	1048
400-6000	Spec	Smith	JCP	19	(1951)	189
-	Polarizability	Matosi	JCP	20	(1952)	819
0.1-0.2 μ	Microwave	Burnes	PR	92	(1953)	1437
-	Spec	Cowan	JOSA	43	(1953)	710
-	Spec	Cowan	JCP	21	(1953)	1397
-	Band study	Nichols	JOSA	43	(1953)	331
-	I	Penner	JCP	21	(1953)	649
1876	Rotation line width	Weber	JCP	21	(1953)	1503
-	I	Aroeste	JCP	22	(1954)	1273
-	Freq	Hornbeck	JRNB	52B	(1954)	9
1800-2000	Spec	Nightingale	JPC	58	(1954)	1047
2-9 μ	Spec, Ident	Riley	JACS	76	(1954)	3301
1200-2400	Spec, Anal	Saier	AC	26	(1954)	1079
-	I	Vincent-Geisse	CPR	239	(1954)	251
1.8-2.69 μ	Potential function	Lippincott	JCP	23	(1955)	1131
100-600 μ	Spec, Mol. Const.	Nichols	JCP	23	(1955)	57
-	Spec	Palik	JCP	25	(1956)	1174
2-15 μ	Spec	Pierson	AC	28	(1956)	1218
5.3 μ	Spec	Shaw	JCP	24	(1956)	399
0.12-0.2 μ	Stark effect	Burnes	PR	109	(1957)	1553
-	I	Smith	AC	30	(1958)	1217

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$N^{14}O^{16}$	0.117 μ	G	Microwave, Mol. Const.	Favro	PR	114 (1959)	1534
	-	Sol	Struct	Lescombe	BSCF	- (1959)	1175
	-	G	Microwave, Absorption	Maryott	JCP	31 (1959)	617
	1600-2000	-	Spec	Terenin	SA	15 (1959)	946
	-	G	Spec, Struct	Lin	PR	119 (1960)	1027
$N^{15}O$	-	G	Spec, Mol. Const.	Mould	SA	16 (1960)	479
	-	G	Microwave	Gallagher	PR	93 (1954)	729
$N^{15}O^{16}$	-	G	Spec, Mol. Const.	Gallagher	PR	103 (1956)	1727
	1700-2000	G	Mol. Const.	Fletcher	JCP	27 (1957)	579
NO^+	-	G	Spec	Gallagher	PR	103 (1956)	1727
	-	-	Assign	Goulden	JCS	- (1950)	2620
NO_2	20.7-152 μ	G	Spec	Strong	PR	42 (1932)	267
	2-16 μ	L	Spec	Schaffert	JCP	1 (1933)	507
	-	-	Freq	Sutherland	PRS	141 (1933)	342
	1-4 μ	-	Mol. Struct	Harris	JCP	2 (1934)	51
	14 μ	G	Freq, Assign	Sutherland	PRS	145 (1934)	278
	-	-	FC	Penney	PRS	156 (1936)	654
	-	-	Assign	Sutherland	PRS	- (1936)	678
	-	-	Freq, Assign	Harris	JCP	8 (1940)	765
	-	-	Review	Mulliken	RMP	14 (1942)	204
	-	-	Force field	Linnett	TFS	45 (1949)	844
	-	-	Quant. Mech.	Torkington	JCP	17 (1949)	357
	1.5-25 μ	G	Freq	Wilson	PR	76 (1949)	472
-	G	Night sky	Kaplan	PR	78 (1950)	82	
1630	G	Spec	Cowan	JCP	21 (1953)	1397	
1.4-3.4 μ	G	Spec, Assign	Moore	JOSA	43 (1953)	1045	
1600-1800	G	Reactions study	Nightingale	JCP	21 (1953)	1398	
640-920	G	Spec, Mol. Const.	Brown	JCP	22 (1954)	955	
-	G	Mol. Const.	Grenier-Besson	CPR	238 (1954)	2067	
-	-	Assign, Spec	Neuberger	JCP	22 (1954)	1693	
700-1800	G	Spec	Nightingale	JPC	58 (1954)	1047	
-	G	I	Vincent-Geisse	CPR	239 (1954)	251	
-	S	Unstable species studied	Whittle	JCP	22 (1954)	1943	
750	G	Freq	Keller	PR	99 (1955)	1624	

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NSi	Silicon nitride	Morse potential	Morse	PR	(1929)	57
-	-	FC	Badger	JCP	22 (1934)	128
-	-	Mol. Const.	Pekeris	PR	45 (1934)	98
-	-	FC	Linnett	TFS	38 (1942)	1
-	-	FC	Wu	PR	71 (1947)	118
N ₂	Nitrogen	Thermo	Tolman	JACS	45 (1923)	2277
-	-	Thermo	Urey	JACS	45 (1923)	1445
-	-	Emission	Pfund	JOSA	9 (1924)	193
-	-	Law of force	Birge	PR	27 (1925)	107
-	0-1.5 μ	Emission	Poetker	PR	30 (1927)	812
-	0-1.5 μ	First positive group	Poetker	PR	31 (1928)	152
-	0.9-2 μ	Spec	Ingram	PR	33 (1929)	1092
-	0.9-2 μ	Freq	Ingram	PR	34 (1929)	421
-	-	Morse potential	Morse	PR	34 (1929)	57
-	-	Thermo	Villars	JACS	52 (1930)	1733
-	-	FC	Badger	JCP	2 (1934)	128
-	-	Thermo	Johnston	JACS	56 (1934)	271
-	-	Freq	Mecke	TFS	30 (1934)	200
-	-	Mol. Const.	Pekeris	PR	45 (1934)	98
-	-	Spec	Frost	PR	48 (1935)	66
-	-	Potential function	Linnett	TFS	36 (1940)	1123
-	-	Potential function	Clark	TFS	37 (1941)	299
-	-	Thermo	Hulburt	JCP	9 (1941)	61
-	-	Freq	Barker	RMP	14 (1942)	198
-	-	FC	Linnett	TFS	38 (1942)	1
-	17 μ	Line width	Adel	RMP	16 (1944)	236
-	-	Absorption law	Nielsen	RMP	16 (1944)	307
-	-	Night sky	Stebbins	PR	66 (1944)	225
-	0.5 μ	Microwave	Beringer	PR	70 (1946)	53
-	-	FC	Gordy	JCP	14 (1946)	305
-	-	Spec	Herman	JPR	7 (1946)	203
-	-	Spec	Coggeshall	JCP	15 (1947)	65
-	-	FC	Wu	PR	71 (1947)	118
-	0.8-1.1 μ	Absorption	Worley	JCP	16 (1948)	533
-	-	Absorption	Crawford	PR	75 (1949)	1607
-	-	Zeeman effect	Kiess	JRNB	42 (1949)	183
-	4.3-6.4 μ	Liquid air band	Oxholm	PR	76 (1949)	151
-	-	Spec	Petrie	PR	77 (1950)	720
-	2250-2500	Spec	Smith	PR	79 (1950)	728
-	4.3 μ	Homopolar diatomic	VanAssett	PR	79 (1950)	1016

N_2^+	Nitrogen ion	1.1 μ	G	Active N_2	Branscomb	PR	82 (1951)	83
		4.5 μ	G	I	Colloman	PRS	208 (1951)	332
		1-14 μ	G	Transmission	Gebbie	PRS	206 (1951)	87
		7.8-8.6 μ	G	Anal	Goody	PRS	209 (1951)	178
		1.25-2.5 μ	G	Absorption	Murray	PR	83 (1951)	486
		4-5 μ	G	I	Thompson	PRS	208 (1951)	326
		4632	G, L	I	Welsh	PR	83 (1951)	1264
		1.7 μ	G	Spec	Adel	PR	88 (1952)	128
		-	G	Short duration after glow	Herman	PR	86 (1952)	570
		-	G	Vibration relaxation	Schwartz	JCP	20 (1952)	1591
		-	-	FC	Thomas	JCS	- (1952)	2383
		-	G	Spec	Gaebler	JOSA	43 (1953)	705
		2994-4670	G	Transmission	Fahrenfort	JCP	22 (1954)	1631
-	-	Potential function	Lippincott	JCP	23 (1955)	1131		
-	G	Vibration relaxation	Penny	JCP	23 (1955)	1281		
N_2^+	Nitrogen ion	-	-	Law of force	Birge	BAPS	1 (1925)	12
		-	-	Morse potential	Morse	PR	34 (1929)	57
		-	-	l-type doubling theory	Mulliken	PR	38 (1931)	85
		-	-	Mol. Const.	Pekeris	PR	45 (1934)	98
		-	-	Potential function	Linnett	TFS	36 (1940)	1123
		-	-	Potential function	Clark	TFS	37 (1941)	299
		-	-	FC	Linnett	TFS	38 (1942)	1
		2.5 μ	G	Thermo	Hibben	JACS	50 (1928)	937
		2-5 μ	G	Spec	Bailey	JCS	- (1929)	51
		-	G	Spec	Dickinson	PR	34 (1929)	582
		-	-	Freq	Snow	PR	35 (1930)	563
		-	-	Thermo	Villars	JACS	52 (1930)	1733
		20 μ	G	Spec, Assign, Mol. Const.	Plyler	PR	38 (1931)	1827
20-33 μ	G	Transmission	Strong	PR	37 (1931)	1003		
6.7-33 μ	G	Transmission	Strong	PR	37 (1931)	1565		
-	-	Struct, FC	Bailey	PR	39 (1932)	534		
-	-	Thermo	Rodebush	PR	40 (1932)	113		
20.7-152 μ	G	Spec	Strong	PR	42 (1932)	267		
-	G	Spec	Cross	JCP	2 (1934)	6		
-	-	Thermo	Kassel	JACS	56 (1934)	1838		
-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432		
-	G	Thermo	Gordon	JCP	3 (1935)	259		
-	-	Spec	Duncan	JCP	4 (1936)	638		

-	-	Isotope effect	Rosenthal	JCP	5	(1937)	465
G	-	Spec	Adel	PR	59	(1941)	915
G	-	Absorption	Adel	PR	59	(1941)	944
-	7.78 μ	I	Wells	JCP	9	(1941)	659
-	590-2224	Microwave	Coles	PR	72	(1947)	972
G	-	I, Assign	Thorndike	JCP	15	(1947)	157
G	-	I	Wilson	PR	71	(1947)	479
G	1-16 μ	Dispersion	Hammer	PR	74	(1948)	1262
G	2-13 μ	Earth's atmosphere	Migoette	JOSA	38	(1948)	1094
G	2.5-5 μ	Atmosphere of earth	Shaw	PR	74	(1948)	978
-	59-1285	Pressure broadening	Thorndike	JCP	16	(1948)	211
G	-	Emission	Ginsburg	PR	75	(1949)	1317
-	-	Force field	Linnett	TFS	45	(1949)	844
G	2224	Freq	Rhodes	PR	76	(1949)	1273
G	6 μ	Spec	Chapman	PR	78	(1950)	333
G	1.2 μ	Anal	Herzberg	JCP	18	(1950)	1551
G	3.6 μ	Spec	McMath	PR	78	(1950)	65
G	4.06 μ	Spec	Shaw	PR	78	(1950)	497
G	-	I	Eggers	AC	23	(1951)	1045
G	-	I	Eggers	JCP	19	(1951)	1554
G	579-4734	Refraction	Lieber	JACS	73	(1951)	1313
-	-	Vib., FC	Taylor	JCP	19	(1951)	1314
G	700	Band study	Thomas	JCP	19	(1951)	1162
-	-	Polarizability	Matossi	JCP	20	(1952)	819
G	-	Band study	Adel	JOSA	43	(1953)	1053
G	2-16 μ	Spec	Goldberg	JOSA	43	(1953)	1033
G	2200-2800	Spec, Mol. Const.	Thompson	PRS	220	(1953)	435
G	2198	Spec	White	JCP	21	(1953)	1399
G	2.5-5 μ	Spec	Amart	JPR	15	(1954)	636
G	600	Mol. Const.	Christensen	TFS	50	(1954)	1027
G	-	I	Morrow	JACS	76	(1954)	4522
G	1200-2300	Spec	Nightingale	JPC	58	(1954)	1047
G	2-9 μ	Spec, Ident	Riley	JACS	76	(1954)	3301
G	1200-2400	Spec	Saier	AC	26	(1954)	1079
-	-	FC	Teranishi	JCP	22	(1954)	896
-	-	FC	Bigeleisen	JCP	23	(1955)	2264
G	4.5 μ	Freq, Struct	Lakshmi	JCP	23	(1955)	1887
G	0.08-0.2 μ	Microwave	Burrus	PR	101	(1956)	599
G	1.7 μ	Spec	Lakshmi	JCP	24	(1956)	811
G	2-15 μ	Spec	Pierson	AC	28	(1956)	1218
G	-	Spec	Plyler	JCP	24	(1956)	95

1800-2000	G	Struct, Spec	Thompson	SA	8 (1956)	129
500-4000	S	Spec, Assign, Mol. Const.	Dows	JCP	26 (1957)	745
-	G	I	Eggers	JCP	27 (1957)	1405
2-25 μ	S	Assign, Spec	Giguere	SA	9 (1957)	204
700	Sol	Spec, Freq, Assign	Dows	SA	13 (1958)	308
-	-	Pressure effect	Gilfert	JOSA	48 (1958)	765
2300-3360	G	Spec, Freq	Clough	JCP	30 (1959)	1359
1740-1883	S	Spec, Struct	Fateley	JCP	31 (1959)	204
-	-	Absorption	Singleton	DA	19 (1959)	2372
-	-	FC	Verdier	JCP	30 (1959)	1372
-	G	Spec	Mould	SA	16 (1960)	479
565-615	G	Struct	Nielsen	JPR	21 (1960)	24
2224	G	FC	Richards	JCP	18 (1950)	694
4000-5000	G	Mol. Const.	Douglas	JCP	22 (1954)	275
-	-	Microwave	Coles	PR	72 (1947)	973
-	-	Assign	Bigeleisen	JCP	18 (1950)	1656
2224	G	FC	Richardson	JCP	18 (1950)	694
2.5-20 μ	G	Freq, FC	Begun	JCP	28 (1958)	414
-	G	Assign	Bigeleisen	JCP	18 (1950)	1656
4000-5000	G	Spec, Mol. Const.	Douglas	JCP	22 (1954)	275
2.5-20 μ	G	Freq, FC	Begun	JCP	28 (1958)	414
2.5-20 μ	G	Freq, FC	Begun	JCP	28 (1958)	414
1740-1883	S	Spec, Struct	Fateley	JCP	31 (1959)	204
-	-	Assign	Goulden	JCS	- (1950)	2620
1550-1950	Sol	Spec, Struct	Fateley	JCP	31 (1959)	204
3-24 μ	S	Assign	Hisatsune	JCP	33 (1960)	714
3-24 μ	S	Assign	Hisatsune	JCP	33 (1960)	714

N_2O_4	Nitrogen tetroxide	1-16 μ	L,G	Spec, Assign	Schaffert	JCP	1 (1933)	507
		1-14 μ	G	Spec, Assign, FC, Thermo.	Sutherland	PRS	141 (1933)	342
N_2O_4	Nitrogen tetroxide	1-4 μ	-	Struct	Harris	JCP	2 (1934)	57
		-	-	Bond study	Fugassi	JPC	46 (1942)	630
		1.5-25 μ	-	Temperature effect	Wilson	PR	76 (1949)	472
		240-5000	-	Freq, Assign	Perkins	PR	85 (1952)	755
		1600-1800	G	Reaction study	Nightingale	JCP	21 (1953)	1398
		700-1800	G	Spec	Nightingale	JPC	58 (1954)	1047
		700-800	G	Spec	Keller	JCP	24 (1956)	636
		-	-	FC	Smith	TFS	52 (1956)	891
		800-2600	-	Spec, I	Miller	JCS	- (1957)	1369
		320-5500	G,L,S	Absorption	Snyder	JCP	26 (1957)	960
		320-5500	L,G,S, Sol	Spec, Assign	Snyder	JMS	1 (1957)	139
		N_2O_4	Nitrogen tetroxide	700-1900	S	Spec, Struct	Fateley	JCP
450-2600	S			Assign	Hisatsune	JCP	31 (1959)	1130
-	-			FC	Hisatsune	SA	16 (1960)	450
N_2O_4	Nitrogen tetroxide (isotopic)	340-5500	L,G	Freq, I, Assign	Begun	JMS	4 (1960)	388
		3-24 μ	S	Assign	Hisatsune	JCP	33 (1960)	714
N_2O_4	Nitrogen tetroxide (isotopic)	340-5500	L,G	Freq, I, Assign	Begun	JMS	4 (1960)	388
		3-24 μ	S	Assign	Hisatsune	JCP	33 (1960)	714
N_2O_5	Nitrogen pentoxide	1-10 μ	G	Spec	Deniels	JACS	48 (1926)	607
		-	G	Photochemical effect	Taylor	JACS	48 (1926)	577
		-	G	Photochemical effect	Mayer	JACS	49 (1927)	3033
		-	G	Photochemical data	Daniels	CR	5 (1928)	39
		1 μ	-	Thermo	Villars	JACS	52 (1930)	1733
		-	-	Assign, Struct	Ingold	JCS	- (1950)	2612
		1730	G	Spec	Cowan	JOSA	43 (1953)	710
		-	G	Spec	Cowan	JOSA	43 (1953)	710
		3.5-25 μ	S	Freq, Assign	Teranishi	JCP	21 (1953)	1116
		700-1850	G	Spec	Nightingale	JPC	58 (1954)	1047
		2-15 μ	G	Spec	Pierson	AC	28 (1956)	1218
		700-1800	S	Spec	Fateley	JCP	31 (1954)	204
N_2O_5	Nitrogen pentoxide (isotopic)	500-2600	S	Spec, Assign, FC	Teranishi	JCP	22 (1954)	896
		500-2600	S	Spec, Assign, FC	Teranishi	JCP	22 (1954)	896

N_3^-					FC	Force field	Penney Linnett	PRS TFS	156 (1936) 45 (1949)	654 844
N_4^+	250-3500	S, Sol			Spec, Struct, Assign	Lippincott	JCP	JCP	21 (1953)	1559
OP					FC FC	Badger Linnett	JCP TFS	JCP TFS	2 (1934) 38 (1942)	128 1
OS					FC FC Mol. Const. FC Freq Thermo. FC FC	Lochte-Holtgreven Badger Pekeris Badger Clark Hulburt Gordy Wu	TFS JCP PR PR TFS JCP JCP	TFS JCP PR PR TFS JCP	28 (1932) 2 (1934) 45 (1934) 48 (1935) 33 (1937) 9 (1941) 14 (1946) 71 (1947)	698 128 98 284 1390 61 305 118
OS_2	400-2000	G			Struct Potential function	Jones Lippincott	JCP JCP	JCP JCP	18 (1950) 23 (1955)	1263 1131
OB					Spec, Struct	Meschi	JMS	JMS	3 (1959)	405
					Morse potential l-type doubling theory FC Mol. Const. Potential function Potential function FC FC	Morse Mulliken Badger Pekeris Linnett Clark Linnett Wu	PR PR JCP PR TFS TFS TFS PR	PR PR JCP PR TFS TFS TFS PR	34 (1929) 38 (1931) 2 (1934) 45 (1934) 36 (1940) 37 (1941) 38 (1942) 71 (1947)	57 85 128 98 1123 299 1 118
OSe					Freq Freq	Clark Clark	TFS TFS	TFS TFS	33 (1937) 33 (1937)	1390 1394
OSi					FC Mol. Const. FC FC FC Spec Absorption Spec	Badger Pekeris Badger Linnett Wu Hass Hass Hass	JCP PR PR TFS PR JOSA JOSA JOSA	JCP PR PR TFS PR JOSA JOSA JOSA	2 (1934) 45 (1934) 48 (1935) 38 (1942) 71 (1947) 39 (1949) 43 (1953) 44 (1954)	128 98 284 1 118 179 326 181

	-	Night sky	Kaplan	PR	78 (1950)	82
	1450-1725	Spec	Smith	PR	79 (1950)	728
	6.4 μ	Homopolar diatomics	VanAsselt	PR	79 (1950)	1016
	-	Pressure broadening	Mizushima	PR	83 (1951)	94
	2900-3300	I	Welsh	PR	83 (1951)	1264
	-	Recombination	Kaplan	PR	88 (1952)	157
	400-4000	Evidence for O ₄ molecule	Smith	JCP	20 (1952)	1972
	-	Microwave	Artman	PR	96 (1954)	1237
	3904	Transmission	Fahrenfort	JCP	22 (1954)	1631
	-	Thermo.	Pennington	JCP	22 (1954)	1442
	-	Potential function	Lippincott	JCP	23 (1955)	1131
	-	Vib.	Penney	JCP	23 (1955)	1281
	-	Spec	Tinkham	PR	99 (1955)	537
	-	FC	Baughan	TFS	53 (1957)	1046
	2-25 μ	Spec, Assign	Harvey	JMS	2 (1958)	405
	-	Morse potential	Morse	PR	34 (1929)	57
	-	l-type doubling theory	Mulliken	PR	38 (1931)	85
	-	Mol. Const.	Pekaris	PR	45 (1934)	98
	-	Potential function	Linnett	TFS	36 (1940)	1123
	-	Potential function	Clark	TFS	37 (1941)	299
	-	FC	Linnett	TFS	38 (1942)	1
O ₂ ⁺	3.9-4.1 μ	Freq	Meyer	JOSA	15 (1927)	257
	20-33 μ	Transmission	Strong	PR	37 (1931)	1003
	6.7-33 μ	Transmission	Strong	PR	37 (1931)	1565
	-	Struct, Assign	Badger	PR	43 (1932)	305
	-	Isotope effect	Salant	PR	42 (1932)	812
	20.7-152 μ	Spec	Strong	PR	42 (1932)	267
	4.01-4.37 μ	Spec, Struct	Bailey	PRS	140 (1933)	605
	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
	-	Thermo.	Cross	JCP	3 (1935)	825
	-	Vibrations	Duncan	JCP	3 (1935)	384
	-	FC	Penney	PRS	156 (1936)	654
	-	Rotational energy levels	Mulliken	PR	59 (1941)	873
	7-20 μ	Spec, Freq	Barker	RMP	14 (1942)	198
	-	FC	Glockler	RMP	15 (1943)	111
	-	Quant. Mech.	Glockler	JCP	13 (1945)	388
	-	Pressure broadening	Coggeshall	JAP	17 (1946)	450

	-	-	Anal	Duchesne	JCP	15	(1947)	631
	-	-	Spec	Dailey	AC	21	(1949)	540
	-	-	Force field	Linnett	TFS	45	(1949)	844
	-	-	Quant. Mech.	Torkington	JCP	17	(1949)	357
	-	-	Pressure broadening	Coggeshall	AC	22	(1950)	381
	-	-	Struct	Torkington	JPC	56	(1952)	336
	-	-	Vib.	Duchesne	JCP	21	(1953)	2005
	-	-	Ident	Haszeldine	JCS	-	(1953)	3219
	470-8000	G	Assign, FC, Freq	Shelton	JCP	21	(1953)	2178
	-	G	FC	Kivelson	JCP	22	(1954)	904
	-	G	Ident	Moore	JACS	76	(1954)	5253
	-	-	Spec	Nielsen	JPR	15	(1954)	604
	-	G	FC	Polo	JCP	22	(1954)	900
	6-9/ μ	G	Assign	Haszeldine	JCS	-	(1955)	2901
	400-10000	L, Sol	Spec, Assign	Maybury	JCP	23	(1955)	1277
	-	-	Freq	Slowinski	JCP	23	(1955)	1933
	500-13400	S	Spec, Assign	Giguere	CJC	34	(1956)	1833
	2-15/ μ	G	Spec	Pierson	AC	28	(1956)	1218
	500-2500	S	Spec, Assign	Wiener	JCP	25	(1956)	175
	-	G	I, NCA	Mayhood	CJP	35	(1957)	954
	-	-	Spec	Wertheimer	CPR	245	(1957)	1793
	1200-2500	Sol, G	Freq	Jones	JCP	28	(1958)	995
$^{16}_2\text{S}$	500-2500	G	Freq, FC	Polo	JCP	22	(1954)	900
$^{16}_{10}\text{S}$	500-2500	G	Freq, FC	Polo	JCP	22	(1954)	900
$^{18}_2\text{S}$	500-2500	G	Freq, FC	Polo	JCP	22	(1954)	900
$^{33}_2\text{S}$	-	-	Spec, Struct	Smith	AJP	12	(1959)	109
$^{34}_2\text{S}$	-	-	Spec, Struct	Smith	AJP	12	(1959)	109
$^{10}_2\text{B}$	-	-	Anal, Assign	Nielsen	JCP	4	(1937)	201
$^{10}_2\text{B}$	1200-3000	G	Struct	White	JCP	28	(1958)	508

O_2	Selenium dioxide	400-1900	S,G	Anal Freq		Duchesne Giguere	JCP SA	15 (1947) 16 (1960)	631 1
O_3	Ozone	9.6 μ	G	Photochemical effect Thermo. Atmospheric temperature Struct, Assign Struct, Assign Assign Absorption Vib. Freq FC Assign Pressure effect Spec Pressure effect Pressure effect Review Assign Struct Struct FC Atmospheric temperature Struct Struct Freq, Assign Atmospheric temperature Quant. Mech. Theoretical Assign Spec Spec, Assign Radiation equilibria Pressure broadening Assign, FC, Thermo. Struct	Hibben Villars Hulburt Badger Gerhard Benedicts Kassel Adel Duncan Adel Penney Sutherland Strong Adel Summerfield Summerfield Mulliken Simpson Adel Glockler Glockler Adel Simpson Dewar Wilson Benesch Torkington Badger Badger Gutowsky Plass Shaw Wilson Klein Williamson	JACS JACS PR PR PR PR JCP PR JCP PR PHS PRS PR PR PR PR RMP TFS JCP JCP JCP PR JCP JCS JCP PR JCP JCP JCP JCP PR PR PR JCP JCP PR AS	50 (1928) 52 (1930) 38 (1931) 43 (1932) 42 (1932) 43 (1933) 1 (1933) 47 (1935) 3 (1935) 49 (1936) 156 (1936) 156 (1936) 57 (1940) 59 (1941) 59 (1941) 60 (1941) 14 (1942) 41 (1945) 14 (1946) 14 (1946) 14 (1946) 71 (1947) 15 (1947) - (1948) 16 (1948) 76 (1949) 17 (1949) 18 (1950) 18 (1950) 18 (1950) 78 (1950) 79 (1950) 18 (1950) 19 (1951) 39 (1951)	931 1733 1876 305 622 580 414 580 384 288 654 678 1049 915 217 162 204 379 505 531 564 846 1299 741 863 357 998 998 766 334 1017 564 1068 672	

O_3Se	Selenium trioxide	862	-	Freq	Hahn	JCP	24 (1956)	921
O_4	Tetraoxygen	-	-	Proposed O_4 molecule	Smith	JCP	20 (1952)	1972
O_4P^{-3}	Phosphate ion	-	-	Force field	Heath	TFS	44 (1948)	884
		-	-	Force field	Linnett	TFS	48 (1952)	592
		-	-	FC	Venkateswarlu	JCP	23 (1955)	2365
O_4S^{-2}	Sulfate ion	-	-	Freq	Taylor	TFS	25 (1929)	314
		-	-	Freq	Taylor	TFS	25 (1929)	830
		-	-	Vib.	Urey	PR	38 (1931)	1969
		-	-	Vib.	Rosenthal	PR	46 (1934)	730
		-	-	FC	Rosenthal	PR	49 (1936)	535
		-	-	FC	Heath	TFS	44 (1948)	884
		-	-	Quant. Mech.	Hornig	JCP	16 (1948)	1063
		-	-	FC	Linnett	TFS	48 (1952)	592
		-	S	Freq	Mizushima	JACS	75 (1953)	4870
		-	-	FC	Venkateswarlu	JCP	23 (1955)	2365
		947-1290	Sol	Spec	Antikainen	SK	31 (1958)	223
		-	-	FC	Pistorius	JCP	28 (1958)	514
O_4As^{-2}	Arsenate ion	837	-	Freq	Hahn	JCP	24 (1956)	921
O_4Se^{-2}	Selenate ion	-	-	Freq	Taylor	TFS	25 (1929)	314
		-	-	FC	Heath	TFS	44 (1948)	884
		-	-	FC	Linnett	TFS	48 (1952)	592
		-	-	FC	Venkateswarlu	JCP	23 (1955)	2365
		-	-	FC	Pistorius	JCP	28 (1958)	514
O_4Si	Silica radical	-	-	Freq	Taylor	TFS	25 (1929)	314
		2-4.2 μ	S	Effect of H_2O during fusing	Carino-Canina	CPR	239 (1954)	705
		-	-	FC	Venkateswarlu	JCP	23 (1955)	2365
O_4Si^{-2}	Silicate ion	800-1050	S	Spec	Wickersheim	JCP	32 (1960)	271
O_5As_2	Arsenic pentoxide	300-880	S	Spec	Miller	SA	16 (1960)	135
O_6P_4	Phosphorous trioxide	-	-	Bond study	Huggins	JACS	75 (1953)	4126
$O_6S_4^{-2}$	Tetrathionate ion	947-1290	Sol	Spec	Antikainen	SK	31 (1958)	223

S_2B_2	Boron disulfide	650-3500	G	Assign, Thermo.	JCP	33 (1960)	296	
	Arsenic trisulfide	-	S	Properties	JOSA	43 (1953)	332	
		-	S	Glasses study	JOSA	43 (1953)	823	
		1-15 μ	S	Spec	JOSA	43 (1953)	1153	
		1-6 μ	S	Refractive index	JOSA	47 (1957)	782	
	S_3B_2	Boron trisulfide	650-3500	G	Assign, Thermo.	JCP	33 (1960)	296
		Arsenic tetrasulfide ion	-	-	FC	JCP	28 (1958)	514
	S_8	Sulfur (rhombic)	10-130 μ	S	Spec	PR	39 (1932)	562
			1.05 μ	S	Selection rule	JCP	14 (1946)	8
		2-25 μ	L,S	Dispersion	JPC	51 (1947)	875	
700-1500		S	Spec, Assign	JCP	18 (1950)	1018		
0.8-20 μ		S	Spec	JOSA	43 (1953)	999		
As_2Se_3	Arsenic triselenide	86-532	G	Reflectance	JCP	21 (1953)	219	
		-	-	Assign, Thermo., Struct	JACS	76 (1954)	1488	
	Helium molecule	-	-	NCA, FC	JMS	3 (1959)	101	
		-	S	Glasses	JOSA	43 (1953)	823	
	Se_2	Selenium	-	-	l-type doubling theory	PR	38 (1931)	85
			0.5-2.4 μ	S	Photoconductivity	PR	3 (1914)	1
		107 μ	S	Photoelectric properties	BBS	15 (1919)	121	
	S_4As^{-3}	Sulfur (rhombic)	-	S	Transmission	JOSA	7 (1923)	517
			-	-	FC	TFS	28 (1932)	698

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0.6-1.2 μ	S	Spec	Nix	RMP	4	(1932)	723
1-11 μ	S	Transmission	Pfund	JOSA	23	(1933)	375
-	-	Spec	Ruedy	PR	46	(1934)	880
45-125 μ	S	Spec	Barnes	JOSA	26	(1936)	428
-	-	Freq	Clark	TFS	33	(1937)	1394
-	-	Freq	Clark	TFS	33	(1937)	1398
20.7-152 μ	S	Transmission	Seifert	RSI	11	(1940)	365
-	-	PC	Sutherland	JCP	8	(1940)	161
-	-	Polarizer	Pfund	JOSA	36	(1946)	715
-	S	Polarizer	Ames	JSI	26	(1949)	132
1-25 μ	S	Spec	Gebbie	JOSA	42	(1952)	277
0.8-20 μ	S	Reflectance	Agnew	JOSA	43	(1953)	823
0.8-20 μ	S	Reflectance	Agnew	JOSA	43	(1953)	999
-	S	Polarization	Conn	JOSA	44	(1954)	553
0-80 μ	L,S	Spec	Caldwell	PR	100	(1955)	1251
-	-	Potential function	Lippincott	JCP	23	(1955)	1131

Iib. Inorganic Compounds of Metals

(Containing elements other than those in Iia)

AG COMPOUNDS

Formula	Name	State	Range	Remarks	Reference
$\text{AgCHF}_3\text{O}_3\text{As}$	Monosilver trifluoro-methyl acid arsonate	-	-	Freq	JCS - (1954) 881
$\text{AgCH}_3\text{N}_2\text{O}_2$	Silver methyl nitramide	S	670-4000	Assign, Struct	JMS 5 (1960) 101
$\text{AgCF}_3\text{O}_3\text{S}$	Silver trifluoro-methanesulfonate	-	-	Group freq	JCS - (1954) 4228
		S	7-10 μ	Assign, Correlation	JCS - (1955) 2901
AgCN	Silver cyanide	S	-	Residual rays	JOSA 7 (1923) 517
		-	0-8.7 μ	Dispersion formula	RMP 4 (1932) 471
		S	1800-2500	Spec, Anal	JCP 10 (1942) 199
		S, Sol	2100	Spec	JCP 22 (1954) 965
		S	2164	Freq	JCP 24 (1956) 293
		S	300-880	Spec	SA 16 (1960) 135
AgCNO	Silver cyanate	S	2-16 μ	Spec "highest purity"	AC 24 (1952) 1253
		S	300-880	Spec	SA 16 (1960) 135
AgCNO	Silver isocyanate	S	400-4000	Spec	JCS - (1959) 2499
AgCNS	Silver thiocyanate	S	-	Group freq, Band freq, Config.	JCS - (1960) 1912
$\text{AgC}_2\text{H}_3\text{N}_2\text{S}_2$	Silver rubeanate	Sol	400-4000	Struct	SA 10 (1958) 245
$\text{AgC}_2\text{H}_6\text{O}_4\text{PO}$	Dimethylsilver phosphate	-	-	Spec	KMC 76 (1957) 724
$\text{AgC}_2\text{F}_6\text{O}_2\text{P}$	Silver bistrifluoro-methylphosphinate	-	-	Group freq	JCS - (1955) 563
$\text{AgC}_2\text{F}_6\text{O}_2\text{As}$	Silver bistrifluoro-methylarsinate	S	-	Group freq	JCS - (1953) 1552
		-	-	Group freq	JCS - (1954) 881
AgC_2N_2	Silver dicyanide ion	-	-	Group freq	JCS - (1937) 1399
		-	-	Spec, Freq	JCP 22 (1954) 965
		Sol	2135	Freq, I	JCP 24 (1956) 293
		S	250-2200	Spec, Assign	ARS 56A (1960) 9
$\text{AgC}_2\text{N}_2\text{K}$	Potassium silver cyanide complex	Sol	4422-5.4 μ	Spec	JCP 5 (1935) 664
		Sol, S	2135	Freq	JCP 22 (1954) 965

	1900-4500	S	Spec, Assign, Struct, Correlation, Force constant Assign	Jones	JCP	26 (1957)	1578
$\text{Ag}_3\text{H}_4\text{NO}_2$	250-2200	-	Spec	Hidalgo	CPR	249 (1959)	233
3-Isocoxzolidinone silver salt	3-14 μ	S	Spec	Hidy	JACS	77 (1955)	2345
$\text{Ag}_3\text{H}_5\text{NO}_2$	3-14 μ	S	Spec, Band freq, Group freq	Hidy	JACS	77 (1955)	2345
Cycloserine silver salt	-	-	Ident	Haszeldine	JCS	- (1953)	2075
Silver pentafluoro propionate	2100	Sol	Spec, Freq	Jones	JCP	22 (1954)	965
Silver tricyanide ion	2105	Sol	Freq, I	Penneman	JCP	24 (1956)	293
$\text{Ag}_4\text{H}_8\text{Cl}_4\text{O}_2$	-	S	Symmetry, Thermo	Daasch	SA	15 (1959)	726
Silver perchlorate dioxane complex	-	-	Spec	Maarsen	RTC	76 (1957)	724
Diethyl silver phosphate	2100	Sol	Spec, Freq	Jones	JCP	22 (1954)	965
Silver tetracyanide ion	2092	Sol	Freq, I	Penneman	JCP	24 (1956)	293
$\text{Ag}_4\text{N}_4\text{K}_3$	2100	S, Sol	Freq	Jones	JCP	22 (1954)	965
Potassium silver tetracyanide ion	625-5000	S	Spec, Struct	West	JINC	5 (1958)	295
Silver(I)-acetyl acetone complex	600-1800	S	Spec, Assign	Lefevre	AJC	6 (1953)	341
$\text{Ag}_6\text{H}_6\text{Cl}_6\text{N}_6\text{O}_3$	600-1800	S	Spec, Assign	Lefevre	AJC	6 (1953)	341
Silver-o-chloro-benzenediazo sulfonate	650-5000	S	Symmetry, Thermo	Daasch	SA	15 (1959)	726
Silver-p-chloro-benzenediazo-sulfonate							
$\text{Ag}_6\text{H}_6\text{Cl}_6\text{N}_6\text{O}_3$							
Silverperchlorate benzene complex							

AgC ₆ H ₁₄ O ₄ P	Di-1-propyl silver phosphate	-	-	Spec	Maarsen	RTC	76 (1957)	724
AgC ₈ H ₈ ClO ₄	Silver perchlorate benzene complex	650-5000	S	Symmetry, Thermo	Daasch	SA	15 (1959)	726
AgC ₈ H ₁₅ O	n-Octanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
AgC ₈ H ₁₈ O ₄ P	Silver di-n-butyl phosphate	670-3500	-	Spec, Assign	Bellamy	JCS	- (1953)	728
AgC ₉ H ₁₇ O ₂	n-Nonoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
AgC ₁₀ H ₁₉ O ₂	n-Decanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
AgC ₁₁ H ₂₁ O ₂	n-Hendecanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
AgC ₁₂ H ₄ Cl ₆ O ₄ P	Silver-di-2,4,6-trichlorophenyl phosphate	-	-	Group freq	Bellamy	JCS	- (1952)	1701
AgC ₁₂ H ₁₀ O ₄ P	Silver diphenyl phosphate	-	-	Group freq	Bellamy	JCS	- (1952)	1701
AgC ₁₂ H ₁₁ NO ₃ P	Silver phenyl anilinophosphonate	-	-	Group freq	Bellamy	JCS	- (1952)	1701
AgC ₁₂ H ₁₂ ClO ₄	Silver perchlorate benzene complex	650-5000	S	Symmetry, Thermo	Daasch	SA	15 (1959)	726
AgC ₁₂ H ₁₂ N ₂ O ₂ P	Silver dianilino phosphinate	-	-	Group freq	Bellamy	JCS	- (1952)	1701
AgC ₁₂ H ₂₃ O ₂	n-Dodecanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
AgC ₁₂ H ₂₄ ClO ₁₀	Silver perchlorate dioxane complex	-	S	Symmetry, Thermo	Daasch	SA	15 (1959)	726

$\text{AgC}_{13}\text{H}_{25}\text{O}_2$	n-Tridecanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
$\text{AgC}_{14}\text{H}_{14}\text{O}_4\text{P}$	Silver dibenzyl phosphate	-	-	Group freq Spec, Assign	Bellamy Bellamy	JCS JCS	- (1952) - (1953)	1701 728
$\text{AgC}_{14}\text{H}_{27}\text{O}_2$	n-Tetradecanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
$\text{AgC}_{16}\text{H}_{31}\text{O}_2$	n-Hexadecanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
$\text{AgC}_{16}\text{H}_{34}\text{O}_4\text{P}$	Silver bis-2-ethyl- hexyl phosphate	670-3500	-	Spec, Assign	Bellamy	JCS	- (1953)	728
$\text{AgC}_{17}\text{H}_{33}\text{O}_2$	n-Heptadecanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
$\text{AgC}_{18}\text{H}_{18}\text{ClO}_4$	Silver perchlorate benzene complex	650-5000	S	Symmetry, Thermo	Daasch	SA	15 (1959)	726
$\text{AgC}_{18}\text{H}_{35}\text{O}_2$	n-Octadecanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
$\text{AgC}_{18}\text{H}_{35}\text{O}_2$	Silver stearate	710-730	S	Correlation	Chapman	JCS	- (1957)	4489
$\text{AgC}_{19}\text{H}_{37}\text{O}_2$	n-Nonadecanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
$\text{AgC}_{20}\text{H}_{39}\text{O}_2$	n-Eicosanoic acid, silver soap	-	S	Anal	Meiklejohn	AC	29 (1957)	329
$\text{AgC}_{24}\text{H}_{16}\text{ClN}_4\text{O}_4$	Silver (I)-1:10- phenanthroline complex perchlorate	600-2000	S	Spec	Schitt	JINC	9 (1959)	211
$\text{AgC}_{65}\text{H}_{125}\text{NO}_4\text{P}$	α,β -Dilauroyl- kephalin silver salt salt	-	-	Assign	Bellamy	JCS	- (1953)	728
AgH	Silver hydride	-	-	Rot-vib coupling Force constant, Bond distance	Pekeris Platt	PR JCP	45 (1934) 18 (1950)	98 932

1990

$\text{AgCl} + \text{Ag}_2\text{S}$	Silverchloride filter, covered with film of silver sulfide	1-16 μ	S	Spec	Eastman	AC	26 (1954)	31
AgClO_4	Silver perchlorate	400-4000	Sol	Spec	Pullin	TFS	54 (1958)	11
AgFO_3	Silver fluoro sulphate	550-2400	S	Assign	Sharp	JCS	- (1957)	3761
AgNO_2	Silver nitrite	2-16 μ 700-4000 300-880	S S S	Spec Spec, Force constant Spec	Miller Weston Miller	AC JCP SA	24 (1952) 27 (1957) 16 (1960)	1253 683 135
AgNO_3	Silver nitrate	0.8-2.3 μ 6-9 μ 2-16 μ 2-16 μ 2-15 μ	Sol S S S S	Solute effect on water spec Reflection from compressed powder Spec, Band study Spec Spec Freq	Collins Sanderson Miller Meloche Addison Anber	PR JOSA AC JINC JCS	20 (1922) 30 (1940) 24 (1952) 6 (1958) - (1960) - (1960)	486 566 1253 104 613 1242
$\text{Ag}_2\text{CH}_3\text{O}_3\text{P}$	Disilver methylphosphonate	700-1600 300-800	S S	Absorp freq, Assign Spec	Ferraro Miller	JMS SA	5 (1960) 16 (1960)	99 135
$\text{Ag}_2\text{CF}_3\text{O}_3\text{As}$	Disilver trifluoromethylarsonate	704-3330	S	I, Group freq	Corbridge	JCS	- (1954)	4555
Ag_2CO_3	Silver carbonate	-	-	Group freq	Emeleus	JCS	- (1954)	881
$\text{Ag}_2\text{C}_2\text{H}_5\text{O}_4\text{P}$	Disilver phenyl phosphate	2-16 μ 300-800	S S	Spec Spec	Meloche Miller	JINC SA	6 (1958) 16 (1960)	104 135
$\text{Ag}_2\text{H}_2\text{NO}_3\text{P}$	Disilver phosphoramidate	2-15 μ 650-5000	S S	Group freq Spec	Bellamy Corbridge Pustinger	JCS SA	- (1952) - (1954) 15 (1959)	1701 493 909
$\text{Ag}_2\text{H}_3\text{IO}_6$	Disilver para-	300-3000	S	Freq, Spec	Blinc	MP	1 (1957)	391

Ag₂Cl₂O₄S
 Silver (Cl) ammoniate
 S + Sol
 Assign, Freq

Chemical Formula	Compound Name	Wavenumber Range	Solvent	Assignment / Frequency	Author(s)	Year(s)	Citation Number
$Ag_2H_{12}N_4O_4S_6$	Silver (I) ammonia complex sulphate	740-3300 650-1650	S, Sol	Assign, Freq Group freq, Symmetry Freq	Powell Swatos Wilmahurst	- (1956) 79 (1957) 38 (1960)	3108 3313 467
$Ag_2D_{10}IO_6$	Disilver paraperiodic acid-d ₃	300-3000	S	Freq, Spec	Blinc	1 (1957)	391
$Ag_2D_{12}N_4O_4S_6$	Silver (I) ammonia complex sulphate-d ₆	950	Sol	Assign, Freq	Powell	- (1956)	3108
$Ag_2FO_3P_3$	Disilver monofluoro-phosphate	720-1210 650-5000	S S	I, Group freq Spec	Corbridge Pustinger	- (1954) 15 (1959)	4555 909
$Ag_2O_4S_4$	Silver sulfate	300-880	S	Spec	Miller	16 (1960)	135
$Ag_2O_4Se_4$	Silver selenate	290-650 220-3500	S S	Assign Spec, Struct	Duval Duval	239 (1954) 64 (1960)	249 582
Ag_2S_2	Silver sulfide	25750 4-24 μ 1-1.8 μ	- S S	Absorption Reflectance spec, Filter study Temp. dependence of absorption	Cartwright Plyler Lehovec	35 (1930) 42 (1952) 21 (1953)	415 266 54
$Ag_3H_2N_2O_4P_3$	Silver diimido trimetaphosphate	650-5000	S	Spec	Pustinger	15 (1959)	909
$Ag_3H_3N_3O_4P_3$	Silver trimeta-phosphimate	650-5000	S	Spec	Pustinger	15 (1959)	909
$Ag_3H_3N_3O_4P_3$	Trisilver triphos-phonitritate	787-1338	S	I, Group freq	Corbridge	- (1954)	4555
$Ag_3O_4P_4$	Silver orthophosphate	2-15 μ 290-650	S S	Band & Group freq, I, Assign Assign	Corbridge Duval	- (1954) 239 (1954)	493 249

Ag_3O_4As	Silver arsenate	2-16/ μ 650-5000	S	Spec	Meloche Pustinger	JINC SA	6 (1958) 15 (1959)	104 909	
$Ag_3O_4P_3$	Trisilver trimeta- phosphate	2-15/ μ 650-5000	S	Group freq, I, Assign Spec	Corbridge Pustinger	JCS SA	- (1954) 15 (1959)	493 909	
$Ag_4HNO_6P_2$	Tetrasilver imidodiphosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909	
$Ag_4HNO_4P_4$	Silver tetrameta- phosphimate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909	
$Ag_4HNO_4P_4$	Tetrasilver tetra- phosphonitritate	710-1387	S	Table, I, Group freq	Corbridge	JCS	- (1954)	4555	
$Ag_4O_7P_2$	Tetrasilver pyrophosphate	2-15/ μ 650-5000	S	Table, I, Group freq Spec	Corbridge Pustinger	JCS SA	- (1954) 15 (1959)	493 909	
$Ag_4O_4P_4$	Silver tetrameta- phosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909	
$Ag_4O_{12}P_4 \cdot 2H_2O$	Tetrasilver tetra metaphosphate dihydrate	2-15/ μ	S	Group freq, I, Assign	Corbridge	JCS	- (1954)	493	
$Ag_5NO_6P_2$	Pentasilver imido diphosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909	
$Ag_5O_{10}P_3$	Pentasilver triphosphate	2-15/ μ 650-5000	S	Group freq, I, Assign Spec	Corbridge Pustinger	JCS SA	- (1954) 15 (1959)	493 909	
<u>AL COMPOUNDS</u>									
AIC	Aluminium monocarbide	-	G	Freq analysis	Zeeman	CJP	32 (1954)	9	
$AlCl_3Br_3NO_2$	Nitromethane: Aluminium- bromide adduct	-	-	Spec	Gagnaux	HCA	41 (1958)	1322	

Chemical Formula	Compound Name	Wavenumber (cm ⁻¹)	Phase	Measurement Type	Author	Year	Page
AlC ₆ H ₃ N ₂ O ₅ S ₂ ·6H ₂ O	Guanidine-aluminium sulfate hexahydrate	-	-	Spec, Struct	Lafon	1958	2120
AlCD ₆ N ₃ O ₅ S ₂ ·6H ₂ O	Guanidine-d ₆ -aluminium sulphate hexahydrate-d ₆	-	-	Spec, Struct	Lafon	1958	2120
AlC ₂ H ₃ Cl ₄ O	Liquid complex of AlCl ₃ with CH ₃ COCl	350-4000	L, Sol	Band assign, Struct, Spec	Cook	1959	48
AlC ₃ H ₉	Trimethylaluminium	3.38-14.35 μ	G	Table	Pitzer	1946	2204
		800-4000	-	Spec, Freq anal	Pitzer	1948	552
		-	-	Force constant	Sheline	1950	602
AlC ₃ H ₁₂ N	Aluminium hydride trimethylamine	-	Sol	Spec, Freq	Schomburg	1957	1110
		-	-	Spec	Dantel	1960	1234
AlC ₃ H ₁₆ Br ₂ N	Dibromoaluminium hydride triethylamine	-	Sol	Spec, Freq	Schomburg	1957	1110
AlC ₃ H ₁₈ N	Aluminium hydride triethylamine	-	Sol	Spec, Freq	Schomburg	1957	1110
AlC ₄ H ₈ Cl ₃ O ₂	Aluminium (III) dioxane complex chloride	500-1500	S	Spec, Struct	Hendara	1960	5105
AlC ₄ H ₁₀ D	Diethyl aluminium hydride-d ₁	-	-	Spec	Hoffman	1957	1101
AlC ₄ H ₁₁	Diethyl aluminium hydride	-	-	Spec	Hoffman	1957	1101
		4.85-7.50 μ	Sol	Quant anal	Hudson	1957	1895
AlC ₄ H ₁₁ Br ₂ O	Dibromo aluminium hydride ethyl ether adduct	-	Sol	Freq, Spec	Schomburg	1957	1110
AlC ₄ H ₁₁ O	Monoeethylmonoe thoxy aluminium hydride	-	-	Spec	Hoffman	1957	1101

AlC ₈ H ₁₉	Di-sec-butyl aluminum hydride	-	-	Spec	Hoffman	ZE	61 (1957)	1101
AlC ₈ H ₁₂ I ₂ O ₂	Diiodo aluminum hydride ethyl ether	-	Sol	Freq, Spec	Schomburg	ZE	61 (1957)	1110
AlC ₉ H ₁₂ O ₁₅ K ₃ · 3H ₂ O	Al (III) melanic acid complex (K-salt)	2-15/μ	S	Spec, Freq assign, Metal bond	Schmelz	JACS	81 (1959)	287
AlC ₉ H ₂₁ O ₃	Aluminum triiso- propoxide	2-15/μ	Sol	Spec, Group freq, Band freq, I	Bell	AC	25 (1953)	1720
AlC ₁₀ H ₁₂ N ₂ O ₈ Na· xH ₂ O	Aluminum (III)- ethylenediamine tetraacetic acid complex (sodium salt) polyhydrate	800-1800	S	Spec, Bonding	Donald	JACS	82 (1960)	4191
AlC ₁₀ H ₁₃ Br ₃ NO ₂	p-Ter-butyl- nitrobenzene: AlBr ₃ adduct	-	-	Spec	Gagnaux	HCA	41 (1958)	1322
AlC ₁₀ H ₂₅ O	Triethyl aluminum ethyl ether adduct	-	-	Spec, Assign	Hoffman	ZE	64 (1960)	616
AlC ₁₅ H ₂₁ O ₆	Aluminum (III)- acetyl acetone complex	625-5000 280-1700	S	Spec, Struct Bond study	West Nakamoto	JINC N	5 (1958) 183 (1959)	295 459
AlC ₁₈ H ₁₆ Cl ₄ N	Aluminum chloride triphenyl ammonium chloride adduct	-	S	H bond, Band freq	Nuttall	JCS	- (1960)	4965
AlC ₂₄ H ₅₄ O ₁₂ P ₃	Aluminum-di-n-butyl phosphate	714-5000	S	Interaction study	Smith	JINC	9 (1959)	150
AlC ₂₇ H ₁₈ N ₃ O ₃	Aluminum (III)-8- hydroxyquinoline chelate	- 8-15/μ 700-800	S S L	Spec Spec Bonding, Struct	Charles Charles Sidorov	AC SA OS	25 (1953) 8 (1956) 6 (1959)	530 1 812

$AlCl_3O_{27}H_6$	Aluminum (III)-benzoylacetone complex	280-1700	-	Bond study	Nakamoto	N	183 (1959)	459
$AlCl_3O_6H_6$	Aluminum triisaurate	2-16 μ	Sol	Struct, Assign	Leger	CJC	35 (1957)	799
AlH	Aluminum monohydride	-	-	π -type doubling theory	Mulliken	PR	38 (1931)	85
		-	-	Force constants, Bond distance	Badger	JCP	2 (1934)	128
		-	-	Rot-vib coupling constants	Pekeris	PR	45 (1934)	98
		-	-	Force constant, Bond distance	Wa	PR	71 (1947)	118
		-	-	Force constant, Bond distance	Platt	JCP	18 (1950)	932
		-	-	Force constant, Bond distance	Sheline	JCP	18 (1950)	927
		42.4 \AA	G	Freq, Spec	Zeeman	CJP	32 (1954)	535
		-	-	Force const	Mitra	JCP	22 (1954)	564
AlH ₄	Aluminum hydride ion	-	-	Band study, Force constants	Woodward	TFS	52 (1956)	1458
		-	-	Force constant	Pistorius	JCP	27 (1957)	965
$AlH_{12}F_6N_3$	Triammonium aluminum hexafluoride	-	S	Group and Band freq	Cox	JCS	- (1954)	1798
$AlH_{12}B_3$	Aluminum boro hydride	2-15 μ	G	Spec, Anal, Assign	Price	JCP	17 (1949)	1044
		-	-	Absorp freq	Price	JCP	17 (1949)	217
$AlCl_3$	Aluminum chloride	8-2.3 μ	Sol	Solute effect on H ₂ O	Collins	PR	20 (1922)	486
		-	-	Force const	Venkateswarlu	JCP	23 (1955)	2368
		325-1200	G	Absorp, Emission, Freq	Klemperer	JCP	24 (1956)	353
$AlCl_3 \cdot 6H_2O$	Aluminum chloride hexahydrate	800-4000	S	Hydrates studied	Lucchesi	JACS	78 (1956)	1347
$AlCl_4NO$	Nitrosonium tetra chloroaluminate	800-2600	S, Sol	Freq	Miller	JCS	- (1957)	1369

AlF	Aluminium mono-fluoride	6670-8175A°	G	Freq anal, Molecular constants	Naude	CJP	31 (1953)	1106
		-	G	Rotational analysis	Naude	CJP	32 (1954)	246
		-	G	Band study, Thermo	Barrow	TFS	52 (1956)	913
AlF ₄	Aluminium (III)-fluoride complex anion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
AlF ₄ K	Potassium aluminium fluoride	-	-	Freq	deLattre	JCP	20 (1952)	1180
AlN ₃ O ₉	Aluminium nitrate	0.8-2.3/ μ 2-16/ μ	Sol S	Solute effect on H ₂ O Spec	Collins Meloche	PR JINC	20 (1922) 6 (1958)	486 104
AlN ₃ O ₉ .9H ₂ O	Aluminium nitrate nonahydrate	400-800	S	Variation of H ₂ O fundamentals with the nature of the hydrates	Lucchesi	JACS	78 (1956)	1347
		300-880	S	Spec	Miller	SA	16 (1960)	135
AlO	Aluminium oxide	-	-	Morse potential	Morse	PR	34 (1929)	57
		-	-	Force constant, Bond distance	Badger	JCP	2 (1934)	128
		-	-	Rot-vib coupling constants	Pekeris	PR	45 (1934)	98
AlO	Aluminium monoxide	-	-	Rotational analysis	Largerquist	AF	12 (1957)	543
AlO ₂ Na	Sodium aluminate	410-1200	S	Assign	Kolesova	OS	6 (1959)	38
AlO ₈ 2S.K. 12H ₂ O	Potassium aluminium sulfate dodecahydrate	800-900	S	Band study, H bond	Fujita	JACS	78 (1956)	3963
Al ₂ C ₂	Aluminium carbide	-	-	Freq, Thermo	Chmpka	JPC	62 (1958)	611
Al ₂ C ₄ H ₈ Br ₆ O ₂	Aluminium (III)-dioxane complex bromide	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
Al ₂ C ₄ H ₁₂ Cl ₂	Bis-dimethyl aluminium chloride	-	-	Spec, Assign	Hoffman	ZE	64 (1960)	616

$Al_2C_6H_{18}$	Bis-trimethyl aluminium	-	-	Spec, Assign	Hoffman	ZE	64 (1960)	616
$Al_2C_8H_{20}Cl_2$	Bis-diethyl aluminium chloride	-	-	Spec, Assign	Hoffman	ZE	64 (1960)	616
$Al_2C_{12}H_{30}$	Bis-triethyl aluminium	-	-	Spec, Assign	Hoffman	ZE	64 (1960)	616
$Al_2C_{16}H_{36}Cl_2$	Bis-di-n-butyl aluminium chloride	-	-	Spec, Assign	Hoffman	ZE	64 (1960)	616
$Al_2C_{16}H_{36}Cl_2$	Bis-di-sec-butyl aluminium chloride	-	-	Spec, Assign	Hoffman	ZE	64 (1960)	616
$Al_2C_{16}H_{42}$	Bis-triisopropyl aluminium	-	-	Spec, Assign	Hoffman	ZE	64 (1960)	616
$Al_2C_{24}H_{54}$	Bis-tributyl aluminium	-	-	Spec, Assign	Hoffman	ZE	64 (1960)	616
$Al_2C_{24}H_{54}$	Bis-tri-sec-butyl aluminium	-	-	Spec, Assign	Hoffman	ZE	64 (1960)	616
$Al_2C_{48}H_{92}O_8$	Aluminium dilaurate	2-16 μ	Sol	Struct, Assign	Leger	CJC	35 (1957)	799
$Al_2H_8N_2O_{16}S$	Ammonium aluminium sulfate	.779-2.82 μ	Sol	Transmission curves	Nichols	PR	1 (1893)	1
Al_2Br_6	Aluminium hexabromide	-	-	Freq	Bell	PRS	183 (1945)	357
Al_2Cl_6	Aluminium hexachloride	325-1200	G	Freq Absorp and emiss freq, Force const	Bell Klempner	PRS JCP	183 (1945) 24 (1956)	357 353
Al_2I_6	Aluminium hexaiodide	-	-	Freq	Bell	PRS	183 (1945)	357
Al_2O_3	Aluminium oxide	-	S	IR, Emisivity Force constant, Bond distance Al soap study Spec	Pirani Wu Gray Hass	JIS PR JPC JOSA	16 (1939) 71 (1947) 53 (1949) 39 (1949)	372 118 23 532

$\text{AmCl}_2\text{O}_{10}$	Americium perchlorate	800-1600	Sol	Spec, Force constant	Jones	JCP	21 (1953)	542
AmF_3	Americium trifluoride	3500-20000A	S	Spec	Asprey	JINC	7 (1958)	27
AmF_4	Americium tetrafluoride	3500-20000A	S	Spec	Asprey	JINC	7 (1958)	27

At COMPOUNDS

AtH	Astatine hydride	-	-	FC, Bond study	Platt	JCP	18 (1950)	932
		-	-	FC, Bond study	Shelline	JCP	18 (1950)	927
AtBr	Astatine bromide	-	-	Freq	Clark	TFS	33 (1937)	1398
AtCl	Astatine chloride	-	-	Freq, Calc.	Clark	TFS	33 (1937)	1398
AtF	Astatine fluoride	-	-	Freq	Clark	TFS	33 (1937)	1398
At ₂	Astatine	-	-	Freq	Clark	TFS	33 (1937)	1398

Au COMPOUNDS

AuCN	Gold cyanide	2261 2261	S S	Freq Freq	Jones Penneman	JCP JCP	22 (1954) 24 (1956)	965 293
		-	S	Absorption	Penneman	JCP	28 (1958)	169
Au ₂ N ₂	Gold dicyanide ion	2140 2147	Sol Sol	Freq Freq, I	Jones Penneman	JCP JCP	22 (1954) 24 (1956)	965 293
		250-2200	S	Spec, Assign	Hidalgo	ARS	56A (1960)	9
Au ₂ N ₂ K	Gold(I)cyanide complex potassium salt	400-4000 2140	S S, Sol	Spec, Assign Freq	Jones Jones	JCP JCP	21 (1953) 22 (1954)	1891 965
		2000-3000 250-2200	S	Spec, FC, Freq, Struct Assign	Jones Hidalgo	JCP CPR	27 (1957) 249 (1959)	468 233
Au ₄ HCl ₃ S ₂	Gold(III)-dithiane complex	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105

AuC ₄ N ₄	Gold(II) tetracyanide complex ion	250-2200	S	Spec, Assign	Hidalgo	ARS	56A (1960)	9
AuC ₄ N ₄ K ₄	Gold(III) cyanide complex potassium salt	250-2200	-	Assign	Hidalgo	CPR	249 (1959)	233
Au ₈ C ₁₄ H ₄ N ₄ O ₄	Gold(I) bisdimethylglyoxime ion	-	S	Struct, Spec	Rundle	JACS	76 (1954)	3101
AuH	Gold hydride	-	-	Mol. Const. FC, Bond study FC, Bond study	Pekeris Platt Sheline	PR JCP JCP	45 (1934) 18 (1950) 18 (1950)	98 932 927
AuF ₄	Gold(III) fluoride complex ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
<u>Ba COMPOUNDS</u>								
Ba _{1/2} C ₉ H ₁₃ O ₇ ·H ₂ O	Barium-1,2-o-isopropylidene-D-glucosufuranuronate	2-15 μ	S	Spec	Tipson	JRNB	62 (1959)	257
BaCH ₃ O ₃ P ₃	Barium methyl phosphonate	759-1421	S	I, Freq	Corbridge	JCS	- (1954)	4555
BaCO ₃	Barium carbonate	-	-	Freq, Assign Spec Band freq Spec Spec Spec	Schaefer Miller Underwood Meloche Harkins Miller	TFS AC JACS JINC AC SA	25 (1929) 24 (1952) 77 (1955) 6 (1958) 31 (1959) 16 (1960)	841 1253 317 104 541 135
Ba ¹² O ₃	Barium carbonate (isotopic)	857 11.3-12.5 μ	S S	Intermol. coupling Spec, FC	Decius Decius	JCP JCP	22 (1954) 23 (1955)	1946 1290
Ba ¹³ O ₃	Barium carbonate (isotopic)	840 11.3-12.5 μ	S S	Intermol. Coupling Spec, FC	Decius Decius	JCP JCP	22 (1954) 23 (1955)	1946 1290

$\text{BaC}_2\text{F}_6\text{O}_5\text{S}_2$	Barium bistrifluoromethane sulfonate	-	Group freq Assign	Haszeldine Haszeldine	JCS JCS	- -	(1954) (1955)	4228 2901
BaC N	Barium cyanide	7-10 μ	Spec Spec	Gordy Miller	JCP SA	3 16	(1935) (1960)	664 135
$\text{BaC}_2\text{N}_2\text{O}_2 \cdot 2\text{H}_2\text{O}$	Barium thiocyanate dihydrate	4.2-5.4 μ 300-880	Spec Spec	Miller Miller	AC SA	24 16	(1952) (1960)	1253 135
$\text{BaC}_2\text{N}_2\text{S} \cdot 2\text{H}_2\text{O}$	Barium isothiocyanate dihydrate	-	Freq, Assign	Mitchell	JCS	-	(1960)	1912
$\text{BaC}_2\text{O}_4 \cdot \text{H}_2\text{O}$	Barium oxalate monohydrate	343-3500	Assign	Schmelz	SA	9	(1957)	51
$\text{BaC}_4\text{H}_{12}\text{O}_4\text{P}_2 \cdot \text{XH}_2\text{O}$	Barium bis-dimethyl phosphinate x hydrate	735-3200	I, Group freq	Corbridge	JCS	-	(1954)	4555
$\text{BaC}_4\text{H}_{12}\text{O}_8\text{P}_2$	Dimethyl barium phosphate	-	Spec	Maarsen	RTC	76	(1957)	724
$\text{BaC}_6\text{H}_3\text{N}_5\text{O}_2$	Xanthopterin barium salt	8-15 μ	Spec	Crowe	APS	8	(1954)	57
$\text{BaC}_6\text{Cl}_6\text{O}_4$	Barium trichloroacrylate	700-1600	Spec	Duval	RTC	69	(1950)	391
$\text{BaC}_8\text{H}_{20}\text{O}_8\text{P}_2$	Diethyl barium phosphate	-	Spec	Maarser	RTC	76	(1957)	724
$\text{BaC}_9\text{H}_{12}\text{N}_2\text{O}_2\text{P}_2$	Barium uridine diphosphate (natural)	2-15.5 μ	Spec, Ident	Anand	JCS	-	(1952)	3665
$\text{BaC}_9\text{H}_{12}\text{N}_2\text{O}_2\text{P}_2$	Barium uridine-5 pyrophosphate (synthetic)	2-15.5 μ	Spec, Ident	Anand	JCS	-	(1952)	3665

BaC ₁₀ H ₁₂ N ₂ O ₈ Na ₂ · 1.5H ₂ O	BaC ₁₂ H ₈ Cl ₂ N ₂ O ₆ S ₂	BaC ₁₂ H ₈ Cl ₂ N ₂ O ₆ S ₂	BaC ₁₂ H ₂₈ O ₈ P ₂	BaC ₁₆ H ₃₀ O ₄	BaC ₁₆ H ₃₆ O ₈ P ₂	BaC ₁₈ H ₃₄ O ₄	BaC ₂₀ H ₃₈ O ₄	BaC ₂₂ H ₄₂ O ₄	BaC ₂₄ H ₂₀ N ₂ O ₆ S ₂	BaC ₂₄ H ₄₆ O ₄	BaC ₂₄ H ₅₀ O ₆ S ₂
Barium(II)-ethylene diamine tetra acetic acid complex (sodium salt)-1.5 hydrate	Barium-o-chlorobenzene diazosulfonate	Barium-p-chloro-benzenediazosulfonate	Di-1-propyl barium phosphate	n-Octanoic acid barium soap	Barium-di-n-butyl phosphate	n-Nonoic acid barium soap	n-Decanoic acid barium soap	n-Hendecanoic acid barium soap	Diphenylamine p-sulfonic acid, barium salt	n-Dodecanoic acid, barium soap	Ba Dodecane-1-sulfonate
800-3000	600-1800	600-1800	-	7-9 μ	714-5000	7-9 μ	7-9 μ	7-9 μ	2-16 μ	7-9 μ	2-15.6 μ
S	S	S	-	S	S	S	S	S	S	S	S
Spec, Freq	Spec, Assign	Spec, Assign	Spec	Qual. Anal	Interaction study	Qual. Anal.	Qual. Anal.	Qual. Anal.	Spec	Qual. Anal	Assign, Ident
JACS 80 (1958)	AJC 6 (1953)	AJC 6 (1953)	RTC 76 (1957)	AC 29 (1957)	JINC 9 (1959)	AC 29 (1957)	AC 29 (1957)	AC 29 (1957)	AC 22 (1950)	AC 29 (1957)	AC 31 (1959)
Sawyer	LeFevre	LeFevre	Maarsen	Meiklejohn	Smith	Meiklejohn	Meiklejohn	Meiklejohn	Hunt	Meiklejohn	Jenkins
1597	341	341	724	329	150	329	329	329	1478	329	1056

$\text{BaC}_{26}\text{H}_{50}\text{O}_4$	n-Tridecanoic acid, barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{28}\text{H}_{54}\text{O}_4$	n-Tetradecanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{30}\text{H}_{58}\text{O}_4$	n-Pentadecanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{32}\text{H}_{62}\text{O}_4$	n-Hexadecanoic barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{34}\text{H}_{66}\text{O}_4$	n-Heptanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{36}\text{H}_{70}\text{O}_4$	n-Octadecanoic acid barium soap	7-9 μ 6-8 μ	S S	Qual. Anal Spec	Meiklejohn ELLIS	AC N	29 (1957) 181 (1958)	329 181
$\text{BaC}_{38}\text{H}_{74}\text{O}_4$	n-Nonadecanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{40}\text{H}_{78}\text{O}_4$	n-Eicosanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{44}\text{H}_{86}\text{O}_4$	n-Docosanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{48}\text{H}_{94}\text{O}_4$	n-Tetracosanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{48}\text{H}_{94}\text{Cl}_2\text{N}_2\text{O}_8$ $\cdot 4\text{H}_2\text{O}$	Barium (II)-1:10- phenanthroline complex perchlorate tetrahydrate	600-2000	S	Spec	Schilt	JINC	9 (1959)	211
$\text{BaC}_{48}\text{H}_{94}\text{O}_4$	n-Tetracosanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{52}\text{H}_{104}\text{O}_4$	n-Hexacosanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_{56}\text{H}_{110}\text{O}_4$	n-Octacosanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329

$\text{BaC}_6\text{H}_{118}\text{O}_4$	n-Triacontanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_6\text{H}_{134}\text{O}_4$	n-Tetraatriacontanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_7\text{H}_{142}\text{O}_4$	n-Hexatriacontanoic acid barium soap	7-9 μ	S	Qual. Anal	Meiklejohn	AC	29 (1957)	329
$\text{BaC}_8\text{H}_{131}\text{O}_4\text{P}_3$	Barium vitamin D ₃ phosphate	-	S	I	Milas	JACS	77 (1955)	1640
BaH	Barium hydride	-	-	Freq	Watson	PR	43 (1933)	9
		-	G	Freq, Mol. Const. Anal	Koontz	PR	48 (1935)	937
		-	-	FC	Watson	PR	47 (1935)	213
		-	-	FC	Platt	JCP	18 (1950)	932
		-	-	FC	Sheline	JCP	18 (1950)	927
BaHPO_3	Barium ortho- phosphite	2-15 μ	S	Group freq, I, Assign, Spec	Corbridge	JCS	- (1954)	493
BaHPO_4	Barium acid phosphate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		600-4000	S	Group study	Braunholtz	JCS	- (1959)	868
		300-880	S	Spec	Miller	SA	16 (1960)	135
		420-3600	-	Spec, H bond	Ryskin	OS	8 (1960)	606
$\text{BaH}_2\text{NO}_3\text{P}_3\text{H}_2\text{O}$	Barium monoamido phosphate mono- hydrate	-	-	Bond study	Steiger	ZE	61 (1957)	1004
$\text{BaH}_3\text{N}_3\text{O}_6\text{P}_3\text{Na}\cdot 1.5\text{H}_2\text{O}$	Sodium barium triphospho- nitrate 1.5 hydrate	823-3150	S	I, Group freq	Corbridge	JCS	- (1954)	4555
$\text{BaH}_4\text{O}_6\text{P}_2$	Barium phosphinate	2-15 μ	S	Group freq, I, Assign	Corbridge	JCS	- (1954)	4555
$\text{BaH}_6\text{N}_2\text{O}_6\text{P}_2$	Barium biphosphora- medate	-	-	Bond study	Steiger	ZE	61 (1957)	1004
$\text{BaCl}_2\cdot 2\text{H}_2\text{O}$	Barium chloride dihydrate	2.5 μ 2-16 μ	S S	Absorption Spec	Lyon Miller	PR AC	61 (1942) 24 (1952)	482 1253

$\text{BaCl}_2 \cdot 6\text{H}_2\text{O}$	300-880	S	Spec	Miller	SA	16 (1960)	135
Barium chlorate monohydrate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
	300-880	S	Spec	Miller	SA	16 (1960)	135
Barium mono-fluorido-phosphate	745-1163	S	I, Group freq	Corbridge	JCS	- (1954)	4555
Barium fluoride	-	-	Polarizability theory	Szigeti	TFS	45 (1949)	155
	-	S	Properties	Ballard	JOSA	42 (1952)	684
	-	-		Friedel	AC	29 (1957)	1362
Barium hypo-nitrite	400-4000	S	Freq	LeFevre	AJC	10 (1957)	361
Barium nitrite monohydrate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
	81-3500	S	Spec, Struct	Tramer	CPR	249 (1959)	392
	300-880	S	Spec	Miller	SA	16 (1960)	135
Barium nitrate	2-16 μ	S	Spec, Freq, Qual. Anal	Miller	AC	24 (1952)	1253
	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
	700-1600	S	Freq, Assign	Ferraro	JMS	4 (1960)	99
	300-880	S	Spec	Miller	SA	16 (1960)	135
Barium azide	635-3100	S	Freq, FC	Gray	TFS	53 (1957)	901
Barium oxide	0.5-2.5 μ	S	Spec	Dash	PR	92 (1953)	68
Barium dioxide	2-16 μ	S	Spec, Struct	Brame	JINC	4 (1957)	90
Barium sulfite	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
	300-880	S	Spec	Miller	SA	16 (1960)	135
Barium sodium phosphoromono-thioate octahydrate	2-15 μ	S	Spec, I, Group freq	Corbridge	JCS	- (1954)	4555
Barium thiosulphate monohydrate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
	300-880	S	Spec	Miller	SA	16 (1960)	135

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 1954

BaO ₃ Ti	Barium Titanate	S	Phase change	Field	PR	72	(1947)	1119
			Spec	Mara	PR	96	(1954)	801
				Hilsaum	JOSA	45	(1955)	771
			Pyroelectric effect	Chynoweth	JAP	27	(1956)	78
			Transmission	Abramovitch	CJC	36	(1958)	151
			Temp. effect on spec	Yatsenko	IANS	24	(1960)	1308
BaO ₄ S	Barium sulfate	S	Freq	Hollaender	PR	34	(1929)	994
		S	Emission of Powd. Film	Pfund	JOSA	23	(1933)	270
		S	Refr. Ind.	Pfund	JOSA	26	(1936)	230A
			Particle size by IR	Bailey	LEC	18	(1946)	365
			Selection rule	Couture	JCP	15	(1947)	1532
			Interpretation of spec	Duval	CPR	227	(1948)	1153
		S	Spec	Hunt	AC	22	(1950)	1478
		S	Spec, Anal	Hunt	AC	25	(1953)	1169
		S	Assign	Duval	CPR	239	(1954)	249
			Spec	Ramdas	FIAS	A391	(1954)	81
		S	Spec	Meloche	JINC	6	(1958)	104
		S	Spec	Harkins	AC	31	(1959)	541
		S	Spec	Miller	SA	16	(1960)	135
BaO ₄ B	Barium metaborate	S	Spec, Struct	Duval	JOSA	44	(1954)	261
BaO ₄ Cr	Barium chromate	S	Spec	Miller	AC	24	(1952)	1253
		S	Assign	Duval	CPR	239	(1954)	249
BaO ₄ Mo	Barium molybdate	S	Assign	Duval	CPR	239	(1954)	249
BaO ₄ Se	Barium selenate	S	Assign	Duval	CPR	239	(1954)	249
		S	Spec, Struct	Duval	ZE	64	(1960)	582
BaO ₈ Mn ₂	Barium permanganate	S	Spec	Miller	AC	24	(1952)	1253
Ba ₂ C ₁₀ H ₁₂ N ₂ O ₁₁ P ₂	Barium thymidine-3',5'-diphosphate	-	Ident	Dekker	JCS	-	(1953)	947
Ba ₂ C ₁₀ H ₁₂ N ₅ O ₁₃ P ₃	Adenosine triphosphate dibarium salt	S	Band freq	Schwarz	APS	6	(1952)	15

$\text{Ba}_2\text{H}_4\text{N}_4\text{O}_4\text{P}_4 \cdot 2\text{H}_2\text{O}$	Dibarium tetraphospho- nitrate dihydrate	796-3400	S	I, Group freq	Corbridge	JCS - (1954)	4555
$\text{Ba}_2\text{O}_6\text{P}_2$	Dibarium hypophosphate	2-15 μ	S	Spec, I, Group freq	Corbridge	JCS - (1954)	4555
$\text{Ba}_2\text{O}_7\text{P}_2$	Dibarium pyrophosphate	2-15 μ	S	Spec, Group freq, I, Assign	Corbridge	JCS - (1954)	493
$\text{Ba}_2\text{O}_8\text{P}_2 \cdot 2\text{H}_2\text{O}$	Dibarium peroxydi- phosphate x hydrate	730-3250	S	I, Group freq	Corbridge	JCS - (1954)	4555
$\text{Ba}_2\text{O}_{12}\text{P}_4 \cdot 4\text{H}_2\text{O}$	Dibarium tetra- metaphosphate tetrahydrate	2-15 μ	S	Spec, Group freq, I	Corbridge	JCS - (1954)	493
$\text{Ba}_3\text{C}_2\text{H}_4\text{N}_{10}\text{O}_{20}\text{P}_4$	Adenosine diphosphate tribarium salt	9-11 μ	S	Band freq	Schwarz	APS 6 (1952)	15
$\text{Ba}_3\text{O}_8\text{P}_2$	Orthophosphate barium	2-15 μ 290-650 2-16 μ	S S S	Group freq, I, Assign Assign Spec	Corbridge Duval Meloche	JCS - (1954) CPR 239 (1954) JINC 6 (1958)	493 249 104
$\text{Ba}_3\text{O}_{18}\text{P}_6 \cdot 4\text{H}_2\text{O}$	Tribarium trimeta- phosphate tetra- hydrate	2-15 μ	S	Spec, Group freq	Corbridge	JCS - (1954)	493
<u>Be COMPOUNDS</u>							
$\text{BeCO}_7 \cdot 5\text{H}_2\text{O}$	Basic beryllium carbonate	2-16 μ	S	Spec	Meloche	JINC 6 (1958)	104
BeC_2	Beryllium carbide	-	-	Freq, Thermo.	Chupka	JPC 62 (1958)	611
$\text{BeC}_{10} \text{H}_{14}\text{O}_4$	Beryllium acetyl succinate	625-5000	S	Spec, Struct	West	JINC 5 (1958)	295

Chemical Formula	Compound Name	Wavenumber (cm⁻¹)	Sol	Band freq	Author	JOC	Year
BeC ₁₄ O ₁₀	Beryllium tropolonate	-	-	-	Bryant	JOC	19 (1954) 1889
BeH	Beryllium hydride	-	-	-type doubling theory	Mulliken	PR	38 (1931) 85
		-	-	Mol. Const.	Pekeris	PR	45 (1934) 98
		-	-	Bond distance	Wu	PR	71 (1947) 118
		-	-	FC	Platt	JCP	18 (1950) 932
		-	-	FC	Sheline	JCP	18 (1950) 927
BeH ⁺	Beryllium hydride ion	-	-	FC, Bond distance	Badger	JCP	2 (1934) 128
		-	-	Mol. Const.	Pekeris	PR	45 (1934) 98
BeH ₂	Beryllium hydride	-	-	Struct	Mulliken	JCP	1 (1933) 492
		-	S	Band freq	Fox	JCS	- (1954) 1798
BeH ₈ F ₄ N ₂	Diammonium beryllium tetrafluoride	-	-	-	Price	JCP	17 (1949) 217
		2-15 μ	S	Spec	Price	JCP	17 (1949) 1044
BeH ₈ P ₂	Beryllium borohydride	-	-	Spec, Freq, FC	Buchler	JCP	9 (1958) 121
		200-2000	G	-	-	-	-
BeCl ₂	Beryllium chloride	-	-	FC, Bond distance	Badger	JCP	2 (1934) 128
		-	-	Mol. Const.	Pekeris	PR	45 (1934) 98
BeF	Beryllium fluoride	-	-	Potential function	Linnett	TFS	36 (1940) 1123
		-	-	Potential function	Clark	TFS	37 (1941) 299
		-	-	FC, Bond distance	Linnett	TFS	38 (1942) 1
BeF ₂	Beryllium fluoride	700-2300	G	Spec, Freq, FC	Buchler	JCP	29 (1958) 121
		-	S	Struct, Freq	Peacock	JCS	- (1959) 2762
BeF ₄ ²⁻	Beryllium (II) fluoride complex ion	-	-	-	Lecomte	CPR	249 (1949) 1991
		300-1500	S	Spec	-	-	-
BeF ₄ K ₂	Beryllium (II) fluoride complex (Potassium salt)	1-8 μ	S	Spec, Coblentz	Coblentz	BBS	5 (1908) 159
		-	-	Quantum mechanics, Morse potential	Morse	PR	34 (1929) 57

$\text{BiC}_{36}\text{H}_{24}\text{Cl}_3\text{N}_6\text{O}_{12}$	Bismuth-1,10 phenanthroline complex perchlorate	600-2000	S	Spec, Assign	Schilt	JINC	9 (1959)	211
BiH	Bismuth hydride	-	-	Mol. Const. FC, Bond distances FC, Bond distances	Pekeris Platt Sheline	PR JCP JCP	45 (1934) 18 (1950) 18 (1950)	98 932 927
BiClO	Bismuth oxychloride	300-880	S	Spec	Miller	SA	16 (1960)	135
BiCl ₃	Bismuth chloride	-	-	Calc. of vibration freq FC, Bond distances	Howard Gord	JCP JCP	2 (1934) 14 (1946)	630 305
		3-1.5 μ	-	Mol. Consts.	Happ	ZP	147 (1957)	567
		300-880	S	Spec	Miller	SA	16 (1960)	135
BiN	Bismuth nitride	-	-	Freq	Clark	TFS	33 (1937)	1390
BiNO ₄ ·H ₂ O	Bismuth subnitrate monohydrate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		300-880	S	Spec	Miller	SA	16 (1960)	135
Bi ₃ O ₃	Bismuth(III)nitrate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
Bi ₃ O ₅ ·5H ₂ O	Bismuth nitrate pentahydrate	300-880	S	Spec	Miller	SA	16 (1960)	135
Bi ₃ O ₅ Na	Sodium bismuthate	300-880	S	Spec	Miller	SA	16 (1960)	135
BiO ₄ P	Bismuth phosphate (anhydrous)	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
BiP	Bismuth phosphide	-	-	Freq	Clark	TFS	33 (1937)	1390
Bi ₂ CO ₅	Bismuth subcarbonate	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
Bi ₂ O ₁₂ S ₃	Bismuth sulphate	300-880	S	Spec	Miller	SA	16 (1960)	135
Bi ₂ S ₃	Bismuth sulphide	.8-2 μ	S	Photoelectric props.	Coblentz	BBS	15 (1919)	231
Bi ₃ O ₈ P ₂	Bismuth orthophosphate	650-290	S	Assign	Duval	CPR	239 (1954)	249
BiAs	Bismuth arsenide	-	-	Freq	Clark	TFS	33 (1937)	1390

BiSb	Bismuth antimoniide	-	-	Freq	Clark	TFS	33 (1937)	1390
$\frac{1}{2}\text{Ca}_3\text{C}_9\text{H}_{13}\text{O}_7 \cdot 2\text{H}_2\text{O}$	Calcium 1-2-O-isopropylidene-L-idofuramuronate-dihydrate	2-15 μ	S	Spec	Tipson	JRNB	62 (1959)	257
$\text{CaCH}_3\text{O}_3\text{P} \cdot 2\text{H}_2\text{O}$	Calcium methyl phosphonate dihydrate	768-3350	-	I, Freq	Corbridge	JCS	- (1954)	4555
CaCO_3	Calcium carbonate	3-5 μ	S	Spec, Fine struct Freq, Assign	Randall	PR	31 (1928)	1131A
		2-16 μ	S	Spec	Schaefer	TFS	25 (1929)	841
		8-15 μ	S	Spec	Hunt	AC	22 (1950)	1478
		-	S	Quant. Anal	Louisfert	CPR	235 (1952)	287
		-	S	Anal	Kuentzel	AC	26 (1954)	434A
		11-12.5 μ	S	Spec	Kuentzel	AC	27 (1955)	301
		-	S	Usage	Underwood	JACS	77 (1955)	317
		1-22 μ	S	Assign	Wiberly	AC	29 (1957)	210
		2-16 μ	S	Spec	Saksena	PIAS	30 (1949)	128
		2-15 μ	S	Spec	Meloche	JINC	6 (1958)	104
		300-880	S	Spec	Harkins	AC	31 (1959)	541
			S	Spec	Miller	SA	16 (1960)	135
$\text{CaC}_2\text{O}_4 \cdot \text{H}_2\text{O}$	Calcium oxalate monohydrate	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
		305-3400	S	Assign	Schmetz	SA	9 (1957)	51
$\text{CaC}_4\text{H}_{12}\text{O}_4 \cdot 2\text{P}_2\text{O}_5 \cdot x\text{H}_2\text{O}$	Calcium bisdimethyl phosphinate xhydrate	738-3030	S	I	Corbridge	JCS	- (1954)	4555
$\text{CaC}_6\text{Cl}_6\text{O}_4$	Calcium trichloroacrylate	1600-700	-	Spec	Duval	RTC	69 (1950)	381

Ca COMPOUNDS

CaC₁₀H₁₂N₂O₈ BiSb Bismuth antimoniide 2012 1597
 CaC₁₀H₁₂N₂O₈ BiSb Bismuth antimoniide 2012 1597
 CaC₁₀H₁₂N₂O₈ BiSb Bismuth antimoniide 2012 1597

Chemical Formula	Compound Name	S	800-3000	Spec, Freq	Sawyer	JACS	80 (1958)	1597
$\text{CaC}_{10}\text{H}_{12}\text{N}_2\text{O}_8$ $\text{Na}_2 \cdot 3.5\text{H}_2\text{O}$	Ethylene diamine tetraacetic acid monocalcium disodium salt 3.5 hydrate	S	800-3000	Spec, Freq	Sawyer	JACS	80 (1958)	1597
$\text{CaC}_{10}\text{H}_{12}\text{N}_2\text{O}_8 \cdot 2\text{Na}_2\text{O}$ $5\text{H}_2\text{O}$	Ethylenediamine tetraacetic acid monocalcium disodium salt pentahydrate	S	800-3000	Spec, Freq	Sawyer	JACS	80 (1958)	1597
$\text{CaC}_{10}\text{H}_{14}\text{O}_4$	Calcium acetyl acetate	S	625-5000	Spec, Struct	West	JINC	5 (1958)	295
$\text{CaC}_{12}\text{H}_{18}\text{O}_{14}$	Calcium galacturonate	S	5.5-6.5 μ	Spec, Band freq	Ulte	AC	27 (1955)	557
$\text{CaC}_{18}\text{H}_{12}\text{N}_2\text{O}_2$	Calcium(II)8-hydroxy- quinolate	S	- 8-15 μ	Spec Spec	Charles Charles	AC SA	25 (1953) 8 (1956)	530A 1
$\text{CaC}_{32}\text{H}_{62}\text{O}_4$	Calcium palmitate	S	650-4000	Spec	Kawano	NKZ	81 (1960)	1805
$\text{CaC}_{36}\text{H}_{70}\text{O}_4$	Calcium stearate	S	6-8 μ 650-4000	Spec Spec	Ellis Kawano	N NKZ	181 (1958) 81 (1960)	181 1805
$\text{CaC}_{48}\text{H}_{38}\text{Cl}_2 \cdot \text{N}_2\text{O}_{11}$	Calcium(II)-1:10 phenanthroline complex per chlorate trihydrate	S	600-2000	Spec	Schiltt	JINC	9 (1959)	211
$\text{CaC}_{48}\text{H}_{78}\text{O}_4$	Calcium 9-(or 10)phenyl stearate	S	2-15 μ	Spec	Kagarise	JPC	59 (1955)	271
CaH	Calcium hydride	-	-	-type coupling theory Mol. Consts. FC, Bond distance FC, Bond distance	Mulliken Pekeris Platt Sheline	PR PR JCP JCP	38 (1931) 45 (1934) 18 (1950) 18 (1950)	85 98 932 927
$\text{CaHO}_3 \cdot \text{P}_2\text{O}_5$	Calcium orthophosphate monohydrate	S	2-15 μ	Assign	Corbridge	JCS	- (1954)	493
$\text{CaHO}_4 \cdot \text{P}$	Calcium acid phosphate	S	2-16 μ 2-15 μ	Spec Assign	Hunt Corbridge	AC JCS	22 (1950) - (1954)	1478 493

$\text{CaHO}_4\text{P}_2\cdot 2\text{H}_2\text{O}$	Calcium hydrogen phosphate dihydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
CaH_2O_2	Calcium hydroxide	1400-4500	- -	H bond, Spec H bond	Rundle Petch	JCP PR	20 (1952) 99 (1955)	1487 1635
$\text{CaH}_2\text{O}_7\text{P}_2$	Calcium dihydrogen pyrophosphate	2-15 μ	S	Assign	Corbridge	JCS	- (1954)	493
$\text{CaH}_3\text{N}_3\text{O}_6\text{P}_3\cdot\text{Na}_3\cdot 4\text{H}_2\text{O}$	Sodium calcium triphosphonitrilate tetrahydrate	847-3200	S	I	Corbridge	JCS	- (1954)	4555
$\text{CaH}_4\text{O}_4\text{P}_2$	Calcium phosphinate	2-15 μ	S	I	Corbridge	JCS	- (1954)	493
$\text{CaH}_4\text{O}_8\text{P}_2$	Calcium biphosphate	2-15 μ	S	I	Corbridge	JCS	- (1954)	493
$\text{CaH}_4\text{O}_8\text{P}_2\cdot\text{H}_2\text{O}$	Calcium biphosphate monohydrate	300-880	S	Spec	Miller	SA	16 (1960)	135
$\text{CaH}_4\text{O}_8\text{P}_2\cdot\text{H}_2\text{O}$	Calcium diacid phosphate monohydrate	2-16 μ 2-15 μ	S S	Spec I	Miller Corbridge	AC JCS	24 (1952) - (1954)	1253 493
CaDO_4P	Calcium hydrogen phosphate-d ₁	420-3600	-	Spec	Ryskin	OS	7 (1960)	320
CaD_2O_2	Calcium hydroxide-d ₂	1400-4500	-	H bond, Spec	Rundle	JCP	20 (1952)	1487
CaCl_2	Calcium chloride	1-9 μ 2-4 μ 6.8-2.3 μ 2.6-3.5 μ	S Sol Sol Sol	Spec Reflection spectra Spec Spec	Coblentz Angstrom Collins Buswell	BBS PR PR JPC	2 (1907) 3 (1914) 20 (1922) 43 (1939)	457 47 486 1181
$\text{CaFO}_3\text{P}_2\text{X}_2\text{O}$	Calcium monofluoro-phosphate xhydrate	-	S	I	Corbridge	JCS	- (1954)	4555
CaF_2	Calcium fluoride	-	S	Spec	Refilor	OS	6 (1959)	234
CaF_4	Calcium(II)-fluoride complex ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762

$\text{CaI}_2 \cdot 6\text{H}_2\text{O}$	Calcium iodate hexahydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
CaN_2O_6	Calcium nitrate	2-16 μ 700-1600	S S	Spec Freq, Assign	Miller Ferraro	AC JMS	24 (1952) 4 (1960)	1253 99
$\text{CaN}_2\text{O}_6 \cdot 4\text{H}_2\text{O}$	Calcium nitrate tetrahydrate	700-1600 300-880	S S	Freq, Assign Spec	Ferraro Miller	JMS SA	4 (1960) 16 (1960)	99 135
CaN_6	Calcium azide	3100-635	S	Freq, FC	Gray	TFS	53 (1957)	901
$\text{CaN}_6\text{O}_{12} \cdot \text{K}_2\text{Ni} \cdot 3\text{H}_2\text{O}$	Calciumdipotassium nickel nitrite trihydrate	-	-	Struct	Puget	CPR	250 (1960)	4141
CaO	Calcium oxide	1-8 μ - - -	S - - S	Spec Polarizability, Theory Freq Band study	Coblentz Szigeti Szigeti Hultin	BBS TFS PRS N	5 (1908) 45 (1949) 204 (1950) 166 (1950)	159 155 51 190
CaO_2	Calcium dioxide	2-16 μ	S	Spec, Struct	Brame	JINC	4 (1957)	90
$\text{CaO}_2 \cdot 8\text{H}_2\text{O}$	Calcium dioxide octahydrate	2-16 μ	S	Spec, Struct	Brame	JINC	4 (1957)	90
$\text{CaO}_3 \cdot \text{S} \cdot 2\text{H}_2\text{O}$	Calcium sulphite dihydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$\text{CaO}_3 \cdot \text{PSNa} \cdot 2\text{H}_2\text{O}$	Sodium calcium phosphoromonothioate octahydrate	865-3040	S	I	Corbridge	JCS	- (1954)	4555
$\text{CaO}_4 \cdot \text{S}$	Calcium sulphate	1-8 μ 1-7.5 μ 0.3-7 μ 7.9 μ 2-16 μ 650-290 7.5-10.5 μ	S S S - S S S	Spec Spec Relative reflectance Christianson filter Spec Assign Spec	Coblentz Coblentz Hulbert Barnes Hunt Duval Tai	BBS BBS JOSA PR AC CPR AC	2 (1907) 7 (1911) 17 (1928) 49 (1936) 22 (1950) 239 (1954) 29 (1957)	457 619 23 732 1478 249 1430

$\text{CaO}_4\text{S}_4\cdot\frac{3}{2}\text{H}_2\text{O}$	Calcium sulphate $\frac{1}{2}$ hydrate	5-15 μ	S	I, Freq	Lippincott	SA	16 (1960)	58
$\text{CaO}_4\text{S}_4\cdot 2\text{H}_2\text{O}$	Calcium sulphate dihydrate	2-16 μ 0.6-2.7 μ 2-16 μ 300-880	S S S S	Spec Dispersion Spec Spec	Miller Venderberg Meloche Miller	AC AC JINC SA	24 (1952) 26 (1954) 6 (1958) 16 (1960)	1253 428A 104 135
$\text{CaO}_4\text{S}_4\cdot x\text{H}_2\text{O}$	Calcium sulphate polyhydrate	2-15 μ 300-880	S S	Spec Spec	Harkins Miller	AC SA	31 (1959) 16 (1960)	541 135
CaO_4B_4	Calcium metaborate	250-4000	-	Spec, Freq, Assign	Goubeau	ZPC	20 (1959)	15
CaO_4Se_4	Calcium selenate	650-290	S	Assign	Duval	CPR	239 (1954)	249
$\text{CaO}_7\text{Cr}_2\cdot 3\text{H}_2\text{O}$	Calcium dichromate trihydrate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
$\text{CaO}_9\text{P}_3\text{Na}_3\cdot 3\text{H}_2\text{O}$	Calcium sodium trimetaphosphate trihydrate	2-15 μ	S	I, Assign	Corbridge	JCS	- (1954)	493
$\text{Ca}_2\text{H}_4\text{N}_4\text{O}_4\text{P}_4\cdot 4\text{H}_2\text{O}$	Dicalcium tetra- phosphonitrilate tetrahydrate	798-3350	S	I	Corbridge	JCS	- (1954)	4555
$\text{Ca}_2\text{O}_6\text{P}_2\cdot 2\text{H}_2\text{O}$	Dicalcium hypophosphate dihydrate	860-3100	S	I	Corbridge	JCS	- (1954)	4555
$\text{Ca}_2\text{O}_7\text{P}_2$	Dicalcium pyrophosphate	2-15 μ	S	I, Assign	Corbridge	JCS	- (1954)	493
$\text{Ca}_2\text{O}_8\text{P}_2\cdot x\text{H}_2\text{O}$	Dicalcium peroxy- diphosphate xhydrate	2-15 μ	S	Spec, I	Corbridge	JCS	- (1954)	4555
$\text{Ca}_2\text{O}_{12}\text{P}_4\cdot 5\text{H}_2\text{O}$	Dicalcium tetrameta- phosphate pentahydrate	2-15 μ	S	I, Assign	Corbridge	JCS	- (1954)	493
$\text{Ca}_3\text{C}_8\text{H}_{129}\text{O}_{12}\text{P}_3$	Calcium vitamin D phosphate	-	S	I	Millas	JACS	77 (1955)	1640
$\text{Ca}_3\text{O}_8\text{P}_2$	Calcium orthophosphate	1-8 μ	S	Spec	Coblentz	BBS	5 (1908)	159

$\text{Ca}_3\text{O}_8\text{As}_2$	2-16 μ 2-15 μ 650-290 2-16 μ - 300-880	S S S S - S	Spec I, Assign Assign Spec Freq Spec	Willes Corbridge Duval Meloche Pobegien Miller	AC JCS CPR JINC CPR SA	24 (1952) - (1954) 239 (1954) 6 (1958) 248 (1959) 16 (1960)	1253 493 249 104 2220 135
Tricalcium ortho-arsenate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$\text{Ca}_{10}\text{CO}_{27}\text{P}_6$	2-16 μ	-	Spec	Romo	JACS	76 (1954)	3924

Cb COMPOUNDS

CbO	-	G	Spec	Rao	LJP	27 (1953)	399
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Cd COMPOUNDS

CdCO_3	2-16 μ 300-880	S S	Spec Spec	Meloche Miller	JINC SA	6 (1958) 16 (1960)	104 135
CdC_2H_6	- -	- -	Assign FC	Gutowsky Sheline	JACS JCP	71 (1949) 18 (1950)	3194 602
$\text{CdC}_3\text{H}_7\text{Cl}_2\text{NO}$	650-4000	L,S	Spec, Assign	Martinette	SA	15 (1959)	77
$\text{CdC}_4\text{H}_8\text{Cl}_2\text{O}_2$	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
$\text{CdC}_4\text{H}_8\text{Cl}_2\text{S}_2$	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
$\text{CdC}_4\text{H}_{10}$	650-3500	L	Spec, Assign	Kaesz	SA	15 (1959)	360

$\text{CdC}_4\text{H}_{10}\text{Cl}_2\text{N}_2$	Cadmium(II)-piperazine complex chloride	500-1500	S	Spec, Struct	Hendra	JCS - (1960)	5105
$\text{CdC}_4\text{H}_{12}\text{Cl}_2\text{N}_2\text{S}_2$	Cadmium(II)-methyl thiourea complex chloride	2-15 μ	S	Spec	Lane	JACS 81 (1959)	3824
$\text{CdC}_4\text{H}_{12}\text{Cl}_2\text{O}_2\text{S}_2$	Cadmium(II)-dimethyl sulfoxide complex chloride	650-4000	S	Assign, Spec	Cotton	JPC 64 (1960)	1534
$\text{CdC}_4\text{H}_{12}\text{N}_6\text{O}_2$	Cadmium(II)-iso thiocyanate complex (Ammonium salt)	-	S	Freq, Assign	Mitchell	JCS - (1960)	1912
CdC_4N_4	Cadmium(II)-tetra-cyanide complex ion	250-2200	S	Spec, Assign	Hidalgo	ARS 56A (1960)	9
$\text{CdC}_4\text{N}_4\text{K}_2$	Cadmium(II) cyanide complex (Potassium salt)	250-2200	-	Assign	Hidalgo	CPR 249 (1959)	233
$\text{CdC}_6\text{Cl}_6\text{O}_4$	Cadmium trichloro-acrylate	700-1600	-	Spec	Duval	RTC 69 (1950)	391
$\text{CdC}_7\text{H}_5\text{O}_2$	Salicylaldehyde cadmium chelate	-	S	Freq	Bellamy	JCS - (1954)	4491
$\text{CdC}_8\text{H}_4\text{F}_3\text{O}_2\text{S}$	Thenoyl trifluoroacetone cadmium chelate	-	Sol	Freq	Bellamy	JCS - (1954)	4491
$\text{CdC}_8\text{H}_{10}\text{Cl}_2\text{N}_3\cdot\text{H}_2\text{O}$	P-Dimethylamino benzene dizonium chloride cadmium chloride monohydrate	3-14 μ	S	Freq	Gremillion	JACS 81 (1959)	6134
$\text{CdC}_8\text{H}_{10}\text{N}_2\text{O}_8\text{N}_3\cdot 2\text{H}_2\text{O}$	Cadmium(II)ethylene diamine tetraacetic acid complex (sodium salt) dihydrate	800-1800	S	Freq, Assign	Sawyer	JACS 81 (1959)	816

CdC ₁₂ H ₈ N ₂ O ₄	Cadmium(II)-2-pyridine carboxylic acid chelate	-	-	Struct	Lumme	SK	31B (1958)	294
CdC ₁₂ H ₁₀ N ₄ S ₂	Cadmium(II)-pyridine complex thiocyanate	-	S	Freq assign	Mitchell	JCS	- (1960)	1912
CdC ₁₄ H ₁₀ O ₄	Cadmium tropolonate	-	S	Freq, Band freq	Bryant	JOC	19 (1954)	1889
CdC ₁₇ H ₁₉ INO ₃	Morphine-cadmium iodide complex	650-4000	-	Spec	Levy	AC	29 (1957)	470
CdC ₁₈ H ₁₂ N ₂ O ₂	Cadmium(II)-8-hydroxy quinolate	8-15 μ	S	Assign, Spec	Charles Charles	SA AC	8 (1956) 25 (1953)	1 530
CdC ₂₀ H ₁₂ N ₂ O ₄	Cadmium(II)-8-quinoline carboxylic acid chelate	-	-	Struct	Lumme	SK	31B (1958)	294
CdC ₂₀ H ₂₂ O ₄	Cadmium isopropyl tropolonate	-	S	Band freq	Bryant	JOC	19 (1954)	1889
CdC ₃₆ H ₂₄ Cl ₂ N ₂ O ₆	Cadmium(II)-1:10 phenanthroline complex perchlorate	600-2000	S	Spec	Schilt	JINC	9 (1959)	211
CdC ₃₆ H ₃₀ I ₂ O ₂ P ₂	Cadmium(II)-Triphenyl phosphine oxide complex iodide	900-1300	S	Freq	Cotton	JCS	- (1960)	2199
CdH	Cadmium hydride	-	-	-type doubling theory Mol. Const. Thermo. FC FC	Mulliken Pekeris Hulburt Platt Sheline	PR PR JCP JCP JCP	38 (1931) 45 (1934) 9 (1941) 18 (1950) 18 (1950)	85 498 61 932 927
CdH ⁺	Cadmium hydride ion	-	-	Mol. Consts.	Pekeris	PR	45 (1934)	98
CdH ₄ F ₃ N ₃	Ammonium fluoride cadmium fluoride	1400-4000	S	Spec	Crocket	JACS	82 (1960)	4158
CdH ₄ N ₂ O ₂ S ₂	Cadmium sulfamate	-	S	Freq, Assign	Bicelli	AC	47 (1957)	1380

$Cd_3O_8P_2$	Cadmium orthophosphate	290-650 2-16 μ	S S	Assign Spec	Duval Meloche	CPR JINC	239 (1954) 6 (1958)	249 104	
Cd_3As_8	Cadmium arsenate-d ₈	290-650	S	Assign	Duval	CPR	239 (1954)	249	
<u>Ce COMPOUNDS</u>									
$CeC_{10}H_{12}N_2O_8 \cdot Na_2H_2O$	Cerium(III)-ethylene diamine tetracetic acid complex (sodium salt)dihydrate	800-1800	S	Spec, Bonding	Donald	JACS	82 (1960)	4191	
$CeC_{24}H_{54}O_{12}P_3$	Cerium(III)-di-n-butyl phosphate	714-5000	S	Group study	Smith	JINC	9 (1959)	150	
$CeC_{32}H_{72}O_{16}P_4$	Cerium(IV)-di-n-butyl phosphate	714-5000	S	Group study	Smith	JINC	9 (1959)	150	
$CeH_8N_8O_{18}$	Ammonium hexanitrate cerate(IV)	2-16 μ 700-1600 300-880	S S S	Spec Freq, Assign Spec	Miller Ferraro Miller	AC JMS SA	24 (1952) 4 (1960) 16 (1960)	1253 99 135	
CeF_3	Cerium(III)-fluoride	1950-2700	S	Electronic transitions	Mandel	JCP	33 (1960)	192	
CeN_3O_9	Cerium nitrate	0.56-2.3 μ	Sol	Magnetic rotation	Ingersoll	JOSA	6 (1922)	663	
$CeN_3O_{16}H_2$	Cerium nitrate hexahydrate	- 700-1550 700-1600	S S,Sol S	Spec Freq Freq, Assign	Hafele Ryskin Ferraro	ZP OS JMS	148 (1957) 6 (1959) 4 (1960)	262 113 99	
$CeN_6O_{18}K_2$	Potassium hexanitrate cerate(IV)	700-4000 700-4000 700-1600	S S S	Assign Assign Freq, Assign	Gatehouse Gatehouse Ferraro	JCS JINC JMS	- (1957) 8 (1958) 4 (1960)	4222 75 99	
CeO_2	Cerium dioxide	0.4-1.6 μ	-	Reflectance	Haas	JOSA	45 (1955)	945	

CeO_8S_2 Cerium(IV)sulfate 300-880 S Spec Miller SA 16 (1960) 135

Cm COMPOUNDS

CmF_3 Curium(III)fluoride - S Spec Asprey JINC 7 (1958) 27
 CmF_3 Curium(IV)fluoride - S Spec Asprey JINC 7 (1958) 27

Co COMPOUNDS

$CoCH_4N_4O_7 \cdot H_2O$ Cobalt (III)-ammonia carbonate, nitrite complex (potassium salt) hydrate - S Spec Kyuno NKZ 80 (1959) 724

$CoCH_{12}ClN_4O_3$ Cobalt (III)-ammonia carbonate complex chloride 400-5000 S Spec Nakamoto 79 (1957) 4904
 650-1650 S Freq Svatos 79 (1957) 3313
 2-15 μ S Spec, Assign, Struct Bertin 81 (1959) 3818

$CoCH_{12}ClN_6O_2S$ Cobalt (III)-ammonia, isothiocyanate, nitrite complex chloride 1900-2100 S Freq Fujita JACS 78 (1956) 3295

$CoCH_{12}ClN_6O_2S \cdot AgNO_3$ Cobalt (III)-ammonia isothiocyanate, nitrite complex chloride silver-nitrate 1900-2100 S Freq Fujita JACS 78 (1956) 3295

$CoCH_{16}ClN_6O_2S \cdot HgCl_2$ Cobalt (III)-ammonia isothiocyanate, nitrite complex chloride mercuric chloride 1900-2100 S Freq Fujita JACS 78 (1956) 3295

$\text{CoCH}_{12}\text{N}_5\text{O}_6$	Cobalt (III)-ammonia, carbonate complex nitrate	2-15 μ 700-4000	S S	Asslgn Asslgn	Beattic Gatehouse	JCS JINC	- 8	(1956) (1958)	2549 75
$\text{CoCH}_{12}\text{N}_5\text{O}_6 \cdot \frac{1}{2}\text{H}_2\text{O}$	Cobalt (III)-ammonia, carbonate complex nitrate hemhydrate	2-15 μ 700-4000	S S	Band freq Asslgn	Merritt Gatehouse	JPC JCS	59 -	(1955) (1957)	55 4222
$\text{CoCH}_{15}\text{Cl}_2\text{N}_6\text{S}$	Cobalt (III)-ammonia, isothiocyanate complex chloride	680-4000	S	Struct	Chamberlain	JACS	81	(1959)	6412
$\text{CoCH}_{15}\text{IN}_5\text{O}_3$	Cobalt (III)-ammonia, carbonate complex iodide	2-15 μ	S	Spec, Struct	Bertin	JACS	81	(1959)	3818
$\text{CoCH}_{15}\text{N}_6\text{O}_6$	Cobalt (III)-ammonia, carbonate complex nitrate	650-1650	S	Freq	Svatos	JACS	79	(1957)	3313
$\text{CoCH}_{15}\text{N}_8\text{O}_6\text{S}$	Cobalt (III)-ammonia, isothiocyanate complex nitrate	1900-2100 680-4000	S S	Freq Struct	Fujita Chamberlain	JACS JACS	78 81	(1956) (1959)	3295 6412
$\text{CoCH}_{15}\text{N}_9\text{O}_9\text{SAg}$	Cobalt (III)-ammonia, isothiocyanate complex nitrate silvernitrate	- 680-4000	S S	Freq assign Struct	Mitchell Chamberlain	JCS JACS	- 81	(1960) (1959)	1912 6412
$\text{CoCH}_{18}\text{ClN}_6\text{O}_3$	Cobalt (III)-ammonia complex chloride carbonate	400-5000	S	Spec	Nakamoto	JACS	79	(1957)	490
CoCO_3	Cobaltous carbonate	2-16 μ 2-16 μ	S S	Spec Spec	Miller Meloche	AC JINC	24 6	(1952) (1958)	1253 104
$\text{CoC}_2\text{H}_3\text{N}_5\text{S}_2$	Cobalt rubeanate	400-4000	Sol	Struct	Barcelo	SA	10	(1958)	245
$\text{CoC}_2\text{H}_6\text{N}_6\text{O}_6\text{K} \cdot \text{H}_2\text{O}$	Cobalt (III)-ammonia, carbonate complex (potassium salt) monohydrate	-	-	Spec	Kyuno	NKZ	80	(1959)	849

$\text{CoC}_2\text{H}_6\text{N}_4\text{O}_8\text{K}$	Cobalt (III)-ammonia nitrite, oxalate complex (potassium salt)	-	-	Spec	Kyuno	NKZ 81 (1960)	728
$\text{CoC}_2\text{H}_6\text{N}_4\text{O}_8\text{K} \cdot \text{H}_2\text{O}$	Cobalt (III)-ammonia, nitrite, oxalate complex (potassium salt) monohydrate	-	-	Spec	Kyuno	NKZ 80 (1959)	724
$\text{CoC}_2\text{H}_6\text{N}_4\text{O}_8 \cdot \text{H}_2\text{O}$	Cobalt (III)-ammonia, nitrite, oxalate complex (hydrogen salt) monohydrate	-	-	Spec	Kyuno	NKZ 80 (1959)	852
$\text{CoC}_2\text{H}_6\text{N}_4\text{O}_8\text{Ag}$	Cobalt (III)-ethylenediamine nitrite complex (silver salt)	-	-	Spec	Kyuno	NKZ 80 (1959)	722
$\text{CoC}_2\text{H}_6\text{N}_4\text{O}_8\text{K}$	Cobalt (III)-ethylenediamine, nitrite complex (potassium salt)	-	-	Spec	Kyuno	NKZ 80 (1959)	722
$\text{CoC}_2\text{H}_{12}\text{Cl}_4\text{N}_4\text{O}_4$	Cobalt (III)-ammonia, oxalate complex chloride	400-5000	-	Spec	Nakamoto	JACS 79 (1957)	4904
$\text{CoC}_2\text{H}_{12}\text{Cl}_4\text{N}_4\text{S}$	Cobalt (III)-ammonia isothiocyanate complex chloride	680-4000	S	Struct	Chamberlain	JACS 81 (1959)	6412
$\text{CoC}_2\text{H}_{12}\text{Cl}_4\text{N}_4\text{O}_2$	Cobalt (III)-chloride, ethylene diamine, water complex chloride	-	-	Spec	Kyuno	NKZ 80 (1959)	724
$\text{CoC}_2\text{H}_{12}\text{N}_4\text{O}_2\text{S}_2$	Cobalt (III)-ammonia, isothiocyanate nitrite complex	1900-2100	S	Freq	Fuji ta	JACS 78 (1956)	3295

$\text{Co}_2\text{H}_{15}\text{BrN}_5\text{O}_4 \cdot \text{Coalt (III)-}$ ammonia, oxalate complex bromide 1.5 hydrate	400-5000	S	Spec	Nakamoto	JACS	79 (1957)	4904
$\text{Co}_2\text{H}_{15}\text{BrN}_5\text{O}_4 \cdot \text{Coalt (III)-}$ ammonia, oxalate complex bromide hydrogen bromide	650-1650	S	Freq	Svatos	JACS	79 (1957)	3313
$\text{Co}_2\text{H}_{16}\text{BrN}_5\text{O}_4 \cdot \text{Coalt (III)-}$ ammonia, bioxalate complex bromide	400-5000	S	Spec	Nakamoto	JACS	79 (1957)	4904
$\text{Co}_2\text{H}_{18}\text{ClN}_5\text{O}_{10} \cdot \text{Coalt (III)-}$ ammonia, acetate complex perchlorate	400-5000	S	Spec	Nakamoto	JACS	79 (1957)	4904
$\text{Co}_2\text{O}_6\text{K} \cdot \text{Potassium carbonate}$ cobalt (II) tetra- hydrate	700-4000	S	Freq assign	Gatehouse	JCS	- (1958)	3137
$\text{Co}_3\text{H}_8\text{N}_4\text{O}_7 \cdot \text{Coalt (III)-}$ carbonate, ethylene diamine, nitrite complex (potassium salt) monohydrate	-	-	Spec	Kyuno	NKZ	80 (1959)	724
$\text{Co}_3\text{H}_{18}\text{N}_5\text{O}_6 \cdot \text{Coalt (III)-}$ ammonia, β -amino- propionate complex sulfate	-	-	Spec	Ogawa	NKZ	81 (1960)	72
$\text{Co}_3\text{O}_6\text{K} \cdot \text{Potassium carbonate}$ cobaltate (III)- trihydrate	700-4000	S	Freq assign	Gatehouse	JCS	- (1958)	3137
$\text{Co}_4\text{HO}_4 \cdot \text{Coalt hydrocarbonyl}$	703-2121 2-24 μ	Sol,G Sol,G	I Spec, I, Struct, Assign	Sternberg Friedel	JACS JACS	75 (1953) 75 (1955)	2717 3951

$\text{CoC}_4\text{H}_6\text{N}_2\text{O}_8\text{Ag}\cdot\text{H}_2\text{O}$	Cobalt (III)- ammonia, oxalate complex (silver salt) monohydrate	-	-	Spec	Kyuno	NKZ	80 (1959)	852
$\text{CoC}_4\text{H}_6\text{N}_2\text{O}_8\text{K}\cdot\text{H}_2\text{O}$	Cobalt (III)- ammonia, oxalate complex (potassium salt) monohydrate	-	-	Spec	Kyuno	NKZ	80 (1959)	849
$\text{CoC}_4\text{H}_7\text{N}_2\text{O}_8\cdot\text{H}_2\text{O}$	Cobalt (III)- ammonia, oxalate complex (hydrogen salt) monohydrate	-	-	Spec	Kyuno	NKZ	80 (1959)	852
$\text{CoC}_4\text{H}_8\text{N}_2\text{O}_6\text{K}$	Cobalt (III)- carbonate, ethylene diamine complex (potassium salt)	-	-	Spec	Kyuno	NKZ	80 (1959)	849
$\text{CoC}_4\text{H}_8\text{N}_4\text{O}_8\cdot\text{H}_2\text{O}$	Cobalt (III)- ethylene diamine, nitrite, oxalate complex (potassium salt)	-	-	Spec	Kyuno	NKZ	80 (1959)	724
$\text{CoC}_4\text{H}_{16}\text{BrCl}_2\text{N}_4$	cis-Cobalt (III)- ethylenediamine chloride complex bromide	400-4000	S	Freq, Spec	Baldwin	JCS	- (1960)	4369
$\text{CoC}_4\text{H}_{16}\text{BrCl}_2\text{N}_4$	trans-Cobalt (III)- ethylenediamine, chloride complex bromide	400-5000	S	Freq, Spec	Baldwin	JCS	- (1960)	4369
$\text{CoC}_4\text{H}_{16}\text{Br}_3\text{N}_4\cdot\text{H}_2\text{O}$	trans-Cobalt (III)- ethylenediamine complex hydro- bromide dihydrate	1000-2000	-	Group study	Curtis	PRCS	- (1960)	410

Chemical Formula	Compound Name	S	2-15 μ	Band freq	Merritt	JPC	59 (1955)	55
$\text{CoC}_4\text{H}_{16}\text{Cl}_4\text{N}_4\text{O}_3$ H_2O	cis-Cobalt (III)- carbonate, ethylene diamine complex chloride monohydrate							
$\text{CoC}_4\text{H}_{16}\text{Cl}_6\text{N}_4\text{O}_4$	cis-Cobalt (III) ethylenediamine, nitrite complex chloride	S	800-1500 800-1500 700-3500	Bonding Freq, Struct Spec, Freq, Assign, Config.	Gatehouse Chatt Morris	JINC JCS JACS	8 (1958) - (1959) 82 (1960)	79 4073 1521
$\text{CoC}_4\text{H}_{16}\text{Cl}_6\text{N}_4\text{O}_4$	trans-Cobalt (III)- ethylenediamine, nitrite complex chloride	S	800-1500 800-1500 700-3500	Bonding Freq, Struct Spec, Freq, Assign, Config.	Gatehouse Chatt Morris	JINC JCS JACS	8 (1958) - (1959) 82 (1960)	79 4073 1521
$\text{CoC}_4\text{H}_{16}\text{Cl}_2\text{IN}_4$	cis-Cobalt (III)- ethylenediamine, chloride complex iodide	S	400-4000	Spec, Freq	Baldwin	JCS	- (1960)	4369
$\text{CoC}_4\text{H}_{16}\text{Cl}_2\text{IN}_4$	trans-Cobalt (III)- ethylenediamine, chloride complex iodide	S	400-4000	Spec, Freq	Baldwin	JCS	- (1960)	4369
$\text{CoC}_4\text{H}_{16}\text{Cl}_2\text{N}_4$	cis-Cobalt (III)- chloride, ethylene diamine complex	-	-	Spec, Config.	Morris	DA	19 (1958)	223
$\text{CoC}_4\text{H}_{16}\text{Cl}_2\text{N}_4$	trans-Cobalt (III)- chloride, ethylene diamine complex	-	-	Spec, Config.	Morris	DA	19 (1958)	223
$\text{CoC}_4\text{H}_{16}\text{Cl}_2\text{-N}_4\text{O}_2\text{S}_2$	cis-Cobalt (III)- chloride, ethylene diamine complex	S	400-4000	Spec, Freq	Baldwin	JCS	- (1960)	4369
$\text{CoC}_4\text{H}_{16}\text{Cl}_2\text{-N}_4\text{O}_2\text{S}_2$	trans-Cobalt (III)- chloride, ethylene diamine complex	S	400-4000	Spec, Freq	Baldwin	JCS	- (1960)	4369

$\text{CoC}_4\text{H}_{16}\text{Cl}_2\text{N}_5\text{O}_2$	-	-	Struct, Freq	Chatt	JCS	- (1959)	4073
cis-Cobalt (III)-chloride, ethylene diamine, nitrite complex chloride							
$\text{CoC}_4\text{H}_{16}\text{Cl}_2\text{N}_5\text{O}_3$	400-4000	S	Spec, Freq	Baldwin	JCS	- (1960)	4369
trans-Cobalt (III)-chloride, ethylene diamine, complex nitrate							
$\text{CoC}_4\text{H}_{16}\text{Cl}_3\text{N}_4$	2-15 μ 700-3500	S S	Band study Spec, Freq, Config.	Merritt Morris	JPC JACS	59 (1955) 82 (1960)	55 1521
cis-Cobalt (III)-chloride, ethylene diamine complex chloride							
$\text{CoC}_4\text{H}_{16}\text{Cl}_3\text{N}_4$	2-15 μ 700-3500	S S	Band freq Spec, Freq, Config.	Merritt Morris	JPC JACS	59 (1955) 82 (1960)	55 1521
trans-Cobalt (III)-chloride, ethylene diamine complex chloride							
$\text{CoC}_4\text{H}_{16}\text{Cl}_3\text{N}_4 \cdot \text{HCl} \cdot 2\text{H}_2\text{O}$	1000-2000	-	Group study	Curtis	PRCS	- (1960)	410
trans-Cobalt (III)-chloride, ethylene diamine complex hydrochloride, dihydrate							
$\text{CoC}_4\text{H}_{16}\text{Cl}_3\text{N}_4\text{O}_2$	400-4000	S	Spec, Freq	Baldwin	JCS	- (1960)	4369
trans-Cobalt (III)-chloride, ethylene diamine complex chloride							
$\text{CoC}_4\text{H}_{16}\text{Cl}_3\text{N}_4\text{O}_4$	400-4000	S	Spec, Freq	Baldwin	JCS	- (1960)	4369
cis-Cobalt (III)-chloride, ethylene diamine complex perchlorate							
$\text{CoC}_4\text{H}_{16}\text{IN}_6\text{O}_4$	800-1500 800-1500	S Sol	Bonding Freq, Struct	Gatehouse Chatt	JINC JCS	8 (1958) - (1959)	79 4073
cis-Cobalt (III)-ethylenediamine, nitrite complex iodide							

$\text{CoC}_4\text{H}_{16}\text{N}_4\text{O}_6$	trans-Cobalt (III)- ethylenediamine, nitrite complex iodide	800-1500 800-1500	Sol Sol	Bonding Freq, Struct	Gatehouse Chatt	JINC JCS	8 (1958) - (1959)	79 4073
$\text{CoC}_4\text{H}_{16}\text{N}_4\text{O}_3\text{PS}$	Cobalt (III)- ethylenediamine, thiophosphate complex	850-1250	S	Spec, Struct	Hidaka	BCSJ	32 (1959)	1317
$\text{CoC}_4\text{H}_{16}\text{N}_4\text{O}_3\text{PS} \cdot 2\text{H}_2\text{O}$	Cobalt (II)- ethylenediamine, thiophosphate complex dihydrate	850-1250	S	Spec, Struct	Hidaka	BCSJ	32 (1959)	1317
$\text{CoC}_4\text{H}_{16}\text{N}_4\text{O}_6\text{P}_2 \cdot \text{S}_2\text{Na} \cdot 8\text{H}_2\text{O}$	Cobalt (III)- ethylenediamine, thiophosphate complex (sodium salt) octahydrate	850-1250	S	Spec, Struct	Hidaka	BCSJ	32 (1959)	1317
$\text{CoC}_4\text{H}_{16}\text{N}_4\text{O}_6 \cdot \text{SNa}_4$	Cobalt (III)- ethylenediamine, thiosulfate complex (sodium salt)	1000-1250	S	Spec, Struct	Hidaka	BCSJ	32 (1959)	1317
$\text{CoC}_4\text{H}_{16}\text{N}_4\text{O}_6$	cis-Cobalt (III)- ethylenediamine, nitrite complex	-	-	Config., Spec	Morris	DA	19 (1958)	223
$\text{CoC}_4\text{H}_{16}\text{N}_4\text{O}_6$	trans-Cobalt (III)- ethylenediamine, nitrite complex	-	-	Config., Spec	Morris	DA	19 (1958)	223
$\text{CoC}_4\text{H}_{16}\text{N}_4\text{O}_7$	cis-Cobalt (III)- ethylenediamine, nitrite complex	800-1500 800-1500 700-3500	S Sol S	Bonding Freq, Struct Spec, Freq, Config.	Gatehouse Chatt Morris	JINC JCS JACS	8 (1958) - (1959) 82 (1960)	79 4073 1521
$\text{CoC}_4\text{H}_{16}\text{N}_4\text{O}_7$	trans-Cobalt(III)- ethylenediamine, nitrite complex	800-1500 800-1500 700-3500	S Sol S	Bonding Freq, Struct Spec, Freq, Config.	Gatehouse Chatt Morris	JINC JCS JACS	8 (1958) - (1959) 82 (1960)	79 4073 1521

$\text{CoC}_4\text{H}_{16}\text{N}_7\text{O}_7$	cis-Cobalt (III)- ethylenediamine, nitrite complex nitrate	2-15 μ 800-1500 800-1500 700-3500	S S Sol S	Band freq, Spec Bonding Freq Spec, Freq, Config.	Merritt Gatehouse Chatt Morris	JPC JINC JCS JACS	59 (1955) 8 (1958) - (1959) 82 (1960)	55 79 4073 1521
$\text{CoC}_4\text{H}_{16}\text{N}_7\text{O}_7$	trans-Cobalt (III)- ethylenediamine, nitrite complex nitrate	2-15 μ 800-1500 800-1500 700-3500	S S Sol S	Spec, Band study Bonding Freq, Struct Spec, Freq, Config.	Merritt Gatehouse Chatt Morris	JPC JINC JCS JACS	59 (1955) 8 (1958) - (1959) 82 (1960)	55 79 4073 1521
$\text{CoC}_4\text{H}_{18}\text{Br}_3\text{N}_4\text{O}$	cis-Cobalt (III)- bromide, ethylene diamine, water complex bromide	2-15 μ	S	Band freq	Merritt	JPC	59 (1955)	55
$\text{CoC}_4\text{H}_{19}\text{Br}_2\text{N}_4\text{O}_2$	trans-Cobalt (III)- ethylenediamine, hydroxide, water complex bromide	2-15 μ	S	Band freq	Merritt	JPC	59 (1955)	55
$\text{CoC}_4\text{H}_{20}\text{Cl}_6\text{N}_4$	Cobalt (III)- chloride, ethylene diamine complex chloride	-	S	Freq	Schultz	JACS	71 (1949)	1288
CoC_4DO_4	Cobalt deutro- carbonyl	703-2121	G	I	Sternberg	JACS	75 (1953)	2717
CoC_4NO_5	Cobalt (0)-carbon monoxide, nitric oxide complex	1700-2050	G	Freq	Lewis	JINC	7 (1958)	32
$\text{CoC}_4\text{N}_4\text{S}_4\text{Ba}$	Cobalt (II)-isothio- cyanate complex (Barium salt)	2-14 μ	S, Sol	Band study	Brubaker	JACS	80 (1958)	5073
$\text{CoC}_4\text{N}_4\text{S}_4\text{Hg}$	Cobalt (II)-isothio- cyanate complex (mercury (II) salt)	-	S	Freq assign	Mitchell	JCS	- (1960)	1912
CoC_4O_4	Cobalt carbonyl ion	2-24 μ	Sol	Spec, I, Assign	Friedel	JACS	77 (1955)	3951

$\text{CoC}_5\text{H}_5\text{N}_3\text{O}_2\text{K}_3$	Cobalt (III)- cyanide, hydroxide complex monohydrate (Potassium salt)	2100-2150	S	Struct	Griffith	JINC	7 (1958)	295
$\text{CoC}_5\text{H}_4\text{N}_6\text{O}_3\text{K}_3$	Cobalt (III)- cyanide, nitric oxide complex (Potassium salt) monohydrate	2100-2150	S	Struct	Griffith	JINC	7 (1958)	295
$\text{CoC}_5\text{H}_7\text{O}_2$	Cobalt (II)-acetyl acetone complex	-	Sol	Group freq	Bellamy	JCS	- (1954)	4491
$\text{CoC}_5\text{H}_{16}\text{BrClN}_5\text{S}$	trans-Cobalt (III)- ethylenediamine, chloride, isothio- cyanate complex bromide	680-4000	S	Struct, Iso, Assign	Chamberlain	JACS	81 (1959)	6412
$\text{CoC}_5\text{H}_{16}\text{BrN}_4\text{O}_3$	Cobalt (III)- ethylenediamine, carbonate complex bromide	400-5000 700-4000	S S	Spec Freq assign	Nakamoto Gatehouse	JACS JCS	79 (1957) - (1958)	4904 3137
$\text{CoC}_5\text{H}_{16}\text{ClN}_4\text{O}_3$	Cobalt (III)- ethylenediamine, carbonate complex chloride	700-4000	S	Freq assign	Gatehouse	JCS	- (1958)	3137
$\text{CoC}_5\text{H}_{16}\text{ClN}_6\text{O}_2\text{S}$	cis-Cobalt (III)- ethylenediamine, nitrite thiocyanate complex chloride	800-1500	Sol	Struct, Freq	Chatt	JCS	- (1959)	4073
$\text{CoC}_5\text{H}_{16}\text{ClN}_6\text{O}_2\text{S}$	trans-Cobalt (III)- ethylenediamine, nitrite thiocyanate complex chloride	800-1500	Sol	Struct, Freq	Chatt	JCS	- (1959)	4073

$\text{CoC}_5\text{H}_{16}\text{Cl}_2\text{N}_6\text{O}_2\text{S}$	trans-Cobalt (III)-chloride, ethylene diamine, nitrite complex thiocyanate	800-1500	Sol	Freq, Struct	Chatt	JCS - (1959)	4073
$\text{CoC}_5\text{H}_{16}\text{Cl}_2\text{N}_5\text{O}$	trans-Cobalt (III)-ethylenediamine, chloride complex isocyanate	400-4000	S	Spec, Freq	Baldwin	JCS - (1960)	4369
$\text{CoC}_5\text{H}_{16}\text{Cl}_2\text{N}_5\text{O}_4\text{S}$	cis-Cobalt (III)-chloride, ethylene diamine, isothiocyanate complex perchlorate	680-4000	S	Struct, Iso, Assign	Chamberlain	JACS 81 (1959)	6412
$\text{CoC}_5\text{H}_{16}\text{Cl}_2\text{N}_5\text{O}_4\text{S}$	trans-Cobalt (III)-chloride, ethylene diamine, isothiocyanate complex perchlorate	2-15 μ	S	Band freq	Merritt	JPC 59 (1955)	55
$\text{CoC}_5\text{H}_{16}\text{Cl}_2\text{N}_5\text{S}$	cis-Cobalt (III)-chloride, ethylene diamine complex thiocyanate	400-4000	S	Freq, Spec	Baldwin	JCS - (1960)	4369
$\text{CoC}_5\text{H}_{16}\text{Cl}_2\text{N}_5\text{S}$	trans-Cobalt (III)-chloride, ethylene diamine complex thiocyanate	400-4000	S	Freq, Spec	Baldwin	JCS - (1960)	4369
$\text{CoC}_5\text{H}_{16}\text{Cl}_2\text{N}_5\text{S}$	cis-Cobalt (III)-chloride, ethylene diamine, isothiocyanate complex chloride	2-15 μ	S	Band freq	Merritt	JPC 59 (1955)	55
$\text{CoC}_5\text{H}_{16}\text{Cl}_2\text{N}_5\text{S}$	trans-Cobalt (III)-chloride, ethylene diamine complex isothiocyanate	680-4000	S	Struct, Iso, Assign	Chamberlain	JACS 81 (1959)	6412

CoC ₅ H ₁₆ N ₄ O ₃	700-4000	S	Freq assign	Gatehouse	JCS	(1958)	3137
Cobalt (III)- carbonate, ethylene diamine complex iodide							
CoC ₅ H ₁₆ N ₄ O ₄ S	800-1500	Sol	Struct, Freq	Chatt	JCS	(1959)	4073
cis-Cobalt (III)- ethylenediamine, nitrite, thiocyanate complex nitrite							
CoC ₅ H ₁₆ N ₄ O ₄ S	800-1500 800-1500	S S	Bonding Struct, Freq	Gatehouse Chatt	JINC JCS	8 (1958) - (1959)	79 4073
cis-Cobalt (III)- ethylenediamine, nitrite complex thiocyanate							
CoC ₅ H ₁₆ N ₄ O ₄ S	800-1500 800-1500	S S	Bonding Struct, Freq	Gatehouse Chatt	JINC JCS	8 (1958) - (1959)	79 4073
trans-Cobalt (III)- ethylenediamine, nitrite complex thiocyanate							
CoC ₅ H ₁₆ N ₄ O ₄ S	800-1500	Sol	Freq, Struct	Chatt	JCS	(1959)	4073
trans-Cobalt (III)- ethylenediamine, nitrite, thiocyanate complex nitrite							
CoC ₅ H ₁₆ N ₄ O ₅ K ₄	1000-1250	S	Spec, Struct	Hidaka	BCSJ	32 (1959)	1317
Cobalt (III)- cyanide, thio- sulphate complex (potassium salt)							
CoC ₅ N ₆ O ₃ K ₃	600-2200	S	Struct	Griffith	JINC	7 (1958)	38
Cobalt (II)-cyanide nitric oxide complex (potassium salt)							
CoC ₆ H ₆ BrCl ₃ N ₂	-	-	Struct	Kazitsyns	IANS	(1960)	1523
p-Bromobenzene - diazonium chloride cobalt (II)-chloride double salt							
CoC ₆ H ₈ N ₂ O ₈ K. H ₂ O	-	-	Spec	Kyuno	NKZ	80 (1959)	849
Cobalt (III)-ethylene diamine, oxalate complex (potassium salt) monohydrate							

Chemical Formula	Wavenumber Range	State	Struct, Iso, Assign	Author	JACS	JCS	JPC	Year	Page
$\text{CoC}_6\text{H}_{16}\text{ClN}_6\text{S}_2 \cdot \text{H}_2\text{O}$	680-4000	S	Struct, Iso, Assign	Chamberlain	JACS	81 (1959)		6412	6412
cis-Cobalt (III)-ethylenediamine, isothiocyanate complex chloride monohydrate									
$\text{CoC}_6\text{H}_{16}\text{ClN}_6\text{S}_2 \cdot \text{H}_2\text{O}$	680-4000	S	Struct, Iso, Assign	Chamberlain	JACS	81 (1959)		6412	6412
trans-Cobalt (III)-ethylenediamine, isothiocyanate complex chloride monohydrate									
$\text{CoC}_6\text{H}_{16}\text{ClN}_6\text{S}_4 \cdot \text{H}_2\text{O}$	1900-2100	S	Freq	Fujita	JACS	78 (1956)		3295	3295
Cobalt (III)-ethylenediamine, isothiocyanate complex chloride monohydrate									
$\text{CoC}_6\text{H}_{16}\text{Cl}_2 \cdot \text{N}_2\text{O}_2\text{S}_2\text{Ag}$	680-4000	S	Struct, Iso, Assign	Chamberlain	JACS	81 (1959)		6412	6412
Cobalt (III)-ethylenediamine, isothiocyanate complex perchlorate, silver perchlorate									
$\text{CoC}_6\text{H}_{17}\text{N}_7\text{O}_2\text{S}_2$	800-1500	Sol	Freq, Struct	Chatt	JCS	- (1959)		4073	4073
trans-Cobalt (III)-ethylenediamine, nitrite, thiocyanate complex thiocyanate									
$\text{CoC}_6\text{H}_{18}\text{Br}_2\text{O}_2\text{S}_2$	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)		1534	1534
Cobalt (II)-dimethyl sulfoxide complex bromide									
$\text{CoC}_6\text{H}_{18}\text{Cl}_2\text{O}_2\text{P}_2$	800-1400	S	Freq	Cotton	JCS	- (1960)		2199	2199
Cobalt (II)-trimethyl phosphineoxide complex chloride									
$\text{CoC}_6\text{H}_{18}\text{Cl}_2\text{O}_2\text{S}_2$	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)		1534	1534
Cobalt (II)-dimethyl sulfoxide complex chloride									

$\text{CoC}_6\text{H}_{18}\text{I}_2\text{O}_3\text{S}_3$	Cobalt (II)- dimethyl sulfoxide complex iodide	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)	1534
$\text{CoC}_6\text{H}_{24}\text{Br}_3\text{N}_6$	Cobalt (III)- ethylenediamine complex bromide	2-15 μ 400-4000	S S	Spec, Freq Spec, Freq	Hill Baldwin	JCP JCS	24 (1956) - (1960)	1219 4369
$\text{CoC}_6\text{H}_{24}\text{Cl}_3\text{N}_6$	Cobalt (III)-ethylene diamine complex chloride	400-1750 400-4000 700-3500	S S S	Spec, Config. Spec, Freq Spec, Freq assign, Config.	Powell Baldwin Morris	JCS JCS JACS	- (1959) - (1960) 82 (1960)	791 4369 1521
$\text{CoC}_6\text{H}_{24}\text{Cl}_3\text{N}_6$	cis-Cobalt (III)- ethylenediamine complex chloride	2-15 μ 2-15 μ	S S	Band freq Spec, Freq	Merritt Hill	JPC JCP	59 (1955) 24 (1956)	55 1219
$\text{CoC}_6\text{H}_{24}\text{ClN}_6\text{O}_4$	Cobalt (III)-ethylene diamine complex perchlorate	400-4000	S	Freq, Spec	Baldwin	JCS	- (1960)	4369
$\text{CoC}_6\text{H}_{24}\text{I}_3\text{N}_6$	Cobalt (III)-ethylene diamine complex iodide	2-15 μ 400-4000	S S	Spec, Freq Spec, Freq	Hill Baldwin	JCP JCS	24 (1958) - (1960)	1219 4369
CoC_6N_6	Cobalt (III)- hexacyanide complex ion	250-2200	S	Spec, Assign	Hidalgo	ARS	56A (1960)	9
$\text{CoC}_6\text{N}_6\text{K}_3$	Cobalt (III)- cyanide complex (potassium salt)	- 2143 250-2200	S, Sol S -	Assign Struct Assign	Bonino Griffith Hidalgo	AAN JINC C'K	21 (1956) 7 (1958) 249 (1959)	246 295 233
$\text{CoC}_6\text{O}_{12}\text{K}_3 \cdot 3\text{H}_2\text{O}$	Cobalt (III)- oxalate complex (potassium salt) trihydrate	445-3450	S	Assign	Schmelz	SA	9 (1957)	51
$\text{CoC}_7\text{H}_5\text{O}_2$	Cobalt (I)-cyclopenta- dienyldicarbon monoxide	1700-2200 600-5000	Sol Sol	Spec, Struct Spec, Config., Freq	Cotton Piper	JINC JINC	1 (1955) 1 (1955)	175 165

$\text{CoC}_7\text{H}_7\text{O}_5$	Salicylaldehyde cobalt chelate	-	S	Group freq	Bellamy	JCS - (1954)	4491
$\text{CoC}_7\text{H}_7\text{O}_3$	Cobalt (III)-carbonyl butadiene complex	-	-	Config	Jonassen	JACS 80 (1958)	2586
$\text{CoC}_7\text{H}_7\text{Cl}_2\text{N}_2\text{O}_5 \cdot 2\text{H}_2\text{O}$	Cobalt (III)-amino-propionate, ethylene-diamine complex chloride, dihydrate	-	-	Spec	Ogawa	NKZ 81 (1960)	72
$\text{CoC}_7\text{H}_{16}\text{N}_7\text{S}$	cis-Cobalt (III)-ethylenediamine, isothiocyanate complex isothiocyanate	680-4000	S	Struct	Chamberlain	JACS 81 (1959)	6412
$\text{CoC}_7\text{H}_{16}\text{N}_7\text{S}$	trans-Cobalt (III)-ethylenediamine, isothiocyanate complex isothiocyanate	680-4000	S	Struct, Iso, Assign	Chamberlain	JACS 81 (1959)	6412
$\text{CoC}_7\text{H}_{24}\text{N}_7\text{S}$	Cobalt (I)-ethylene diamine complex thiocyanate	400-4000	S	Freq, Spec	Baldwin	JCS - (1960)	4369
$\text{CoC}_8\text{H}_4\text{F}_3\text{O}_5$	Thenoyltrifluoroacetone cobalt chelate	-	Sol	Group freq	Bellamy	JCS - (1954)	4491
$\text{CoC}_8\text{H}_{11}\text{Br}_2\text{N}_2\text{O}_7 \cdot \text{Na} \cdot \text{H}_2\text{O}$	Cobalt (III)-bromide, hydroxy, ethylene-diamine triacetic acid complex (sodium salt) monohydrate	800-3600	S	Struct, Ident	Morris	JACS 78 (1956)	5178
$\text{CoC}_8\text{H}_{11}\text{N}_2\text{O}_7 \cdot \text{Na} \cdot 1.5\text{H}_2\text{O}$	Cobalt (III)-hydroxy, ethylenediamine triacetic acid complex (sodium salt) 1.5 hydrate	800-3600	S	Struct, Ident	Morris	JACS 78 (1956)	5178

$\text{CoC}_8\text{H}_{12}\text{D}_3\text{Cl}_2\text{N}_2\text{O}_4$	Cobalt (III)-chloride, dimethyl oxime-d ₁ complex (deuterium salt)	2-15 μ	S	Spec	Nakahara	BCSJ	29 (1956)	296
$\text{CoC}_8\text{H}_{13}\text{D}_2\text{Cl}_2\text{N}_4\text{O}$	Cobalt (III)-dimethyl glyoxime-d ₁ , chloride complex (hydrogen salt)	2-15 μ	S	Spec	Nakahara	BCSJ	29 (1956)	296
$\text{CoC}_8\text{H}_{14}\text{N}_6\text{O}_8$	Cobalt (III)-dimethyl glyoxime, nitrite complex (sodium salt)	1740 5-7 μ	S S	Band study Spec	Fujita Nakahara	JCP BCSJ	23 (1955) 29 (1956)	1541 296
$\text{CoC}_8\text{H}_{15}\text{Br}_2\text{N}_4\text{O}_4$	Cobalt (III)-bromide, dimethyl glyoxime complex (hydrogen salt)	1685 5-7 μ	S S	Band study Spec	Fujita Nakahara	JCP BCSJ	23 (1955) 29 (1956)	1541 296
$\text{CoC}_8\text{H}_{15}\text{Cl}_2\text{N}_4\text{O}_4$	Cobalt (III)-chloride dimethyl glyoxime	1725 2-6 μ 2-15 μ	S S S	Band study Spec Spec	Fujita Nakahara Nakahara	JCP BCSJ BCSJ	23 (1955) 28 (1955) 29 (1956)	1541 473 296
$\text{CoC}_8\text{H}_{15}\text{N}_6\text{O}_8$	Cobalt (III)-dimethyl glyoxime, nitrite complex (hydrogen salt)	5-7 μ	S	Spec	Nakahara	BCSJ	29 (1956)	296
$\text{CoC}_8\text{H}_{16}\text{N}_5\text{O}_7$	Cobalt (III)-dimethyl glyoxime, water, nitrite complex	5-7 μ	S	Spec	Nakahara	BCSJ	29 (1956)	296
$\text{CoC}_8\text{H}_{17}\text{ClN}_5\text{O}_4$	Cobalt (III)-ammonia, dimethyl glyoxime complex	5-7 μ	S	Spec	Nakahara	BCSJ	29 (1956)	296
$\text{CoC}_8\text{H}_{17}\text{N}_6\text{O}_6$	Cobalt (III)-dimethyl nitrite complex	5-7 μ	S	Spec	Nakahara	BCSJ	29 (1956)	296

Chemical Formula	Compound Name	Wavenumber (cm ⁻¹)	Phase	Assignment	Journal	Year	Page
CoC ₈ H ₁₈ N ₂ O ₅ S ₃	Cobalt (II)-dimethyl sulfoxide complex thiocyanate	650-4000	S	Assign, Spec	Cotton	1960	1534
CoC ₈ H ₈ ClN ₆ O ₄	Cobalt (III)-ammonia, dimethyl glyoxime complex chloride	5-7/μ	S	Spec	Nakahara	1956	296
CoC ₈ H ₈ Cl ₂ N ₆ O ₈	Cobalt (II)-acetyl dihydrazone, chloride complex	600-3500	S	Spec, Assign	Stonfer	1960	3491
CoC ₉ H ₉ INO ₆ S	Cobalt (II)-5-sulfo-7-iodo-8-hydroxy-quinoline, water complex	-	S	Struct	Nortia	1959	83
CoC ₉ H ₁₀ NO ₆ S	Cobalt (II)-8-hydroxyquinoline-5-sulfonic acid, water complex	-	S	Struct	Nortia	1959	83
CoC ₉ H ₁₃ INO ₈ S·H ₂ O	Cobalt (II)-7-iodo-8-hydroxyquinoline-5-sulfonic acid, water complex monohydrate	-	S	Struct	Nortia	1959	83
CoC ₉ H ₁₄ NO ₈ S·2H ₂ O	Cobalt (II)-8-hydroxyquinoline-5-sulfonic acid, water complex dihydrate	-	S	Struct	Nortia	1959	83
CoC ₉ H ₂₄ N ₈ S	Cobalt (III)-ethylene diamine complex isothiocyanate	680-4000	S	Struct, Iso, Assign	Chamberlain	1959	6412
CoC ₁₀ H ₁₀	Bis-cyclopentadienyl cobalt (II)	-	Sol	Band freq	Wilkinson	1954	1970
CoC ₁₀ H ₁₂ BrN ₂ O ₈ Na ₂	Cobalt (III)-bromide-ethylenediamine tetraacetic acid (sodium salt)	-	-	Spec	Morris	1958	223

$\text{CoC}_{10}\text{H}_{12}\text{Br}_4\text{N}_2$	Pyridinium tetrabromo-cobaltate (II)	-	-	Freq	Schultz	JACS	71 (1949)	1288
$\text{CoC}_{10}\text{H}_7\text{ClN}_2\text{O}_8\text{Na}_2$	Cobalt (III)-chloride, ethylenediamine tetraacetic acid complex (sodium salt)	800-3600	S	Struct, Ident Spec	Morris Morris	JACS DA	78 (1956) 19 (1958)	5178 223
$\text{CoC}_{10}\text{H}_{12}\text{N}_2\text{O}_8\text{Na}_2 \cdot 2\text{H}_2\text{O}$	Cobalt (III)-ethylenediamine tetraacetic acid complex (sodium salt) dihydrate	800-1800	S	Spec, Bond	Donald	JACS	82 (1960)	4191
$\text{CoC}_{10}\text{H}_{12}\text{N}_2\text{O}_8\text{Na}_2 \cdot 1.5\text{H}_2\text{O}$	Cobalt (II)-ethylenediamine tetraacetic acid complex (sodium salt) 1.5 hydrate	800-1800	S	Spec, Freq	Sawyer	JACS	81 (1959)	816
$\text{CoC}_{10}\text{H}_{12}\text{N}_3\text{O}_8\text{Na}_2$	Cobalt (III)-ethylenediamine tetraacetic acid, nitrate complex (sodium salt)	-	-	Spec	Morris	DA	19 (1958)	223
$\text{CoC}_{10}\text{H}_{12}\text{N}_3\text{O}_8\text{Na}_2 \cdot \text{H}_2\text{O}$	Cobalt (III)-ethylenediamine tetraacetic acid, nitrocomplex (sodium salt) monohydrate	800-3600	S	Struct, Ident	Morris	JACS	78 (1956)	5178
$\text{CoC}_{10}\text{H}_{13}\text{BrN}_2\text{O}_8\text{Na}$	Cobalt (III)-bromide, ethylenediamine tetraacetic acid (pentadentate) complex (sodium salt)	-	-	Spec, Struct	Morris	DA	19 (1958)	223

$\text{CoC}_{10}\text{H}_{13}\text{ClN}_2$ O_8Na	- Cobalt (III)- chloride, ethylene- diamine tetraacetic acid (pentadentate) complex (sodium salt)	-	-	Spec, Struct	Morris	DA	19 (1958)	223
$\text{CoC}_{10}\text{H}_{13}\text{ClN}_2$ O_8Na	Cobalt (III)- chloride, ethylene diamine tetraacetic acid complex (sodium salt)	-	-	Spec, Struct	Kyuno	NKZ	81 (1960)	223
$\text{CoC}_{10}\text{H}_{13}\text{ClN}_2$ $\text{O}_8\text{Na} \cdot 2\text{H}_2\text{O}$	Cobalt (III)- chloride, ethylene diamine tetraacetic acid complex (sodium salt) hemihydrate	800-3600	S	Struct, Ident	Morris	JACS	78 (1956)	5178
$\text{CoC}_{10}\text{H}_{13}\text{N}_2\text{O}_8$	Cobalt (III)-ethylene diamine tetraacetic acid (hydrogen salt)	-	-	Spec, Struct	Kyuno	NKZ	81 (1960)	232
$\text{CoC}_{10}\text{H}_{13}\text{N}_2\text{O}_8$ $4\text{H}_2\text{O}$	Cobalt (III)-ethylene diamine tetraacetic acid complex (hydrogen salt) tetrahydrate	-	-	Spec	Kyuno	NKZ	81 (1960)	232
$\text{CoC}_{10}\text{H}_{13}\text{N}_3$ O_{10}Na	Cobalt (II)ethylene diamine tetraacetic acid (pentadentate), nitrite complex (sodium salt)	-	-	Spec, Struct	Morris	DA	19 (1958)	223
$\text{CoC}_{10}\text{H}_{13}\text{N}_3$ $\text{O}_{10}\text{Na} \cdot \text{H}_2\text{O}$	Cobalt (III)-ethylene- diamine tetraacetic acid, nitrite complex (sodium salt) monohydrate	800-3600	S	Struct, Ident	Morris	JACS	78 (1956)	5178

$\text{CoC}_{10}\text{H}_{14}\text{ClN}_2\text{O}_8 \cdot 2\text{H}_2\text{O}$	Cobalt (III)-chloride, ethylenediamine tetraacetic acid complex (hydrogen salt) dihydrate	-	-	Spec, Struct	Kyuno	NKZ	81 (1960)	232
$\text{CoC}_{10}\text{H}_{14}\text{O}_4$	Cobalt (III)-acetyl acetate	625-5000	S	Spec, Struct	West	JINC	5 (1958)	295
$\text{CoC}_{10}\text{H}_{15}\text{BrN}_2\text{O}_7\text{Na}$	Cobalt (III)-bromide, hydroxyethyl, ethylenediamine triacetic acid complex (sodium salt)	-	-	Spec, Struct	Morris	DA	19 (1958)	223
$\text{CoC}_{10}\text{H}_{15}\text{ClN}_2\text{O}_7\text{Na}$	Cobalt (III)-chloride, hydroxyethyl, ethylenediamine triacetic acid complex (sodium salt)	-	-	Spec, Struct	Morris	DA	19 (1958)	223
$\text{CoC}_{10}\text{H}_{15}\text{N}_3\text{O}_8\text{Na}$	Cobalt (III)-hydroxyethyl, ethylenediamine triacetic acid complex (sodium salt)	-	-	Spec, Struct	Morris	DA	19 (1958)	223
$\text{CoC}_{10}\text{H}_{19}\text{N}_6\text{O}_8$	Cobalt (III)-methyl dimethyl glyoxime, nitrite complex (hydrogen salt)	2-15 μ	S	Spec	Nakahara	BGSJ	29 (1956)	296
$\text{CoC}_{10}\text{H}_{24}\text{N}_2\text{O}_6\text{S}$	Cobalt (III)-dimethyl sulfoxide complex thiocyanate	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)	1534
$\text{CoC}_{12}\text{H}_{18}\text{Cl}_4\text{N}_6\text{O}_4$	p-Nitrobenzene diazonium chloride, cobalt (II) chloride double salt	-	-	Struct	Kazitsyna	IANS	- (1960)	1523

Chemical Formula	Compound Description	Wavenumber (cm⁻¹)	State	Struct	Author	Year	Page
CoC ₁₂ H ₈ Cl ₆ N ₄	p-Chlorobenzene diazonium chloride, cobalt (II) chloride double salt	1700-2050	S	Freq	Lewis	JINC 7 (1958)	32
CoC ₁₂ H ₈ IN ₄ O ₂	Cobalt-iodide, nitric oxide, o-phenanthroline complex	-	-	Struct	Lumme	SK 31B (1958)	294
CoC ₁₂ H ₂₁ N ₆ O ₆	Cobalt (II)-2-pyridine carboxylic acid chelate	2-6 μ	S	Spec	Nakahara	BCSJ 28 (1955)	473
CoC ₁₂ H ₂₁ N ₆ O ₆ · 2.5H ₂ O	Cobalt-dimethyl glyoxime complex	2-15 μ	S	Spec	Nakahara	BCSJ 29 (1956)	296
CoC ₁₂ H ₃₀ I ₂ N ₁₂	Cobalt (III)-biacetyl dihydrazone complex iodide	2-6 μ	S	Spec	Nakahara	BCSJ 28 (1955)	473
CoC ₁₂ H ₃₆ Cl ₂ O ₁₂ P ₄	Cobalt (II)-trimethyl phosphine oxide complex perchlorate	600-3500	S	Spec, Assign	Stoufer	JACS 82 (1960)	3491
CoC ₁₂ H ₃₆ Cl ₂ O ₁₄ S ₆	Cobalt (III)-dimethyl sulfoxide perchlorate complex	800-1400	S	Freq	Cotton	JCS - (1960)	2199
CoC ₁₂ H ₃₆ I ₂ O ₆ S ₂	Cobalt (II)-dimethyl sulfoxide complex iodide	650-4000	S	Assign, Spec	Cotton	JPC 64 (1960)	1534

$\text{CoC}_{13}\text{H}_{10}\text{Cl}_3$	Cobalt (II)-cyclo-pentadienyl trichloromethyl complex	-	-	Struct	Katz	JACS 80 (1958)	64
$\text{CoC}_{14}\text{H}_{14}\text{Cl}_2\text{N}_4\text{O}_2\text{xF}_2$	Cobalt (II)-bis(pyridinal)-ethylenediamine complex chloride xhydrate	600-4000	S	Assign	Bush	JACS 78 (1956)	1137
$\text{CoC}_{14}\text{H}_{14}\text{Cl}_4\text{N}_4$	p-Methylbenzene diazonium chloride, cobalt (II) chloride double salt	-	-	Struct	Kazitsyna	IANS - (1960)	1523
$\text{CoC}_{15}\text{H}_{21}\text{O}_6$	Cobalt (III)-acetyl acetate	625-5000	S	Spec, Struct	West	JINC 5 (1958)	295
$\text{CoC}_{18}\text{H}_{10}\text{Cl}_4\text{N}_4\text{O}_4$	p-Carbethoxy benzene diazonium chloride, cobalt (II) chloride double salt	-	-	Struct	Kazitsyna	IANS - (1960)	1523
$\text{CoC}_{18}\text{H}_{12}\text{N}_2\text{O}_2$	Cobalt (III)-8-hydroxy quinoline chelate	-	S	Assign, Spec	Charles Charles	AC 25 (1953) SA 8 (1956)	530 1956
$\text{CoC}_{18}\text{H}_{14}\text{Br}_3$	Dibenzcobalticinium tribromide	6-15 μ	S	Spec	Pauson	JACS 76 (1954)	2024
$\text{CoC}_{18}\text{H}_{14}\text{ClO}_4$	Dibenzcobalticinium perchlorate	3-15 μ	S	Spec	Pauson	JACS 76 (1954)	2024
$\text{CoC}_{18}\text{H}_{16}\text{Br}_4\text{N}_2$	Quinoline tetrabromocobaltate (II)	-	S	Freq	Schultz	JACS 71 (1949)	1288
$\text{CoC}_{19}\text{H}_{15}\text{NO}_2\text{P}$	Cobalt (o)-Carbon monooxide, nitric oxide, triphenyl phosphine complex	1700-2050	Sol	Freq	Lewis	JINC 7 (1958)	32

CoC ₂₀ H ₁₂ N ₂ O ₄	CoC ₂₀ H ₁₆ ClN ₂ O ₄	CoC ₂₀ H ₁₆ N ₂ O ₂	CoC ₂₀ H ₁₆ N ₂ O ₂	CoC ₂₀ H ₂₂ O ₄	CoC ₂₃ H ₂₁ NO ₃ As	CoC ₂₃ H ₂₁ NO ₃ Sb	CoC ₃₂ H ₁₆ N ₆	CoC ₃₆ H ₂₄ Cl ₂ - N ₂ O ₆	CoC ₂₀ H ₁₂ N ₂ O ₄	CoC ₂₀ H ₁₆ ClN ₂ O ₄	CoC ₂₀ H ₁₆ N ₂ O ₂	CoC ₂₀ H ₁₆ N ₂ O ₂	CoC ₂₀ H ₂₂ O ₄	CoC ₂₃ H ₂₁ NO ₃ As	CoC ₂₃ H ₂₁ NO ₃ Sb	CoC ₃₂ H ₁₆ N ₆	CoC ₃₆ H ₂₄ Cl ₂ - N ₂ O ₆
Cobalt (II)- 8-quinoline carboxylic acid chelate	Cobalt (I)- dipyridyl complex perchlorate	Cobalt (II)- 2-methyl-8- hydroxyquinoline chelate	Cobalt (II)- 4-methyl-8- hydroxyquinoline chelate	Cobalt-γ - isopropyl tropolonate	Cobalt-carbon- monoxide, nitric oxide, tritropylum arsine complex	Cobalt-carbon- monoxide, nitric oxide, tritropylum stibene complex	Cobalt phthalato- cyanine	Cobalt (II)-1:10- phenanthroline complex perchlorate	Cobalt (II)- 8-quinoline carboxylic acid chelate	Cobalt (I)- dipyridyl complex perchlorate	Cobalt (II)- 2-methyl-8- hydroxyquinoline chelate	Cobalt (II)- 4-methyl-8- hydroxyquinoline chelate	Cobalt-γ - isopropyl tropolonate	Cobalt-carbon- monoxide, nitric oxide, tritropylum arsine complex	Cobalt-carbon- monoxide, nitric oxide, tritropylum stibene complex	Cobalt phthalato- cyanine	Cobalt (II)-1:10- phenanthroline complex perchlorate
-	-	8-15 μ	8-15 μ	-	1700-2050	1700-2050	3-15 μ	600-2000	-	-	8-15 μ	8-15 μ	-	-	-	3-15 μ	600-2000
Struct	Extinction curves	Assign, Spec	Assign, Spec	Band freq	Freq	Freq	Spec	Spec	Struct	Extinction curves	Assign, Spec	Assign, Spec	Band freq	Freq	Freq	Spec	Spec
Lumme	Csaszar	Charles	Charles	Bryant	Lewis	Lewis	Ebert	Schilt	Lumme	Csaszar	Charles	Charles	Bryant	Lewis	Lewis	Ebert	Schilt
SK	NWS	SA	SA	JOC	JINC	JINC	JACS	JINC	SK	NWS	SA	SA	JOC	JINC	JINC	JACS	JINC
31B (1956)	46 (1959)	8 (1956)	8 (1956)	19 (1954)	7 (1958)	7 (1958)	74 (1952)	9 (1959)	31B (1956)	46 (1959)	8 (1956)	8 (1956)	19 (1954)	7 (1958)	7 (1958)	74 (1952)	9 (1959)
294	488	1	1	1889	32	32	2806	211	294	488	1	1	1889	32	32	2806	211

$\text{CoC}_{36}\text{H}_{24}\text{Cl}_3\text{N}_6\text{O}_{12}$	Cobalt (III)-1:10-phenanthroline complex perchlorate	600-2000	S	Spec	Schilt	JINC	9 (1959)	211
$\text{CoC}_{36}\text{H}_{30}\text{Br}_2\text{O}_2\text{P}_2$	Cobalt (II)-triphenyl phosphineoxide complex bromide	900-1300	S	Freq	Cotton	JCS	- (1960)	2199
$\text{CoC}_{36}\text{H}_{30}\text{Cl}_2\text{O}_2\text{P}_2$	Cobalt (II)-triphenyl phosphineoxide complex chloride	900-1300	S	Freq	Cotton	JCS	- (1960)	2199
$\text{CoC}_{36}\text{H}_{30}\text{I}_2\text{O}_2\text{P}_2$	Cobalt (II)-triphenyl phosphineoxide complex iodide	900-1300	S	Freq	Cotton	JCS	- (1960)	2199
$\text{CoC}_{38}\text{H}_{30}\text{NO}_9\text{P}_2$	Cobalt-carbonmono-oxide, nitric oxide, triphenoxy phosphine complex	1700-2050	Sol	Freq	Lewis	JINC	7 (1958)	32
$\text{CoC}_{63}\text{H}_{90}\text{N}_{14}\text{O}_{14}\text{P}_{12}$	Vitamin B_{12}	-	-	Band freq	Kaczka	JACS	73 (1951)	335
		700-3500	S	Spec	Jackson	JACS	73 (1951)	337
		-	S	Ident	Armitage	JCS	- (1953)	3849
$\text{CoC}_{72}\text{H}_{60}\text{Cl}_2\text{O}_2\text{P}_4$	Cobalt (II)-triphenyl phosphine oxide complex perchlorate	900-1300	S	Freq	Cotton	JCS	- (1960)	2199
CoH	Cobalt hydride	-	-	FC, Bond distance	Platt	JCP	18 (1950)	932
CoHF	Cobalt hydrogen-fluoride	-	-	FC, Bond distance	Sheline	JCP	18 (1950)	927
$\text{CoHN}_5\text{O}_{10}\text{Na}_2$	Cobalt (III)-hydroxide, nitrite, nitric oxide complex (sodium salt)	600-2200	S	Struct	Griffith	JINC	7 (1958)	38
$\text{CoH}_4\text{F}_4\text{N}_3$	Cobalt (III)-ammonium-fluoride	1400-4000	S	Spec	Crocket	JACS	82 (1960)	4158

Chemical Formula	Compound Name	Wavelength (μ)	State	Assignment	Researcher	Year	Page
CoH ₄ N ₂ O ₆ S ₂	Cobalt sulfamate	-	S	Freq, Assign	Bicelli	47 (1957)	1380
CoH ₆ N ₆ O ₈	1,6-Cobalt (III)- ammonia, nitrite complex anion	400-5000	S	Spec, Freq, Assign	Nakamoto	80 (1958)	4817
CoH ₆ N ₆ O ₆ K	trans-Cobalt (III)- ammonia, nitrite complex (potassium salt)	2-15 μ	S	Assign	Beattie	- (1956)	2849
		650-1650	S	Freq	Svatos	79 (1957)	3313
		-	-	Freq	Wilmshurst	38 (1960)	467
CoH ₈ Cl ₂ N ₄	Cobalt (II)- hydrazine, chloride complex	15-35 μ	S	Freq	Saconi	186 (1960)	549
CoH ₈ N ₂ O ₈ S ₂	Cobalt ammonium sulfate	0.8-1.25 μ	Sol	Magnetic rotation	Ingersoll	6 (1922)	663
CoH ₉ N ₆ O ₆	Cobalt (III)- ammonia, nitrite complex	650-1650	S	Freq	Svatos	79 (1957)	3313
		-	-	Struct	Majumdar	247 (1958)	302
		-	-	Freq	Wilmshurst	38 (1960)	467
CoH ₉ N ₆ O ₆	trans-Cobalt (III)- ammonia, nitrite complex	2-15 μ	S	Assign	Beattie	- (1956)	2849
CoH ₉ N ₆ O ₆	1,2,3-Cobalt (III)- ammonia, nitrite complex	400-5000	S	Spec, Freq, Assign, Struct	Nakamoto	80 (1958)	4817
CoH ₉ N ₆ O ₆	1,2,4-Cobalt (III)- ammonia, nitrite complex	400-5000	S	Spec, Freq, Assign, Struct	Nakamoto	80 (1958)	4817
CoH ₉ N ₁₂	Cobalt (III)- ammonia, azide complex	1900-2100	S	Freq	Fujita	78 (1956)	3295
CoH ₁₀ N ₇ O ₈	trans-Cobalt (III)- ammonia nitrite complex (Ammonium salt)	2-15 μ	S	Assign	Beattie	- (1956)	2849

$\text{CoH}_{12}\text{ClN}_6\text{O}_4$	cis-Cobalt (III)- ammonia nitrite complex chloride	2-15 μ 2-15 μ 2-15 μ	S S S	Band freq Assign Spec, Assign	Faust Merritt Beattie	JACS JPC JCS	76 (1954) 59 (1955) - (1956)	5346 55 2849
$\text{CoH}_{12}\text{ClN}_6\text{O}_4$	trans-Cobalt (III)- ammonia, nitrite complex chloride	2-15 μ 2-15 μ 2-15 μ 650-1650 -	S S S S -	Group freq, Spec Band freq Assign Freq Freq	Faust Merritt Beattie Svatos Wilmshurst	JACS JPC JCS JACS CJC	76 (1954) 59 (1955) - (1956) 79 (1957) 38 (1960)	5346 55 2849 3313 467
$\text{CoH}_{12}\text{Cl}_2\text{N}_5\text{O}_3$	Cobalt (III)- ammonia, chloride nitrate complex chloride	700-4000	S	Assign	Gatehouse	JINC	8 (1958)	75
$\text{CoH}_{12}\text{Cl}_2\text{N}_5\text{O}_3 \cdot \frac{1}{2} \text{H}_2\text{O}$	Cobalt (III)- ammonia, nitrate, chloride complex chloride hemi- hydrate	700-4000	S	Assign	Gatehouse	JCS	- (1957)	4222
$\text{CoH}_{12}\text{Cl}_3\text{N}_4$	cis-Cobalt (III)- ammonia, chloride complex chloride	2-15 μ	S	Band freq	Merritt	JPC	59 (1955)	55
$\text{CoH}_{12}\text{Cl}_3\text{N}_4$	trans-Cobalt (III)- ammonia, chloride complex chloride	2-15 μ	S	Band freq	Merritt	JPC	59 (1955)	55
$\text{CoH}_{12}\text{N}_4\text{O}_4 \cdot 2\text{H}_2\text{O}$	Cobalt (III)- ammonia complex phosphate dihydrate	640-4000	S	Assign	Siebert	ZAUA	296 (1958)	280
$\text{CoH}_{12}\text{N}_6\text{O}_4$	1,2-Cobalt (III)- ammonia nitrite complex cation	400-5000	S	Spec, Freq, Assign, Struct	Nakamoto	JACS	80 (1958)	4817
$\text{CoH}_{12}\text{N}_6\text{O}_4$	1,6-Cobalt (III)- ammonia, nitrite complex cation	400-5000	S	Spec, Freq, Assign, Struct	Nakamoto	JACS	80 (1958)	4817

$\text{CoH}_{12}\text{N}_7\text{O}_7$	cis-Cobalt (III)- ammonia nitrite complex nitrate	2-15 μ 2-15 μ	S S	Band freq Assign	Merritt Beattie	JPC JCS	59 (1955) - (1956)	55 2849
$\text{CoH}_{12}\text{N}_7\text{O}_7$	trans-Cobalt (III)- ammonia nitrite complex nitrate	2-15 μ	S	Band freq	Merritt	JPC	59 (1955)	55
$\text{CoH}_{12}\text{N}_7\text{O}_9$	Cobalt (III)- ammonia, nitrate complex nitrate	700-1400	S	Assign	Gatehouse	JINC	8 (1958)	75
$\text{CoH}_{12}\text{N}_7\text{O}_9 \cdot \text{H}_2\text{O}$	Cobalt (III)- ammonia, nitrate complex nitrate monohydrate	700-4000	S	Assign	Gatehouse	JCS	- (1957)	4222
$\text{CoH}_{12}\text{O}_6$	Hexaquo cobaltous ion	-	S, Sol	Freq, FC	Schultz	JCP	10 (1942)	194
$\text{CoH}_{14}\text{ClN}_4\text{O}_5\text{S}$	Cobalt (III)- ammonia chloride, water complex sulfate	-	-	Spec	Ogawa	NKZ	81 (1960)	72
$\text{CoH}_{15}\text{BrCl}_2\text{N}_5$	Cobalt (III)- ammonia, bromide complex chloride	- 2-15 μ	S S	Freq Freq, Spec	Hill Hill	JCP JCP	22 (1954) 24 (1956)	148 1219
$\text{CoH}_{15}\text{BrN}_5\text{O}_3$	Cobalt (III)- ammonia, carbonate complex bromide	400-5000	S	Spec	Nakamoto	JACS	79 (1957)	4904
$\text{CoH}_{15}\text{BrN}_5\text{O}_4\text{S}$	Cobalt (III)- ammonia, sulfate complex bromide	400-5000	S	Spec	Nakamoto	JACS	79 (1957)	4904
$\text{CoH}_{15}\text{Br}_2\text{ClN}_5$	Cobalt (III)- ammonia, chloride complex bromide	650-1650 -	S -	Freq Freq	Svatos Wilmshurst	JACS CJC	79 (1957) 38 (1960)	3313 467

$\text{CoH}_{15}\text{Br}_2\text{FN}_5$	Cobalt (III)- ammonia, fluoride complex bromide	- 2-15 μ	S S	Freq Freq, Spec	Hill Hill	JCP JCP	22 (1954) 24 (1956)	148 1219
$\text{CoH}_{15}\text{Br}_2\text{N}_6\text{O}$	Cobalt (II)- ammonia, nitric oxide complex bromide	600-2200	S	Struct	Griffith	JINC	7 (1958)	38
$\text{CoH}_{15}\text{Br}_2\text{N}_8$	Cobalt (III)- ammonia, azide complex bromide	- 2-15 μ	S S	Freq Freq, Spec	Hill Hill	JCP JCP	22 (1954) 24 (1956)	148 1219
$\text{CoH}_{15}\text{Br}_3\text{N}_5$	Cobalt (III)- ammonia, bromide complex bromide	- 830-1530 2-15 μ 650-1650	S - S S -	Freq Freq Freq, Spec Freq Freq	Hill Mizushima Hill Svatos Wilmshurst	JCP JCP JCP JACS CJC	22 (1954) 23 (1955) 24 (1956) 79 (1957) 38 (1960)	148 1367 1219 3313 467
$\text{CoH}_{15}\text{ClN}_5\text{O}_3\text{S}$	Cobalt (III)-ammonia, sulfite complex chloride	2-15 μ	S	Spec, Struct	Bertin	JACS	81 (1959)	3818
$\text{CoH}_{15}\text{ClN}_5\text{O}_3\text{S}_2$	Cobalt (III)- ammonia, chloride complex thio- sulfate	2-15 μ	S	Spec, Struct	Bertin	JACS	81 (1959)	3818
$\text{CoH}_{15}\text{ClN}_5\text{O}_3\text{S}_2$	Cobalt (III)- ammonia, thio- sulfate complex chloride	2-15 μ 1000-1250	S S	Spec, Struct Spec, Struct	Bertin Hidaka	JACS BCSJ	81 (1959) 32 (1959)	3818 1317
$\text{CoH}_{15}\text{ClN}_5\text{O}_4\text{S}$	Cobalt (III)- ammonia, sulfate complex chloride	650-1650 2-15 μ	S S	Freq Spec, Struct	Svatos Bertin	JACS JACS	79 (1957) 81 (1959)	3313 3818
$\text{CoH}_{15}\text{Cl}_2\text{FN}_5$	Cobalt (III)- ammonia, fluoride complex chloride	- 2-15 μ	S S	Freq Freq, Spec	Hill Hill	JCP JCP	22 (1954) 24 (1956)	148 1219

Chemical Formula	Compound Description	Wavenumber Range	Assignment	Frequency	Location	Journal	Year	Page
$\text{CoH}_{15}\text{Cl}_2\text{N}_5\cdot\text{H}_2\text{O}$	Cobalt (III)-ammonia, water complex chloride	840-1610	-	Freq	Mizushima	JCP	23 (1955)	1367
$\text{CoH}_{15}\text{Cl}_2\text{N}_6\text{O}$	Cobalt (II)-ammonia, nitric oxide complex chloride	600-2200	S	Struct	Griffith	JINC	7 (1958)	38
$\text{CoH}_{15}\text{Cl}_2\text{N}_6\text{O}_2$	Cobalt (III)-ammonia, nitrite complex chloride	-	-	Struct	Penland	AC	27 (1955)	325
		2-15/ μ	S	Assign	Beattie	JCS	- (1956)	2849
		2-15/ μ	-	Iso	Beattie	TFS	52 (1956)	1590
		5-12/ μ	S	Spec, Assign	Penland	JACS	78 (1956)	887
		650-1650	S	Freq	Svatos	JACS	79 (1957)	3313
$\text{CoH}_{15}\text{Cl}_2\text{N}_6\text{O}_3$	Cobalt (III)-ammonia, nitrate complex chloride	-	-	Freq	Wilmshurst	CJC	38 (1960)	467
		650-1650	S	Freq	Svatos	JACS	79 (1957)	3313
$\text{CoH}_{15}\text{Cl}_2\text{N}_8$	Cobalt (III)-ammonia, azide complex chloride	2-15/ μ	S	Spec, Assign	Bertin	JACS	81 (1959)	3818
		-	S	Freq	Hill	JCP	22 (1954)	148
$\text{CoH}_{15}\text{Cl}_3\text{N}_5$	Cobalt (III)-ammonia, chloride complex chloride	2-15/ μ	S	Freq, Spec	Hill	JCP	24 (1956)	1219
		-	S	Freq	Hill	JCP	22 (1954)	148
		1600-845	-	Freq	Mizushima	JCP	23 (1955)	1367
		2-15/ μ	S	Assign	Beattie	JCS	- (1956)	2849
$\text{CoH}_{15}\text{Cl}_4\text{N}_6\text{O}_3\text{Pt}$	Nitratopentamminocobalt (III)-tetrachloro-platinate	2-15/ μ	S	Freq, Spec	Hill	JCP	24 (1956)	1219
		450-3250	S	Assign	Powell	JCS	- (1956)	3108
		700-4000	S	Assign	Gatehouse	JCS	- (1957)	4222
$\text{CoH}_{15}\text{F}_2\text{N}_5$	Cobalt (III)-ammonia, fluoride, complex iodide	700-4000	S	Assign	Gatehouse	JINC	8 (1958)	75
		-	S	Freq	Hill	JCP	22 (1954)	148
		2-15/ μ	S	Freq, Spec	Hill	JCP	24 (1956)	1219

$\text{CoH}_{15}\text{I}_2\text{N}_6\text{O}$	Cobalt (III)- ammonia, nitric oxide complex iodide	600-2200	S	Struct	Griffith	JINC	7 (1958)	38
$\text{CoH}_{15}\text{I}_2\text{N}_8$	Cobalt (III)- ammonia, azide complex iodide	- 2-15 μ 1900-2100	S S S	Freq Freq, Spec Freq	Hill Hill Fuji ta	JCP JCP JACS	22 (1954) 24 (1956) 78 (1956)	148 1219 3295
$\text{CoH}_{15}\text{N}_6\text{O}_2$	Cobalt (III)- ammonia, nitrite complex cation	400-5000	S	Spec, Freq, Struct, Assign	Nakamoto	JACS	80 (1958)	4817
$\text{CoH}_{15}\text{N}_6\text{O}_5\text{S}$	Cobalt (III)- ammonia, nitric oxide complex sulfate	600-2200	S	Struct	Griffith	JINC	7 (1958)	38
$\text{CoH}_{15}\text{N}_8\text{O}_7$	Cobalt (III)- ammonia, nitric oxide complex nitrate	600-2200	S	Struct	Griffith	JINC	7 (1958)	38
$\text{CoH}_{15}\text{N}_8\text{O}_9$	Cobalt (III)-ammonia, nitrate complex nitrate	700-4000 700-4000	S S	Assign Assign	Gatehouse Gatehouse	JCS JINC	- (1957) 8 (1958)	4222 75
$\text{CoH}_{15}\text{N}_{14}$	Cobalt (III)- ammonia, azide complex azide	2-15 μ	S	Spec, Freq	Hill	JCP	24 (1956)	1219
$\text{CoH}_{16}\text{Br}_2\text{N}_5\text{O}$	Cobalt (III)-ammonia, hydroxide complex bromide	650-1650 -	S -	Freq Freq	Svatos Wilmshurst	JACS CJC	79 (1957) 38 (1960)	3313 467
$\text{CoH}_{16}\text{Cl}_3\text{N}_4\text{O}$	Cis-Cobalt (III)- ammonia, water complex chloride	650-1650	S	Freq	Svatos	JACS	79 (1957)	3313

CoH ₁₇ Br ₃ N ₅ O	Cobalt (III)- ammonia, water complex bromide	- 2-15/ μ	S S	Freq Freq, Spec	Hill Hill	JCP JCP	22 (1954) 24 (1956)	148 1219
CoH ₁₇ Cl ₃ N ₅ O	Cobalt (III)- ammonia, water complex chloride	- 2-15/ μ 650-1650	- S S S -	H bond Freq Freq, Spec Freq Freq	Freymann Hill Hill Svatos Wilmshurst	JCP JCP JCP JACS CJC	6 (1938) 22 (1954) 24 (1956) 79 (1957) 38 (1960)	497 148 1219 3313 467
CoH ₁₇ F ₅ N ₅	Cobalt (III)- ammonia, fluoride complex fluoride dihydrofluoric acid	2-15/ μ	S	Freq, Spec	Hill	JCP	24 (1956)	1219
CoH ₁₇ I ₃ N ₅ O	Cobalt (III)- ammonia, water complex iodide	- 2-15/ μ	S S	Freq Freq, Spec	Hill Hill	JCP JCP	22 (1954) 24 (1956)	148 1219
CoH ₁₈ Br ₂ N ₆	Cobalt (II)- ammonia complex bromide	5-20/ μ	S	Spec, NCA, Assign	Bertin	JACS	80 (1958)	525
CoH ₁₈ Br ₅ N ₆	Cobalt (III)- ammonia complex bromide	- 500-3500 2-15/ μ 5-20	S S S S S, Sol	Freq Spec, Freq Freq, Spec Spec, NCA, Assign Freq, Struct, Config	Hill Fujita Hill Bertin Irwing	JCP JACS JCP JACS JCS	22 (1954) 78 (1956) 24 (1956) 80 (1958) -	148 3295 1219 525 2283
CoH ₁₈ Cl ₂ N ₆	Cobalt (II)- ammonia complex chloride	600-3350 650-1650 5-20/ μ	S S S -	Assign, Freq Freq Spec, Freq, NCA, Freq	Powell Svatos Bertin Wilmshurst	JCS JACS JACS CJC	- (1956) 79 (1957) 80 (1958) 38 (1960)	3108 3313 525 467
CoH ₁₈ Cl ₃ N ₆	Cobalt (III)-ammonia complex chloride	2-15/ μ - 2-15/ μ 300-4000	S S S S	Spec, Group freq Freq, Assign FC, Freq, Assign Spec, Assign	Faust Hill Kobayashi Barrow	JACS JCP JCP JINC	76 (1954) 22 (1954) 23 (1955) 2 (1956)	5346 148 1354 340

	500-3500	S	Spec, Freq	Fujita	JACS	78 (1956)	3295
	2-15 μ	S	Spec, Freq	Hill	JCP	24 (1956)	1219
	450-1700	S	Assign, Freq	Powell	JCS	- (1956)	3108
	650-1650	S	Freq	Svatos	JACS	79 (1957)	3313
	5-20 μ	S	NCA, Spec, Assign	Bertin	JACS	80 (1958)	525
	-	Sol	Freq, Struct, Config.	Irwing	JCS	- (1958)	2283
	-	-	Freq	Wilmshurst	CJC	38 (1960)	467
$\text{CoH}_{18}\text{Cl}_3\text{N}_6\text{O}_{12}$	500-3500	S	Spec	Fujita	JACS	78 (1956)	3295
Cobalt (III)- ammonia, complex perchlorate	2-15 μ	S	Freq, Spec	Hill	JCP	24 (1956)	1219
$\text{CoH}_{18}\text{I}_2\text{N}_6$	-	S	NCA, Spec, Freq	Bertin	JACS	80 (1958)	525
Cobalt (II)- ammonia, complex iodide	-	-	-	-	-	-	-
$\text{CoH}_{18}\text{I}_3\text{N}_6$	1615-810	S	Freq	Hill	JCP	22 (1954)	148
Cobalt (III)- ammonia, complex iodide	500-3500	-	Freq	Mizushima	JCP	23 (1955)	1367
	2-15 μ	S	Spec, Freq	Fujita	JACS	78 (1956)	3295
	5-20 μ	S	Spec, Freq	Hill	JCP	24 (1956)	1219
	-	S	NCA, Spec, Assign	Bertin	JACS	80 (1958)	525
	-	Sol	Struct, Freq, Config	Irwing	JCS	- (1958)	2283
$\text{CoH}_{18}\text{N}_6$	-	-	Freq	Mizushima	JCP	23 (1955)	1367
Hexamine cobalt (III) ion	2-15 μ	S	Spec, Freq, Assign, NCA	Block	TFS	55 (1959)	867
$\text{CoH}_{18}\text{N}_9\text{O}_9$	500-3500	S	Spec, Freq	Fujita	JACS	78 (1956)	3295
Cobalt (III)- ammonia complex nitrate	2-15 μ	S	Spec, Freq	Hill	JCP	24 (1956)	1219
	700-4000	S	Spec, Assign	Gatehouse	JCS	- (1957)	4222
	700-4000	S	Assign	Gatehouse	JINC	8 (1958)	75
$\text{CoH}_{20}\text{F}_5\text{N}_6$	2-15 μ	S	Spec, Freq	Hill	JCP	24 (1956)	1219
Cobalt (III)- ammonia complex fluoride dihydrogen fluoride	-	-	-	-	-	-	-
$\text{CoD}_{15}\text{Cl}_3\text{N}_5$	487	S	Assign	Powell	JCS	- (1956)	3108
	-	-	-	-	-	-	-

CoD ₁₈ ¹³ N ₆	Cobalt (III)- ammonia complex chloride-d ₁₈	300-4000 450-1700	S S	Spec, Assign Assign, Freq	Barrow Powell	JINC JCS	2 (1956) - (1956)	340 3108
CoD ₁₈ ^N 6	Hexammine cobalt (III)- ion-d ₁₈	- 2-15 μ	- S	Freq Spec, Freq, Assign, NCA	Mizushima Block	JCP TFS	23 (1955) 55 (1959)	1367 867
CoBr ₂	Cobalt bromide	-	G	Freq	Bellamy	JCS	- (1957)	4294
CoClF	Cobalt chloro fluoride	-	G	Freq	Bellamy	JCS	- (1957)	4294
CoCl ₂	Cobalt chloride	0.6-1.35 μ	Sol	Activity vs concentration	Hulburt	JPC	21 (1917)	150
		0.6-1.5 μ	Sol	Spec	Coblentz	BBS	14 (1918)	653
		0.56-2.3 μ	L	Mol. rotation	Ingersoll	JOSA	6 (1922)	663
		-	G	Freq	Bellamy	JCS	- (1957)	4294
CoCl ₂ ·6H ₂ O	Cobalt chloride hexahydrate	5-15 μ	S	Freq, I	Lippincott	SA	16 (1960)	58
CoF ₂	Cobalt fluoride	-	G	Freq	Bellamy	JCS	- (1957)	4294
CoF ₄	Cobalt (II)- complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
CoF ₄	Cobalt (III)- complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
CoF ₄ K ₂	Cobalt (II)- fluoride complex (potassium salt)	300-1500	S	Spec	Lecomte	CPR	249 (1959)	1991
CoIN ₂ O ₂	Cobalt (I)-Iodide, nitric oxide complex	1700-2050	S	Struct	Lewis	JINC	7 (1958)	32
CoN ₂ O ₂	Cobalt hyponitrite	400-4000	S	Freq	LeFevre	AJC	10 (1957)	361

CoN_2O_6	Cobalt nitrate	0.8-1.25 μ 2-16 μ 2-15 μ	Sol S S	Magnetic rotation Spec Spec	Ingersoll Meloche Addison	JOSA JINC JCS	6 (1922) 6 (1958) - (1960)	663 104 613
$\text{CoN}_2\text{O}_6 \cdot 6\text{H}_2\text{O}$	Cobalt nitrate hexahydrate	2-16 μ 700-1600 300-880	S S S	Spec, Freq Freq, Assign Spec	Miller Ferraro Miller	AC JMS SA	24 (1952) 4 (1960) 16 (1960)	1253 99 135
$\text{CoN}_2\text{O}_8 \cdot \text{K}_2\text{K}_4$	Cobalt (II)-nitric oxide, thiosulfate complex (potassium salt)	2050-1700	S	Freq	Lewis	JINC	7 (1958)	32
$\text{CoN}_6\text{O}_{12}$	Cobalt (II)-nitrite complex ion	-	S	Spec, Freq, Assign, Struct	Nakamoto	JACS	80 (1958)	4817
$\text{CoN}_6\text{O}_{12} \cdot \text{K}_3$	Cobalt (III)-nitrate complex (potassium salt)	2-15 μ	S	Spec, Freq	Hill	JCP	24 (1956)	1219
$\text{CoN}_6\text{O}_{12} \cdot \text{K}_3$	Cobalt (III)-nitrite complex (potassium salt)	2-15 μ	S	Assign	Beattie	JCS	- (1956)	2849
$\text{CoN}_6\text{O}_{12} \cdot \text{Cs}_2\text{Na}$	Cobalt (III)-nitrate complex (monosodium dicesium salt)	2-15 μ	S	Spec, Freq	Hill	JCP	24 (1956)	1219
$\text{CoN}_6\text{O}_{12} \cdot \text{Cs}_3$	Cobalt (III)-nitrate complex (cesium salt)	-	-	Struct	Puget	CPR	250 (1960)	4141
$\text{CoN}_6\text{O}_{12} \cdot \text{K}_2\text{Na}$	Cobalt (III)-nitrate complex (dipotassium sodium salt)	-	-	Struct	Puget	CPR	250 (1960)	4141
$\text{CoN}_6\text{O}_{12} \cdot \text{NaRb}_2$	Cobalt (III)-nitrate complex (sodium, dirubidium salt)	2-15 μ	S	Spec, Freq	Hill	JCP	24 (1956)	1219

$\text{Co}_6\text{O}_{12}\text{Na}_3$	Cobalt (III)-nitrite complex (sodium salt)	2-16 μ 2-15 μ 2-15 μ 600-2200 300-880	S S S S S	Spec Spec, Freq Spec, Freq Struct Spec	Miller Faust Hill Griffith Miller	AC JACS JCP JINC SA	24 (1952) 76 (1954) 24 (1956) 7 (1958) 16 (1960)	1253 5346 1219 38 135
CoO_4S	Cobalt sulphate	0.8-1.25 μ - 1-15 μ	Sol - Sol	Magnetic rotation Interpretation of spec Spec	Ingersoll Duval Lagerqvist	JOSA CPR AF	6 (1922) 227 (1948) 12 (1957)	663 1153 491
$\text{CoO}_4\text{S}\cdot 7\text{H}_2\text{O}$	Cobalt (II)-sulphate heptahydrate	2-16 μ 300-880	S S	Spec Spec	Meloche Miller	JINC SA	6 (1958) 16 (1960)	104 135
$\text{CoO}_4\text{Se}\cdot 6\text{H}_2\text{O}$	Cobalt selenate hexahydrate	220-3500	S	Spec, Struct	Duval	ZE	64 (1960)	582
CoO_4Fe_2	Cobalt ferrite	10-500	-	Reflection and transmission	Mitsuichi	JPSJ	13 (1958)	1236
$\text{Co}_2\text{C}_2\text{H}_2\text{N}_8\text{O}_{10}\text{S}\cdot 3\text{H}_2\text{O}$	Cobalt (III)-ammonia, carbonate complex sulfate trihydrate	700-4000	S	Freq assign	Gatehouse	JCS	- (1958)	3137
$\text{Co}_2\text{C}_3\text{H}_4\text{N}_6\text{O}_9$	Hexamminecobalt (III) carbonate cobaltate-(III)	700-4000	S	Freq, Assign	Gatehouse	JCS	- (1958)	3137
$\text{Co}_2\text{C}_8\text{O}_8$	Dicobalt octacarbonyl	1859-2066 2.5-15 μ - 2-24 μ 1800-2200 1800-2200	Sol Sol - Sol Sol Sol	I Spec, Struct Freq Spec, I, Assign Spec, Config. Spec, Struct	Sternberg Coble Sternberg Friedel Bor Cotton	JACS JACS JACS JACS SA JCS	75 (1953) 76 (1954) 76 (1954) 77 (1955) 15 (1959) - (1960)	2717 3373 1457 3951 747 1882
$\text{Co}_2\text{C}_8\text{O}_8\cdot\text{AlBr}_3$	Cobalt (0)-octacarbonyl aluminium bromide	1800-2200.	S	Spec	Cotton	JCS	- (1960)	1882
$\text{Co}_2\text{C}_{10}\text{N}_{10}\text{K}_6$	Cobalt (II)-cyanide complex (potassium salt)	2000-2150	S	Struct	Griffith	JINC	7 (1958)	295

$\text{Co}_2\text{C}_{12}\text{H}_{36}\text{Cl}_4\text{O}_6\text{S}_6$	Cobalt (II)- dimethyl sulfoxide, chloride complex	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)	1534
$\text{Co}_2\text{C}_{12}\text{D}_{36}\text{Cl}_4\text{O}_6\text{S}_6$	Cobalt (II)- dimethyl sulfoxide chloride complex- d_{36}	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)	1534
$\text{Co}_2\text{C}_{36}\text{H}_{30}\text{I}_4\text{N}_{12}\cdot 2\text{H}_2\text{O}$	Cobalt (II)- pyridinaldazine complex iodide dihydrate	1400-1700	S	Freq, Struct	Stratton	JACS	82 (1960)	4834
$\text{Co}_2\text{H}_{26}\text{Cl}_4\text{N}_9\text{O}_2$	Cobalt (III)- ammonia, amine, peroxide complex perchlorate	800-1450	S	Binding	Gatehouse	JINC	8 (1958)	79
$\text{Co}_2\text{H}_{26}\text{Cl}_4\text{N}_9\text{O}_2\cdot 4\text{H}_2\text{O}$	Tetraammine cobalt (III)- μ - peroxy- μ -amidotetra- mine cobalt (III) chloride tetra- hydrate	800-1500	S	Freq, Struct	Chatt	JCS	- (1959)	4073
$\text{Co}_2\text{H}_{26}\text{Cl}_4\text{N}_{10}\text{O}_2\text{H}_2$	Tetraammine cobalt (III)- μ - nitro- μ -amido tetrammine cobalt (III) chloride hydrate	800-1500	S	Freq, Struct	Chatt	JCS	- (1959)	4073
$\text{Co}_2\text{H}_{26}\text{N}_9\text{O}_4\text{S}$	Cobalt-ammonia, amine, sulphate complex (bridge complex)	400-5000	S	Spec	Nakamoto	JACS	79 (1957)	490
$\text{Co}_2\text{H}_{30}\text{Cl}_4\text{N}_9\text{O}_2$	Cobalt (III)-ammonia, nitric oxide complex chloride	600-2200	S	Struct	Griffith	JINC	7 (1958)	38

Co ₂ H ₃₀ N ⁰ O ₁₆	600-2200	S	Struct	Griffith	JINC	7 (1958)	38
Cobalt (III)- ammonia, nitric oxide complex nitrate	400-5000	S	Spec	Nakamoto	JACS	79 (1957)	490
Cobalt (III)- ammonia complex sulfate penta- hydrate	2-15 μ	S	Freq, Struct	KroghMbe	ARK	12 (1958)	475
Cobalt pyroborate	897-3250	S	I, Freq	Corbridge	JCS	- (1954)	4555
Tricobalt bis- phosphoromono- thioate	650-290	S	Assign	Duval	CPR	239 (1954)	249
Cobaltic ortho- phosphate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
Cobalt (II)- phosphate octa- hydrate	2-24 μ	Sol	Spec, I, Assign, Struct	Friedel	JACS	77 (1955)	3951
Tetracobalt dodeca- carbonyl	1700-280	-	Band study	Nakamoto	N	183 (1959)	459
Cobalt (II)- acetyl acetone complex (tetramer)	1700-280	-	Band study	Nakamoto	N	183 (1959)	459
Cobalt (II)-benzoyl acetone complex (tetramer)							

Cr COMPOUNDS

CrCH ₆ NO ₈ Se ₂	-	S	Freq, Assign, Spec	Krans	JCP	9 (1941)	133
Methylammonium selenate alum							

$\text{CrCrH}_{15}\text{N}_8\text{O}_6\text{S}$	Chromium (III)- ammonia, isothio- cyanate, complex nitrate	1900-2100	S	Freq	Fujita	JACS	78 (1956)	3295
$\text{CrCrH}_4\text{O}_4\text{K}.$ $3\text{H}_2\text{O}$	Chromium (III)- oxalate, water (potassium salt) trihydrate	2-35 μ	S	Assign	Schmelz	SA	9 (1957)	51
$\text{CrCrH}_4\text{O}_4\text{K}.$ $3\text{H}_2\text{O}$	trans-chromium (III)- oxalate, water complex (potassium salt) trihydrate	800-1100	S	Freq, H bond	Fujita	JACS	78 (1956)	3963
$\text{CrCrH}_4\text{O}_4\text{Na}.$ $5\text{H}_2\text{O}$	Chromium (III)- oxalate, water complex (sodium salt) penta- hydrate	315-3430	S	Assign	Schmelz	SA	9 (1957)	51
$\text{CrCrH}_6\text{N}_8\text{S}_4\text{Ba}$	Chromium (II)- ammonia, isothio- cyanate complex (barium salt)	1900-2100	S	Freq	Fujita	JACS	78 (1956)	3295
$\text{CrCrH}_6\text{N}_8\text{S}_4\text{Hg}$	Chromium (II)- ammonia, isothio- cyanate complex (mercury salt)	1900-2100	S	Freq	Fujita	JACS	78 (1956)	3295
CrCrH_6O_4	Chromium (II)- acetate	600-3000	S	Spec, Assign	Costa	GCI	87 (1957)	885
$\text{CrCrH}_{10}\text{N}_7\text{S}_4$	Chromium (III)- ammonia, isothio- cyanate complex (ammonium salt)	1900-2100 -	S S	Freq Freq, Assign	Fujita Mitchell	JACS JCS	78 (1956) - (1960)	3295 1912
$\text{CrCrH}_5\text{BrN}_2\text{O}_2$	Chromium bromide, cyclo- pentadienyl, nitric oxide complex	1700-2050	Sol	Freq	Lewis	JINC	7 (1958)	32

$\text{Cr}_5\text{H}_5\text{ClN}_2\text{O}_2$	Chromium chloride cyclopentadienyl, nitric oxide complex	5.6-6.8 μ 1700-2050	Sol Sol	Freq Freq	Piper Lewis	JINC JINC	2 (1956) 7 (1958)	38 32
$\text{Cr}_5\text{IN}_6\text{OK}_3 \cdot \text{H}_2\text{O}$	Chromium (III)-cyanide, iodide, nitric oxide complex (potassium salt) hydrate	800-3500	S	Freq, Assign, Struct	Griffith	JCS	- (1959)	872
$\text{Cr}_6\text{H}_5\text{N}_5\text{O}_2\text{S}$	Chromium cyclo- pentadienyl, nitric oxide, thiocyanate complex	5.6-6.8 μ 1700-2050	Sol Sol	Freq Freq	Piper Lewis	JINC JINC	2 (1956) 7 (1958)	38 32
$\text{Cr}_6\text{H}_7\text{ClN}_2\text{O}_2$	Chromium-chloro- methyl cyclo- pentadienyl, nitric oxide complex	5.6-6.8 μ 1700-2050	Sol Sol	Freq Freq	Piper Lewis	JINC JINC	2 (1956) 7 (1958)	38 32
$\text{Cr}_6\text{H}_8\text{N}_2\text{O}_2$	Chromium-cyclo- pentadienyl, methyl, nitric oxide complex	450-4000 1700-2050	Sol Sol	Spec, Freq Freq	Piper Lewis	JINC JINC	3 (1956) 7 (1958)	104 32
$\text{Cr}_6\text{H}_{16}\text{ClN}_6\text{S}_2 \cdot \text{H}_2\text{O}$	Chromium (III)- ethylenediamine, isothiocyanate complex chloride, monohydrate	-	S	Freq, Assign	Mitchell	JCS	- (1960)	1912
$\text{Cr}_6\text{H}_{16}\text{ClN}_6\text{S}_4 \cdot \text{H}_2\text{O}$	trans-chromium (III)- ethylenediamine, isothiocyanate complex chloride monohydrate	1900-2100	S	Freq	Fujita	JACS	78 (1956)	3295

$\text{Cr}_6\text{H}_{24}\text{Cl}_3\text{N}_6$	Chromium (III)- ethylenediamine complex chloride	450-1750	S	Spec, Config.	Powell	JCS	- (1959)	791
Cr_6N_6	Chromium (III)- hexacyanide ion	-	-	Freq Spec, NCA	Coglioti	AAN	22 (1957)	266
		-	-	Freq	Coglioti	AAN	23 (1957)	355
		-	-	Freq	Coglioti	AAN	25 (1958)	260
		450-2200	-	Freq	Coglioti	JINC	8 (1958)	87
		250-2200	S	Spec, Assign	Hidalgo	ARS	56A (1960)	9
$\text{Cr}_6\text{N}_6\text{K}_3$	Chromium (III)- cyanide complex (potassium salt)	250-2200	-	Assign	Hidalgo	CPR	249 (1959)	233
$\text{Cr}_6\text{N}_6\text{K}_3\cdot 4\text{H}_2\text{O}$	Chromium (III)- cyanide complex (potassium salt) tetrahydrate	-	-	Quant. Mech.	VanVleck	JCP	7 (1939)	72
Cr_6O_6	Chromium hexa- carbonyl	2-40/ μ 4.5-15.5/ μ	G	Spec, Assign, Thermo. Spec, Struct NCA	Hawkins Shufler	JCP JACS	23 (1955) 78 (1956)	2422 2678
		-	-	Assign, Thermo., NCA	Murata Kawai	JCP BCSJ	27 (1957) 33 (1960)	605 1008
$\text{Cr}_6\text{O}_6\text{K}_3\cdot 3\text{H}_2\text{O}$	Chromium (III)- oxalate complex (potassium salt) trihydrate	900-1100 409-3450	S	H bond Assign	Fujita Schmelz	JACS SA	78 (1956) 9 (1957)	3963 51
$\text{Cr}_7\text{H}_{10}\text{N}_2\text{O}_2$	Chromium-cyclo- pentadienyl ethyl, nitric oxide complex	450-4000 1700-2050	Sol Sol	Spec, Freq Freq	Piper Lewis	JINC JINC	3 (1956) 7 (1958)	104 32
$\text{Cr}_7\text{H}_{13}\text{N}_3\text{O}_3$	Diethylenetriamine chromium tricarbonyl	1700-2100	S	Freq	Abel	JCS	- (1959)	2323
$\text{Cr}_8\text{H}_{24}\text{Cl}_3\text{N}_4\text{O}_4\text{S}$	Chromium (III)- dime thyl sulfoxide complex chloride	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)	1534

Cr-C	2-15 μ	S	Freq, Assign	Schmelz	JACS	81 (1959)	287
$\text{Cr}_9\text{H}_6\text{O}_{12}\text{K}_3 \cdot 3\text{H}_2\text{O}$							
Chromium (III)-malonic acid complex (potassium salt) trihydrate							
$\text{Cr}_9\text{H}_8\text{O}_3$	450-4000	Sol	Spec, Freq	Piper	JINC	3 (1956)	104
Chromium-carbonmono-oxide, cyclopentadienyl, methyl complex							
$\text{Cr}_9\text{H}_7\text{N}_7\text{OS}_4$	1900-2100	S	Freq	Fujita	JACS	78 (1956)	3295
Chromium (III)-ammonia, isothiocyanate complex (cholinesalt)	-	S	Freq	Mitchell	JCS	- (1960)	1912
$\text{Cr}_9\text{H}_{10}\text{N}_2\text{O}_2$	1450-4000	Sol	Spec, Freq	Piper	JINC	3 (1956)	104
Chromium-cyclopentadienyl, nitric oxide complex	1700-2050	Sol	Freq	Lewis	JINC	7 (1958)	32
$\text{Cr}_9\text{H}_{10}\text{N}_2\text{O}$	800-1800	S	Spec, Bonding	Donald	JACS	82 (1960)	4191
Chromium (III)-ethylenediamine tetracetic acid (sodium salt) dihydrate							
$\text{Cr}_9\text{H}_{11}\text{N}_2\text{O}_2$	450-4000	Sol	Spec, Freq	Piper	JINC	3 (1956)	104
Chromium-cyclopentadienyl, nitric oxide, phenyl complex	1700-2050	Sol	Freq	Lewis	JINC	7 (1958)	32
Cr_9H_{12}	350-3500	S	Spec, Freq, Assign	Snyder	SA	15 (1959)	807
Dibenzene chromium							
$\text{Cr}_9\text{H}_{12}\text{I}$	700-1100	S	Freq	Yamada	BCSJ	30 (1957)	647
Dibenzene chromium (I) iodide							
$\text{Cr}_9\text{H}_{12}\text{Cl}_3\text{S}_6$	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)	1534
Chromium (III)-dimethyl sulfoxide complex perchlorate							
Cr_9D_{12}	350-3500	S	Spec, Freq, Assign	Snyder	SA	15 (1959)	807
Dibenzene chromium-D ₁₂							

$\text{CrC}_{15}\text{H}_{21}\text{O}$	Chromium acetyl- acetone complex	625-5000	S	Spec, Struct	West	JINC	5 (1958)	295
$\text{CrC}_{27}\text{H}_{18}\text{N}_3\text{O}_3$	Chromium (III)- 8-hydroxy- quinolate	-	S	Spec	Charles	AC	25 (1953)	530
$\text{CrC}_{30}\text{H}_{25}\text{Br}$	Pentaphenyl chromium (VI) bromide	-	-	impurity	Cotton	CR	55 (1955)	551
$\text{CrC}_{30}\text{H}_{26}\text{O}$	Pentaphenyl chromium (VI) hydroxide	-	-	Group study	Cotton	CR	55 (1955)	551
CrH	Chromium hydride	-	-	Config.	Kleman	CJP	37 (1959)	537
$\text{CrH}_4\text{NO}_8\text{S}_2$	Ammonium sulphate alum	-	S	Spec, Freq, Assign	Kraus	JCP	9 (1951)	133
$\text{CrH}_4\text{NO}_8\text{Se}_2$	Ammonium selenate alum	-	S	Spec, Freq, Assign	Kraus	JCP	9 (1941)	133
$\text{CrH}_4\text{NO}_9\text{S}_2$	Hydroxylammonium sulfate alum	-	S	Freq assign, Spec	Kraus	JCP	9 (1941)	133
$\text{CrH}_8\text{N}_2\text{O}_4$	Ammonium chromate	2-16/ μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$\text{CrH}_9\text{N}_{12}$	Chromium (III)- ammonia azide complex	1900-2100	S	Freq	Fujita	JACS	78 (1956)	3295
$\text{CrH}_{12}\text{F}_6\text{N}_3$	Chromium-(III)- fluoride complex (ammonium salt)	-	S	Freq	Cox	JCS	- (1954)	1798
$\text{CrH}_{15}\text{Cl}_2\text{N}_2\text{O}_2$	Chromium (III)- ammonia, nitrite complex chloride	650-1650	S	Freq	Svatos Wilmshurst	JACS CJC	79 (1957) 38 (1960)	3313 467

$\text{CrH}_{15}\text{Cl}_3\text{N}_5$	Chromium (III)- ammonia, chloride complex chloride	650-1650 -	- -	Freq Freq	Svatos Wilmshurst	JACS CJC	79 (1957) 38 (1960)	3313 467
$\text{CrH}_{15}\text{I}_2\text{N}_8$	Chromium (III)- ammonia, azide complex iodide	1900-2100	S	Freq	Fujita	JACS	78 (1956)	3295
$\text{CrH}_{15}\text{N}_6\text{O}_2$	Chromium (III)- ammonia, nitrite complex cation	400-5000	S	Spec, Freq, Struct	Nakamoto	JACS	80 (1958)	4817
$\text{CrH}_{17}\text{Cl}_3\text{N}_5\text{O}_{13}$	Chromium (III)- ammonia, water complex per- chlorate	900-1100	S	H bond	Fujita	JACS	78 (1956)	3963
$\text{CrH}_{18}\text{Cl}_3\text{N}_6$	Chromium (III)- ammonia complex chloride	2-15 μ 650-1650	S S	FC, Freq assign Freq	Kobayashi Svatos	JCP JACS	23 (1955) 79 (1957)	1354 3313
$\text{CrH}_{18}\text{Cl}_3\text{N}_6\text{O}_{12}$	Chromium (III)- ammonia complex perchlorate	500-3500	S	Spec, Freq, Assign	Fujita	JACS	78 (1956)	3295
CrClO_3	Chromium chlorotrioxide	-	-	Spec	Dupuis	CPR	246 (1958)	3332
CrClO_3K	Potassium chlorochromate	1000	Sol	Freq	Barracrough	JCS	- (1959)	3552
CrCl_2O_2	Chromylchloride	250-5000 1000 1200-3000	G G Sol	Assign Freq Assign, Thermo.	Hobbs Barracrough Miller	JCP JCS SA	28 (1958) - (1959) 15 (1959)	1220 3552 709
CrCl_3	Chromium chloride	1-15 μ	Sol	Spec	Lagerqvist	AF	12 (1957)	491
CrCl_5OK_2	Potassium chromium chloride	1000	Sol	Freq	Barracrough	JCS	- (1959)	3552
CrFO_3	Chromium fluoro- trioxide	-	-	Spec	Dupuis	CPR	246 (1958)	3332

CrF_2O_2	Chromyl fluoride	250-5000 1000	G G	Spec, Assign Freq	Hobbs Barracrough	JCP JCS	28 -	(1958) (1959)	1220 3552
CrF_4	Chromium (II)- complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	-	(1959)	2762
CrF_4	Chromium (IV)- fluoride	-	S	Freq, Struct	Peacock	JCS	-	(1959)	2762
CrN_2O_9	Chromium (III)- nitrate	0.8-1.2 μ 2-16 μ	Sol S	Magnetic rotation Spec	Ingersoll MeLoche	JOSA JINC	6 6	(1922) (1958)	663 104
$\text{CrN}_3\text{O}_9 \cdot 9\text{H}_2\text{O}$	Chromium nitrate monohydrate	300-880	S	Spec	Miller	SA	16	(1960)	135
CrO_3	Chromium trioxide	1000	- S	Spec Freq	Dupuis Barracrough	CPR JCS	246 -	(1958) (1959)	3332 3552
CrO^{2-}_4	Chromate ion	-	- - - - -	Freq FC Freq Spec FC	Taylor Venkateswarlu Hahn Dupuis Pistorius	TFS JCP JCP CPR JCP	25 23 24 246 28	(1929) (1955) (1956) (1958) (1958)	314 2365 921 3332 514
$\text{CrO}_4\text{P} \cdot \text{H}_2\text{O}$	Chromium phosphate monohydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 16	(1952) (1960)	1253 135
$\text{CrO}_4\text{P} \cdot 6\text{H}_2\text{O}$	Chromium ortho- phosphate hexa- hydrate	2-16 μ	S	Band freq, I, Assign	Corbridge	JCS	-	(1954)	493
CrO_4Ba	Barium chromate	300-880	S	Spec	Miller	SA	16	(1960)	135
CrO_4K_2	Potassium chromate	0.8-1.25 μ 3-14.5 μ 8.8-13.0 μ 2-16 μ 1000 300-880	Sol S S S Sol S	Magnetic rotation Spec, Assign Spec Spec Freq Spec	Ingersoll Taylor Sanderson Miller Barracrough Miller	JOSA TFS JOSA AC JCS SA	6 25 30 24 - 16	(1922) (1929) (1940) (1952) (1959) (1960)	663 856 566 1253 3552 135
$\text{CrO}_4\text{Mg} \cdot 7\text{H}_2\text{O}$	Magnesium chromate hepta hydrate	300-880	S	Spec	Miller	SA	16	(1960)	135

CrO_4Na_2	Sodium chromate	8.9 μ 2-16 μ 300-880	- S S	Spec Spec Spec	Taylor Miller Miller	TFS AC SA	25 (1929) 24 (1952) 16 (1960)	856 1253 135
$\text{CrO}_4\text{Na}_2 \cdot 10\text{H}_2\text{O}$	Sodium chromate decahydrate	5-15 μ	S	Freq, I	Lippincott	SA	16 (1960)	58
CrO_4Pb	Lead chromate	2-16 μ 290-650 300-880	S S S	Spec, Qual. Anal Assign Spec	Miller Duval Miller	AC CPR SA	24 (1952) 239 (1954) 16 (1960)	1253 249 135
$\text{CrO}_4\text{Zn} \cdot 7\text{H}_2\text{O}$	Zinc chromate hepta- hydrate	300-880	S	Spec	Miller	SA	16 (1960)	135
$\text{CrO}_8\text{S}_2\text{K}$	Potassium sulfate alum	0.6-1.5 μ	Sol S	Spec Freq, Assign, Spec	Coblentz Krans	BBS JCP	14 (1918) 9 (1941)	653 133
$\text{CrO}_8\text{S}_2\text{K} \cdot 12\text{H}_2\text{O}$	Potassium chromium sulfate dodeca- hydrate	800-900 -	S -	Freq, H bond Struct	Fujita Harmelin	JACS CPR	78 (1956) 247 (1958)	3963 1123
$\text{CrO}_8\text{Se}_2\text{K}$	Potassium selenate alum	-	S	Freq, Assign, Spec	Kraus	JCP	9 (1941)	133
$\text{CrO}_8\text{Se}_2\text{Rb}$	Rubidium selenate alum	-	S	Freq, Assign, Spec	Kraus	JCP	9 (1941)	133
$\text{Cr}_2\text{H}_8\text{N}_2\text{O}_7$	Ammonium dichromate	2-16 μ 2-16 μ 400-1200	S S S	Spec Spec Freq, Assign, FC, Struct	Miller Meloche Stammreich	AC JINC SA	24 (1952) 6 (1958) 13 (1958)	1253 104 192
Cr_2O	Dichromium oxide	300-880	S	Spec	Miller	SA	16 (1960)	135
Cr_2O_3	Chromium oxide	-	-	Spec	Dupuis	CPR	246 (1958)	3332
$\text{Cr}_2\text{O}_7\text{Ca} \cdot 3\text{H}_2\text{O}$	Calcium dichromate trihydrate	1-8 μ 300-880	S S	Emission Spec	Coblentz Miller	BBS SA	5 (1908) 16 (1960)	159 135
$\text{Cr}_2\text{O}_7\text{Cu} \cdot 2\text{H}_2\text{O}$	Copper dichromate dihydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135

$\text{Cr}_2\text{O}_7\text{K}_2$	Potassium dichromate	0.8-1.25 μ 2-16 μ 400-1200	Sol S S	Magnetic rotation Spec Freq, Assign, Struct, FC	Ingersoll Miller Stammreich	JOSA AC SA	6 (1922) 24 (1952) 13 (1958)	663 1253 192	
$\text{Cr}_2\text{O}_7\text{Na}_2 \cdot 2\text{H}_2\text{O}$	Sodium dichromate dihydrate	1000 300-880 2-16 μ 400-1200	Sol S S	Spec Freq, Assign, Struct, FC	Barracough Miller	JCS SA	- (1959) 16 (1960)	3552 135	
$\text{Cr}_2\text{O}_7\text{S}_3 \cdot 18\text{H}_2\text{O}$	Chromium sulphate.18 hydrate	5-15 μ 300-880	S S	I, Freq Spec	Lippincott Miller	SA SA	16 (1960) 16 (1960)	58 135	
$\text{Cr}_2\text{O}_7\text{S}_3 \cdot 12\text{H}_2\text{O}$	Chrom alum	0.6-1.5 μ 0.56-2.3 μ	Sol L	Spec Magnetic rotation	Coblentz Ingersoll	BBS JOSA	14 (1918) 6 (1922)	653 663	
$\text{Cr}_2\text{O}_7\text{S}_3 \cdot 0.5\text{K}_2 \cdot 24\text{H}_2\text{O}$	Aluminium chromate	300-880	S	Spec	Miller	SA	16 (1960)	135	
$\text{Cr}_2\text{O}_7\text{Al}_2$	Aluminium chromate	300-880	S	Spec	Miller	SA	16 (1960)	135	
<u>Cs COMPOUNDS</u>									
CsNO	Cesium isocyanate	400-4000	S	Spec	Waddington	JCS	- (1959)	2499	
$\text{CsC}_5\text{H}_7\text{O}_2$	Cesium acetyl acetate	625-5000	S	Spec, Struct	West	JINC	5 (1958)	295	
CsH	Cesium hydride	-	-	FC	Gordy	JCP	14 (1946)	305	
		-	-	FC	Platt	JCP	18 (1950)	932	
		-	-	FC	Sheline	JCP	18 (1950)	927	
		-	-	FC	Baughan	TFS	53 (1957)	1046	
CsHO	Cesium hydroxide	1-3 μ 6-33 μ	Sol G	Spec Absorption	Grantham Spinar	PR SA	18 (1921) 12 (1958)	339 244	
CsBr	Cesium bromide	-	-	Christianson filter Freq	Barnes Huggins	PR JCP	49 (1936) 5 (1937)	732 143	

	-	-	-	FC	Gordy	JCP	14 (1946)	305
	-	-	-	Polarizability theory	Szigeti	TFS	45 (1949)	155
	-	S	-	Freq	Roberts	PR	77 (1950)	258
	-	-	-	Freq	Szigeti	PRS	204 (1950)	51
	-	S	-	Transmission	Plyler	JOSA	41 (1951)	209
	-	-	-	Freq	Rittner	JCP	19 (1951)	1080
	0-40 μ	S	-	Mol. properties	Ballard	JOSA	42 (1952)	65
	15-38 μ	S	-	Mol. properties	Plyler	JRNB	49 (1952)	61
	0.365-1.0139 μ	S	-	Ref. Index	Rodney	JOSA	42 (1952)	431
	0.349-39.22 μ	S	-	Ref. Index	Rodney	JOSA	42 (1952)	875
	21-52 μ	-	-	Spec	Acquista	JOSA	43 (1953)	977
	-	S	-	Calibration data	Downie	JOSA	43 (1953)	941
	-	G	-	Microwave	Honig	PR	92 (1953)	901
	0.365-39.22 μ	S	-	Ref. Index	Rodney	JRNB	51 (1953)	123
	-	S	-	Crystal study	Smakula	JOSA	43 (1953)	822
	-	-	-	Pressed disk	Ford	JSI	31 (1954)	338
	40-230 μ	S	-	Spec	Sinton	JOSA	44 (1954)	1954
	24-54 μ	S	-	Iso.	Plyler	AC	27 (1955)	161
	-	S	-	Reaction with thiourea	Stewart	AC	27 (1955)	318
	-	-	-	Spec	Lord	JOSA	47 (1957)	689
	-	-	-	Freq	Rice	JCP	27 (1957)	573
	450-3800	Sol	-	Freq	Frevel	SA	15 (1959)	557
	17-55 μ	S	-	Transmission	Plyler	JRNB	64C (1960)	55
CsBr ₃	8-15 μ	S	-	Spec	Bonner	JACS	74 (1952)	5078
Cesium tribromide								
CsCl	-	S	-	Filter	Barnes	PR	49 (1936)	732
Cesium chloride	-	-	-	Theory	Huggins	JCP	5 (1937)	143
	-	-	-	FC, Bond dist.	Gordy	JCP	14 (1946)	305
	-	-	-	Polarization	Szigeti	TFS	45 (1949)	155
	-	S	-	Theory	Roberts	PR	77 (1950)	258
	-	-	-	Freq	Szigeti	PRS	204 (1950)	51
	-	-	-	Freq	Rittner	JCP	19 (1951)	1030
	-	G	-	Microwave	Honig	PR	92 (1953)	901
	-	-	-	Disk	Ford	JSI	31 (1954)	338
	-	G	-	Freq, Spec, Mol. Const.	Rice	JCP	27 (1957)	573
CsF	-	-	-	Freq	Huggins	JCP	5 (1937)	143
Cesium fluoride	-	S	-	Freq	Roberts	PR	77 (1950)	258
	-	-	-	Freq	Rittner	JCP	19 (1951)	1030
	-	G	-	Microwave	Honig	PR	92 (1953)	901

CsFO_3S	Cesium fluoro-sulfate	2400-550	S	Spec, Assign	Sharp	JCS	-	(1957)	3761
CsF_3	Cesium trifluoride	-	S	Spec	Freed	JCP	8	(1940)	840
CsI	Cesium iodide	-	-	Freq	Huggins	JCP	5	(1937)	143
		-	-	FC	Gordy	JCP	14	(1946)	305
		-	S	Freq	Roberts	PR	77	(1950)	258
		-	-	Freq	Rittner	JCP	19	(1951)	1030
		0.2-38 μ	S	Spec	Plyler	JOSA	42	(1952)	432
		25-52 μ	S	Prism performance	Acquista	JOSA	43	(1953)	333
		21-52 μ	-	Spec	Acquista	JOSA	43	(1953)	977
		-	S	Physical properties	Ballard	JOSA	43	(1953)	975
		-	S	Stabilizes III crystal	Smakula	JOSA	43	(1953)	822
		-	S	Pressed disk	Ford	JSI	31	(1954)	338
		-	-	IR measurements	Plyler	JPC	15	(1954)	519
		25-55 μ	S	Calibration	Mills	JOSA	45	(1955)	785
		24-54 μ	S	Iso.	Plyler	AC	27	(1955)	161
		0.29-50 μ	S	Optical properties,	Rodney	JOSA	45	(1955)	410
		0.29-53 μ	-	Freq	Rodney	JOSA	45	(1955)	987
		-	-	Refraction index,	Rice	JCP	27	(1957)	573
		-	-	Dispersion	Plyler	JRNB	64C	(1960)	55
		17-55 μ	S	Transmission					
CsIO_3	Cesium iodate	-	S	Spec, Struct	Dasent	JCS	-	(1960)	2429
CsIO_4	Cesium periodate	-	-	Freq, Struct	Siebert	ZAUA	303	(1960)	162
CsNO_3	Cesium nitrate	-	S	Growing oriented crystal sections	West	JOSA	35	(1945)	26
		450-3800	Sol	Freq	Frevel	SA	13	(1957)	557
		2-15 μ	S	Assign, Temp. effect	Greenberg	JCP	33	(1960)	900
CsN_3	Cesium azide	635-3100	S	Freq, FC	Gray	TFS	53	(1957)	901
$\text{CsO}_8\text{S}_2\text{Cr}$	Cesium sulfate alum	-	S	Freq assign, Spec	Kraus	JCP	9	(1941)	133
$\text{CsO}_8\text{Se}_2\text{Cr}$	Cesium selenate alum	-	S	Freq assign, Spec	Kraus	JCP	9	(1941)	133
Cs_2	Cesium	0.85-1.01 μ	S	Spec	Meggors	JRNB	10	(1933)	669
		-	-	Freq	Rosen	PR	43	(1933)	5

$Cs_2C_2O_2$	Cesium carbonyl	600-4000	S	Spec, Struct	Seton	CPR	238 (1954)	2472	
$Cs_2B_4O_7$	Cesium tetraborate	2-15/ μ	S	Freq, Struct	Krogh-Moe	ARK	12 (1958)	475	
<u>Cu COMPOUNDS</u>									
$CuCH_3$	Copper methyl	600-3000	S	Spec, Freq, FC	Costs	GCI	87 (1957)	1273	
$CuCN$	Copper cyanide	2020-2160 300-800	Sol S	Spec Spec	Penneman Miller	JCP SA	24 (1956) 16 (1960)	293 135	
Cu_2H_5BrNS	Thioacetamide cuprous bromide	650-3100	S	Freq	Rosenthal	JACS	82 (1960)	4169	
Cu_2H_5ClNS	Thioacetamide cuprous chloride	650-3100	S	Freq	Rosenthal	JACS	82 (1960)	4169	
$Cu_2H_8N_2O_4 \cdot 3H_2O$	Copper (II)- ethylenediamine complex sulfate trihydrate	700-850	S	H bond	Fujita	JACS	78 (1956)	3963	
$Cu_2H_{12}N_6S_2$	Copper (II)- ammonia, isothio- cyanate complex	-	S	Freq	Mitchell	JCS	- (1960)	1912	
Cu_2N_2	Copper dicyanide ion	2020-2160	Sol	Spec	Penneman	JCP	24 (1956)	293	
Cu_2O_4	Copper (II)-oxalate	700-1700	S	Spec, Freq	Kuroda	JPC	64 (1960)	759	
$Cu_2O_4 \cdot \frac{1}{2}H_2O$	Copper (II)-oxalate hemihydrate	2-16/ μ	S	Spec	Hunt	AC	22 (1950)	1478	

$\text{Cu}_2\text{O}_6\text{Na}_2 \cdot 3\text{H}_2\text{O}$	Copper carbonate complex (sodium salt) trihydrate	700-4000	S	Freq assign	Gatehouse	JCS	- (1958)	3137
$\text{Cu}_2\text{H}_2\text{O}_4$	Copper (II)-malonate	700-1700	S	Spec, Freq	Kuroda	JPC	64 (1960)	759
Cu_3N_3	Copper tricyanide ion	2020-2160	Sol	Spec	Penneman	JCP	24 (1956)	293
$\text{Cu}_4\text{H}_4\text{O}_4$	Copper (II)-succinate	700-1700	S	Spec, Freq	Kuroda	JPC	64 (1960)	759
$\text{Cu}_4\text{H}_4\text{O}_{10}\text{Na}_2$	Copper (II)-oxalate, water complex (sodium salt)	346-3500	S	Assign	Schmelz	SA	9 (1957)	51
$\text{Cu}_6\text{H}_6\text{D}_2\text{N}_2\text{O}_4 \cdot \text{H}_2\text{O}$	Copper (II)-D ₂ -glycine complex monohydrate	-	-	Assign	Nakamura	NKZ	80 (1959)	113
$\text{Cu}_4\text{H}_6\text{O}_4$	Cupric acetate	600-3000	S	Spec, Assign	Costa	GCI	87 (1957)	885
$\text{Cu}_4\text{H}_8\text{Cl}_2\text{O}_2$	Copper (II)-dioxane complex chloride	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
$\text{Cu}_4\text{H}_8\text{Cl}_2\text{S}$	Copper (II)-dithiane complex chloride	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
$\text{Cu}_4\text{H}_8\text{N}_2\text{O}_4 \cdot \text{H}_2\text{O}$	Copper (II)-glycine complex monohydrate	2-15.5 μ 900-1100 2-7 μ 2-15 μ	S S S S -	Spec, Group freq H bond Chelation const. Assign Assign	Sen Fuji Rosenberg Saraceno Nakamura	JACS JACS ACS JACS NKZ	77 (1955) 78 (1956) 10 (1956) 80 (1958) 80 (1959)	211 3963 840 5018 113
$\text{Cu}_4\text{H}_8\text{N}_2\text{O}_4 \cdot \text{H}_2\text{O}$	cis-Copper glycinate monohydrate	-	-	Iso.	Tomita	BCSJ	34 (1960)	280

$\text{Cu}_4\text{H}_8\text{N}_4\text{O}_4 \cdot 2\text{H}_2\text{O}$	trans-Copper glycinate dihydrate	-	Iso.	Tomita	BCSJ	34 (1960)	280
$\text{Cu}_4\text{H}_{12}\text{Br}_2\text{O}_2\text{S}_2$	Copper (II)-dimethyl sulfoxide complex bromide	S	Spec, Assign	Cotton	JPC	64 (1960)	1534
$\text{Cu}_4\text{H}_{12}\text{Cl}_2\text{O}_2\text{S}_2$	Copper (II)-dimethyl sulfoxide complex chloride	S	Spec, Assign	Cotton	JPC	64 (1960)	1534
$\text{Cu}_4\text{H}_{16}\text{Cl}_4\text{N}_4\text{Pt}$	Bis-ethylene diamine copper (II)-tetrachloro-platinate (II) anion	S	Spec, Config.	Powell	JCS	- (1959)	791
$\text{Cu}_4\text{H}_{16}\text{N}_4\text{O}_4\text{S} \cdot 2\text{H}_2\text{O}$	Copper (II)-ethylenediamine complex sulfate dihydrate	S	H bond	Fujita	JACS	78 (1956)	3963
Cu_4N_4	Copper (I) tetracyanide ion	Sol S	Spec Spec, Assign	Penneman Hidalgo	JCP ARS	24 (1956) 56A (1960)	293 9
$\text{Cu}_4\text{N}_4\text{K}_3$	Copper (I) cyanide complex (potassium salt)	Sol S S S,Sol	Spec, Freq Freq, Assign, FC Assign Assign	Bonino Jones Hidalgo Poulet	AAN JCP CPR SA	22 (1957) 29 (1958) 249 (1959) 15 (1959)	402 463 233 932
$\text{Cu}_5\text{H}_7\text{O}_2$	Acetylacetone copper chelate	Sol	Freq	Bellamy	JCS	- (1954)	4491
$\text{Cu}_6\text{H}_6\text{BrCl}_3\text{N}_2$	p-Bromobenzene diazonium chloride, cupric chloride double salt	-	Struct	Kazitsyna	IANS	- (1960)	1523

$\text{CuC}_6\text{H}_8\text{O}_{10}\text{Na}_2$	Copper (II)-malonic acid, water complex (sodium salt)	2-15 μ	S	Freq, Assign	Schmelz	JACS 81 (1959)	287
$\text{CuC}_6\text{H}_9\text{O}_3$	Ethyl acetoacetate copper chelate	-	Sol	Freq	Bellamy	JCS • - (1954)	4491
$\text{CuC}_6\text{H}_{10}\text{O}_2\text{S}$	Ethyl copper dioxanthate	2.8-15 μ	S	Spec	Pearson	APS 12 (1958)	116
$\text{CuC}_6\text{H}_{12}\text{N}_2\text{O}_4$	Copper (II)-alanine complex (1 & dl)	650-4000	S	Freq, Assign	Segnini	SA 16 (1960)	540
$\text{CuC}_6\text{H}_{12}\text{N}_2\text{O}_4 \cdot \text{H}_2\text{O}$	Copper (II)-alanine complex monohydrate	2-7 μ	S	Chelation const.	Rosenberg	ACS 10 (1956)	840
$\text{CuC}_6\text{H}_{18}\text{Br}_2\text{NO}_4$	Copper (II)-ethyl alcohol, nitric oxide complex bromide	-	S	Struct	Griffith	JCS - (1958)	3993
$\text{CuC}_6\text{H}_{18}\text{Cl}_2\text{NO}_4$	Copper (II)-ethyl alcohol, nitric oxide complex chloride	-	S	Struct	Griffith	JCS - (1958)	3993
$\text{CuC}_7\text{H}_5\text{O}_2$	Salicylaldehyde copper chelate	-	S	Freq	Bellamy	JCS - (1954)	4491
$\text{CuC}_7\text{H}_9\text{O}_2$	2-Formylcyclohexanone copper chelate	-	Sol	Group freq	Bellamy	JCS - (1954)	4491
$\text{CuC}_8\text{H}_4\text{F}_3\text{O}_2\text{S}$	Thenoyl trifluoroacetone copper chelate	-	Sol	Freq	Bellamy	JCS - (1954)	4491
$\text{CuC}_8\text{H}_{12}\text{Cl}_2\text{N}_2\text{O}_8$	Copper perchlorate tetracetone triole	1000-2500	S	Spec	Hathaway	JCS - (1960)	3705

$\text{Cu}_8\text{H}_{13}\text{O}_3$	Ethyl 2-oxocyclohexane carboxylate copper chelate	-	Sol	Freq	Bellamy	JCS	- (1954)	4491
$\text{Cu}_8\text{H}_{14}\text{O}_4$	Cupric isobutyrate	-	S	Struct	Yamada	BCSJ	31 (1958)	303
$\text{Cu}_8\text{H}_{14}\text{O}_4$	Cupric n-butyrate	-	S	Struct	Yamada	BCSJ	31 (1958)	303
$\text{Cu}_8\text{H}_{16}\text{Cl}_2\text{O}_2\text{S}_2$	Copper (II)- thioxane complex chloride	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
$\text{Cu}_8\text{H}_{18}\text{N}_4\text{O}_6 \cdot 3\text{H}_2\text{O}$	Glycylglycine complex tri- hydrate	-	S, Sol	Spec	Rosenberg	ACS	11 (1957)	1390
$\text{Cu}_8\text{H}_{20}\text{ClN}_4\text{S}_4$	Tetrakis-thio- acetamide cuprous chloride	650-3100	S	Freq	Rosenthal	JACS	82 (1960)	4169
$\text{Cu}_8\text{H}_{24}\text{ClN}_8\text{S}_8$	Copper (I)-methyl thiourea complex chloride	2-15 μ	S	Spec	Lane	JACS	81 (1959)	3624
$\text{Cu}_8\text{H}_{24}\text{Cl}_2\text{O}_{12}\text{S}_4$	Copper (II)- dimethyl sulfoxide complex per- chlorate	650-4000	S	Spec, Assign	Cotton	JPC	64 (1960)	1534
$\text{Cu}_9\text{H}_{10}\text{NO}_6\text{S}$	Copper (II)- 8-hydroxy- quinoline-5- sulfonic acid, water complex	-	S	Struct	Nortia	SK	32B (1959)	83
$\text{Cu}_9\text{H}_{14}\text{NO}_8 \cdot 2\text{H}_2\text{O}$	Copper (II)- 8-hydroxy- quinoline-5- sulfonic acid water complex dihydrate	-	S	Struct	Nortia	SK	32B (1959)	83

$\text{CuC}_{10}\text{H}_2\text{F}_{12}\text{O}_4$	Copper (II)-sym-hexafluoro-acetylacetonone complex	280-1700	-	Band study	Nakamoto	N	183 (1959)	459
$\text{CuC}_{10}\text{H}_8\text{F}_6\text{O}_4$	Copper (II)-1,1,1-trifluoroacetyl-acetone complex	1700-280	-	Band study	Nakamoto	N	183 (1959)	459
$\text{CuC}_{10}\text{H}_9\text{O}_2$	Benzoylacetone copper chelate	- 1780-280	Sol -	Freq Assign	Bellamy Nakamoto	JCS N	- (1954) 183 (1959)	4491 459
$\text{CuC}_{10}\text{H}_{12}\text{D}_4\text{N}_2\text{O}_4$	Copper (II)-allylglycine complex-N-d ₂	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{CuC}_{10}\text{H}_{14}\text{O}_4$	Copper (II)-acetyl acetate	600-5000 280-1700	S -	Spec, Struct Band study	West Nakamoto	JINC N	5 (1958) 183 (1959)	295 459
$\text{CuC}_{10}\text{H}_{15}\text{BrN}_2\text{O}_4$	Copper (II)- γ -bromo allylglycine complex	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{CuC}_{10}\text{H}_{15}\text{ClN}_2\text{O}_4$	Copper (II)- γ -chloroallyl glycine complex	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{CuC}_{10}\text{H}_{16}\text{N}_2\text{O}_4$	Copper (II)-allylglycine complex	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{CuC}_{10}\text{H}_{18}\text{N}_2\text{O}_2$	Copper (II)-4-amino- β -pentene-2-one complex	650-4000	L, Sol	Spec, Assign	Holtzclaw	JACS	80 (1958)	1100
$\text{CuC}_{10}\text{H}_{18}\text{O}_4$	Cupric isovalerianate	-	S	Struct	Yamada	BCSJ	31 (1958)	303
$\text{CuC}_{10}\text{H}_{18}\text{O}_4$	Cupric-n-valerianate	-	S	Struct	Yamada	BCSJ	31 (1958)	303

$\text{CuC}_{10}\text{H}_{20}\text{Cl}_2\text{O}_{13}$	Copper perchlorate 2.5 ethyl acetate	1000-1700	S	Spec	Hathaway	JCS - (1960)	3705
$\text{CuC}_{12}\text{H}_8\text{Cl}_4\text{N}_6\text{O}_4$	p-Nitrobenzene diazonium chloride, cupric chloride double salt	-	-	Struct	Kazitsyna	IANS - (1960)	1523
$\text{CuC}_{12}\text{H}_8\text{Cl}_6\text{N}_4$	p-Chlorobenzene diazonium chloride, cupric chloride double salt	-	-	Struct	Kazitsyna	IANS - (1960)	1523
$\text{CuC}_{12}\text{H}_8\text{N}_2\text{O}_4$	Copper (II)- 2-pyridine carboxylic acid chelate	-	-	Struct	Lumme	SK 31B (1958)	294
$\text{CuC}_{12}\text{H}_{10}\text{N}_4\text{O}_2$	Pyridine-copper cyanate complex	2.5-16 μ	S	Spec	Levi	AC 28 (1956)	1591
$\text{CuC}_{12}\text{H}_{10}\text{N}_4\text{S}_2$	Copper (II)- isothiocyanate pyridine complex	-	S	Freq, Assign	Mitchell	JCS - (1960)	1912
$\text{CuC}_{12}\text{H}_{16}\text{D}_4\text{N}_4\text{O}_2$	Copper (II)- γ - methyl allyl- glycine complex- N-D ₂	2-15 μ	S	Assign	Moreno	SA 16 (1960)	1368
$\text{CuC}_{12}\text{H}_{18}\text{N}_4\text{O}_4$	Copper (II)- cyclohexane 1:2-dione dioxime complex	800-3200	S	Spec, Assign, H bond	Blinic	JCS - (1958)	4536
$\text{CuC}_{12}\text{H}_{20}\text{N}_2\text{O}_4$	Copper (II)- γ - methyl allyl- glycine complex	2-15 μ	S	Assign	Moreno	SA 16 (1960)	1368

CuC ₁₆ H ₂₈ O ₄	1200-1800	S	Assign	Charette	SA	16 (1960)	689
Copper-pivaloyl-acetone complex							
CuC ₁₆ H ₃₀ O ₄	-	S	Struct	Yamada	BCSJ	31 (1958)	303
CuC ₁₆ H ₃₆ O ₈ P ₂	714-5000	S	Group study	Smith	JINC	9 (1959)	150
CuC ₁₈ H ₁₀ C ₁₄ N ₄ O ₄	-	-	Struct	Kazitsyna	IANS	- (1960)	1523
p-Propionoxy benzene diazonium chloride, cupric double salt							
CuC ₁₈ H ₁₂ N ₂ O ₂	- 8-15 μ	S	Spec Assign, Spec	Charles Charles	AC SA	25 (1953) 8 (1956)	530 1
CuC ₂₀ H ₁₂ N ₂ O ₄	-	-	Struct	Lumme	SK	31 (1958)	294
CuC ₂₀ H ₁₂ N ₄	400-4000	S	Spec, H bond	Mason	JCS	- (1958)	976
CuC ₂₀ H ₁₄ N ₄	400-4000	S	Spec, H bond	Mason	JCS	- (1958)	976
CuC ₂₀ H ₁₆ N ₂ O ₂	8-15 μ	S	Assign, Spec	Charles	SA	8 (1956)	1
2-Methyl-8-hydroxy-quinoline copper (II)-chelate							
CuC ₂₀ H ₁₆ N ₂ O ₂	8-15 μ	S	Assign, Spec	Charles	SA	8 (1956)	1
4-Methyl-8-hydroxy-quinoline copper (II)-chelate							
CuC ₂₀ H ₁₈ O ₄	280-1700	-	Band study	Nakamura	N	183 (1959)	459
Copper-benzoylacetone complex							
CuC ₂₀ H ₂₀ N ₂ O ₂	650-4000	S, L	Spec, Assign	Holtzclaw	JACS	80 (1958)	1100
Copper (II)-1-phenyl-3-amino-2-butene complex							

$\text{CuC}_{20}\text{H}_{22}\text{O}_4$	Copper γ -isopropyl tropolonate	-	S	Freq	JOC	19 (1954)	1889
$\text{CuC}_{22}\text{H}_{26}\text{N}_2\text{O}_2$	Copper (II)-(4-anilino-3-pentene-2-one) complex	650-4000	L,S	Spec, Assign	JACS	80 (1958)	1100
$\text{CuC}_{24}\text{H}_{16}\text{ClN}_4\text{O}_4$	Copper-1:10-phenanthroline complex perchlorate	600-2000	S	Spec	JINC	9 (1959)	211
$\text{CuC}_{24}\text{H}_{16}\text{ClN}_4\text{O}_8$	Copper (II)-1:10-phenanthroline complex perchlorate	600-2000	S	Spec	JINC	9 (1959)	211
$\text{CuC}_{24}\text{H}_{20}\text{N}_4$	Copper meso-tetra-methyl porphin	400-4000	S	Spec, H bond	JCS	- (1958)	976
$\text{CuC}_{24}\text{H}_{26}\text{O}_8$	Copper butylphthalate	0.4-2.2 μ	Sol	Optical properties	JOSA	29 (1939)	56
$\text{CuC}_{26}\text{H}_{34}\text{N}_4\text{O}_4$	Cupric N-benzylidene-1-lysinate	-	S	Freq, I, Ident	JACS	76 (1954)	5589
$\text{CuC}_{28}\text{H}_{28}\text{N}_4$	Copper octamethylchlorin	400-4000	S	Spec, H bond	JCS	- (1958)	976
$\text{CuC}_{28}\text{H}_{28}\text{N}_4$	Copper octamethylporphin	400-4000	S	Spec, H bond	JCS	- (1958)	976
$\text{CuC}_{28}\text{H}_{32}\text{N}_6\text{O}_6$	Barbital-copper-pyridine complex	2.5-16 μ	S	Spec	AC	28 (1956)	1591

$\text{CuC}_{28}\text{H}_{36}\text{N}_6\text{O}_6$	Ipral-Copper pyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591
$\text{CuC}_{30}\text{H}_{22}\text{O}_4$	Copper (II)-C ₆ - benzoyl aceto- phenone complex	280-1700	-	Band study	Nakamoto	N	183 (1959)	459
$\text{CuC}_{30}\text{H}_{32}\text{N}_6\text{O}_6$	Dial-Copper- pyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591
$\text{CuC}_{30}\text{H}_{36}\text{N}_6\text{O}_6$	Alurate-Copper- pyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591
$\text{CuC}_{30}\text{H}_{40}\text{N}_6\text{O}_6$	Neonal-Copper- pyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591
$\text{CuC}_{32}\text{H}_{16}\text{N}_8$	Copper phthal- cyanine	3-15 μ 650-4000 2-16 μ	S S S	Spec Spec, Anal Spec	Ebert Kendall Tyler	JACS AC AC	74 (1952) 25 (1953) 25 (1953)	2806 382 390
$\text{CuC}_{32}\text{H}_{28}\text{N}_6\text{O}_6$	Rutonal- Copperpyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591
$\text{CuC}_{32}\text{H}_{44}\text{N}_6\text{O}_6$	Amytal-Copper- pyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591
$\text{CuC}_{32}\text{H}_{44}\text{N}_6\text{O}_6$	Nembutal-Copper- pyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591
$\text{CuC}_{32}\text{H}_{62}\text{O}_4$	Cupric-n- palmitate	-	S	Struct	Yamada	BCSJ	31 (1958)	303
$\text{CuC}_{34}\text{H}_{32}\text{N}_6\text{O}_6$	Luminal-Copper- pyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591
$\text{CuC}_{34}\text{H}_{44}\text{N}_6\text{O}_6$	Seconal-Copper- pyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591
$\text{CuC}_{36}\text{H}_{32}\text{N}_6\text{O}_6$	Alphenal-Copper- pyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591

$\text{CuC}_{36}\text{H}_{36}\text{N}_6\text{O}_6$	Mebaral-Copper-pyridine complex	2.5-16 μ	S	Spec	Levi	AC	28 (1956)	1591
$\text{CuC}_{40}\text{H}_{40}\text{Br}_2\text{N}_4\text{O}_8$	Copper 2,4',5-Trimethyl-3',4-dicarbethoxy-5'-bromo dipyrrolyl-methane	2700-3500	Sol	Spec, H bond	Vestting	JACS	61 (1939)	3511
$\text{CuC}_{36}\text{H}_{48}\text{N}_4$	Copper (II)-octaethylchlorin	400-4000	S	Spec, H bond	Mason	JCS	- (1958)	976
$\text{CuC}_{44}\text{H}_{30}\text{N}_4$	Copper-meso-tetraphenylporphin	400-4000	S	Spec, H bond	Mason	JCS	- (1958)	976
$\text{CuC}_{72}\text{H}_{60}\text{Cl}_2\text{O}_2\text{P}_{12}$	Copper (II)-triphenyl phosphoric oxide complex perchlorate	900-1300	S	Freq	Cotton	JCS	- (1960)	2199
$\text{CuC}_{1808}\text{H}_{3010}\text{O}_4$	Copper-polymer-tha-cryol acetone complex	1200-1800	S	Assign	Charette	SA	16 (1960)	689
CuH	Copper hydride	-	-	Size & Law of force Rotation, quantum theory	Birge Birge	BAPS PR	1 (1925) 27 (1926)	12 245
		-	-	Mol. Const. FC	Pekeris Platt Sheline	PR JCP JCP	45 (1934) 18 (1950) 18 (1950)	98 932 927
CuHClO	Cupric hydroxychloride	270-4000	S	Freq	Tarte	SA	13 (1958)	107
CuHFO	Cupric hydroxyfluoride	270-4000	S	Freq	Tarte	SA	13 (1958)	107

CuH_2O_2	Cupric hydroxide	270-4000	S	Freq	Tarte	SA	13 (1958)	107
$\text{CuH}_4\text{F}_3\text{N}$	Ammonium fluoride cupric fluoride	1400-4000	S	Spec	Crocket	JACS	82 (1960)	4158
$\text{CuH}_8\text{Cl}_2\text{N}_4$	Copper (II)-hydrazine complex chloride	15-35 μ	-	Freq	Sacconi	N	186 (1960)	549
$\text{CuH}_8\text{F}_4\text{N}_2$	Diammonium copper tetrafluoride	300-1500	S	Spec	Lecomte	CPR	249 (1959)	1991
$\text{CuH}_8\text{O}_8\text{S}_2\text{H}_2\text{O}$	Copper (II)-water complex sulfate monohydrate	700-850	S	H bond	Fujita	JACS	78 (1956)	3963
$\text{CuH}_{12}\text{Cl}_2\text{N}_4$	Copper (II)-ammonia complex chloride	300-4000	S	Spec, Assign	Barrows	JINC	2 (1956)	340
$\text{CuH}_{12}\text{N}_4$	Tetramine cupric ion	-	-	Freq, FC	Schultz	JCP	10 (1942)	194
$\text{CuH}_{12}\text{N}_4\text{O}_4\text{S}_2\text{H}_2\text{O}$	Copper (II)-ammonia complex sulfate monohydrate	700-3350 650-1650	S, Sol S	Assign, Freq Freq	Powell Svatos Wilmshurst	JCS JACS CJC	- (1956) 79 (1957) 38 (1960)	3108 3313 467
$\text{CuD}_8\text{O}_8\text{S}_2\text{D}_2\text{O}$	Copper (II)-deuterium oxide complex sulfate-d ₂ monohydrate	700-850	S	H bond	Fujita	JACS	78 (1956)	3963
$\text{CuD}_{12}\text{N}_4\text{O}_4\text{S}_2\text{D}_2\text{O}$	Copper (II)-ammonia complex sulfate-d ₂ monohydrate-d ₂	982	Sol	Assign, Freq	Powell	JCS	- (1956)	3108

CuBr	Copper bromide	-	-	-	Polarizability theory Freq	Szigetti Szigetti	TFS PRS	45 (1949) 204 (1950)	153 51
CuBr ₂	Cupric bromide	4.75 μ	Sol	Absorption		Barr	JCP	7 (1939)	8
CuCl ₂	Cupric chloride	1.4 μ 0.8-1.1 μ 1-15 μ	Sol L, Sol Sol	Spec Beer's law Spec		Coblentz Chatterjee Lagerqvist	BBS JCP AF	7 (1941) 20 (1952) 12 (1957)	619 344 491
CuCl ₂ ·2H ₂ O	Cupric chloride dihydrate	5.75-7 μ	S	Struct		Rundle	JCP	23 (1955)	2450
CuCl ₂ ·0.6H ₂ O	Copper (II)- perchlorate hexahydrate	700-850	S	H bond		Fujita	JACS	78 (1956)	3963
CuF ₄	Copper (II)- complex fluoro ion	-	S	Freq, Struct		Peacock	JCS	- (1959)	2762
CuF ₆ Si	Copper fluo- silicate	488-735	-	Band study		DeLattre	JCP	20 (1952)	1180
CuN ₂ O ₆	Cupric nitrate	0.8-1.1 μ 1000-1500 2-16 μ 2-15 μ	L, Sol S S S	Beer's law Band study Spec Spec		Chatterjee Addison Meloche Addison	JCP CIL JINC JCS	20 (1952) (1958) 6 (1958) - (1960)	344 468 104 613
CuN ₂ O ₆ ·3H ₂ O	Cupric nitrate trihydrate	2-16 μ 700-1600 300-880	S S S	Spec, Freq Freq, Assign Spec		Miller Ferraro Miller	AC JMS SA	24 (1952) 4 (1960) 16 (1960)	1253 99 135
CuO	Copper oxide	5-50 μ	-	Absorption		Cartwright	PR	35 (1930)	415
Cu ₃ Se ₂ ·2H ₂ O	Copper selenite dihydrate	2-16 μ	S	Spec		Miller	AC	24 (1952)	1253
Cu ₂ S	Copper sulfate	2-4 μ 8-10 μ 0.5-1.3 μ	Sol L Sol	Spec Reflection Optical properties		Angstrom Plyler Pfund	PR PR JOSA	3 (1914) 28 (1926) 29 (1939)	47 284 56

				Interpretation of spec	Duval			
		0.8-1.1 μ	L	Beer's law	Chatterjee	CPR	237 (1948)	1153
		2-16 μ	S	Spec, Freq	Miller	JCP	20 (1952)	344
		290-650	S	Assign	Duval	AC	24 (1952)	1253
		800-900	S	H bond	Fujita	CPR	239 (1954)	249
						JACS	78 (1956)	3963
$\text{Cu}_4\text{S}_5 \cdot 5\text{H}_2\text{O}$	Cupric sulfate pentahydrate		-	Freq	Hollaender	PR	34 (1929)	994
		5-50 μ	S	Absorption	Cartwright	PR	35 (1930)	415
		2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
Cu_4Mn_2	Copper manganite	350-5800	S	Spec, FC	Dasgupta	TFS	53 (1956)	909
$\text{Cu}_4\text{Se}_4 \cdot 5\text{H}_2\text{O}$	Copper selenate pentahydrate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		300-880	S	Spec	Miller	SA	16 (1960)	135
Cu_4W_4	Cupric tungstate	290-650	S	Assign	Duval	CPR	239 (1954)	249
CuS	Copper sulfide	5-50 μ	-	Absorption	Cartwright	PR	35 (1930)	415
$\text{Cu}_2\text{CH}_2\text{O}_5$	Basic cupric carbonate	1-6 μ	S	Spec	Hunt	AC	22 (1950)	1478
$\text{Cu}_2\text{CH}_2\text{O}_5 \cdot \text{H}_2\text{O}$	Basic copper carbonate hydrate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
$\text{Cu}_2\text{C}_8\text{H}_{12}\text{O}_8 \cdot 2\text{H}_2\text{O}$	Copper acetate (dimer) dihydrate	700-850	S	H bond	Fujita	JACS	78 (1956)	3963
		400-5000	S	Spec	Nakamoto	JACS	79 (1957)	4904
$\text{Cu}_2\text{C}_{12}\text{H}_{10}\text{Cl}_4\text{N}_4$	Pyridinaldazine-di-Copper (II) chloride	1400-1700	S	Freq, Struct	Stratton	JACS	82 (1960)	4834
$\text{Cu}_2\text{H}_3\text{BrO}_3$	Cupric trihydroxy-bromide	270-4000	S	Freq	Tarte	SA	13 (1958)	107
$\text{Cu}_2\text{H}_3\text{ClO}_3$	Cupric trihydroxy-chloride	270-4000	S	Freq	Tarte	SA	13 (1958)	107
$\text{Cu}_2\text{H}_4\text{N}_4\text{O}_8\text{P}_4 \cdot 4\text{H}_2\text{O}$	Dicopper tetra-phosphonitrilate tetrahydrate	705-3390	S	Freq, I	Corbridge	JCS	- (1954)	4555

Fe COMPOUNDS

FeCO_3	Iron carbonate	22-310 μ - 2-16 μ	S - S	Reflectivity Freq, Assign Spec	Weniger Schaefer Meloche	JOSA TFS JINC	7 (1923) 25 (1929) 6 (1958)	517 841 104
$\text{FeC}_4\text{H}_{12}\text{Cl}_3\text{O}_5\text{S}_2$	Iron (III)-dimethyl sulfoxide complex chloride	650-4000	S	Spec, Assign	Cotton	JFC	64 (1960)	1534
$\text{FeC}_5\text{H}_5\text{N}_5\text{ONa}_2$	Iron (III)-cyanide, water complex (sodium salt)	1600-3400	S	Freq	Herrington	JCS	- (1955)	3555
$\text{FeC}_5\text{H}_2\text{N}_5\text{ONa}_3 \cdot \text{H}_2\text{O}$	Iron (II)-cyanide, water complex (sodium salt) monohydrate	1600-3400	S	Freq	Herrington	JCS	- (1955)	3555
$\text{FeC}_5\text{H}_3\text{N}_6\text{Na}_2 \cdot \text{H}_2\text{O}$	Iron (III)-ammonia, cyanide complex (sodium salt) mono- hydrate	700-3600	S	Freq	Herrington	JCS	- (1955)	3555
$\text{FeC}_5\text{H}_3\text{N}_6\text{Na}_3 \cdot 6\text{H}_2\text{O}$	Iron (II)-ammonia, cyanide complex (sodium salt) hexa- hydrate	700-3600	S	Freq	Herrington	JCS	- (1955)	3555
$\text{FeC}_5\text{H}_7\text{O}_2$	Acetylacetone iron chelate	-	Sol	Freq	Bellamy	JCS	- (1954)	4491
$\text{FeC}_5\text{N}_6\text{ONa}_2$	Iron (III)-cyanide, nitric oxide, complex (sodium salt)	1700-2050	S	Freq	Lewis	JINC	7 (1958)	32
$\text{FeC}_5\text{N}_6\text{ONa}_2 \cdot 2\text{H}_2\text{O}$	Iron (III)-cyanide, nitric oxide complex (sodium salt)dihydrate	600-3600 300-880	S S	Freq, Struct Spec	Herrington Miller	JCS SA	- (1955) 16 (1960)	3555 135

$\text{FeC}_5\text{N}_6\text{OK}_2\cdot\text{H}_2\text{O}$	Iron (III)-cyanide, nitric oxide complex (potassium salt) monohydrate	1700-2050	S	Freq	Lewis	JINC	7 (1958)	32
FeC_5O_5	Iron carbonyl	-	-	FC	Sheline	JCP	18 (1950)	602
		2-22 μ	G,L	Spec, Assign	Sheline	JACS	72 (1950)	1107
		2.5-4.5 μ	-	Spec	Sternberg	JACS	75 (1953)	3148
		-	Sol	Freq	Sternberg	JACS	77 (1955)	2675
FeC_5N_6	Ferricyanide ion	-	-	Struct	Cotton	JCP	29 (1958)	427
		-	-	NCA	Fateley	SA	10 (1958)	8
		400-4000	G,L	NCA, Spec, Assign	O'Dwyer	JMS	2 (1958)	144
		-	-	NCA, Assign	Kawai	NKZ	81 (1960)	1213
FeC_6N_6	Ferrocyanide ion	-	-	Freq	Caglioti	AAN	22 (1957)	266
		450-2200	-	Freq	Caglioti	JINC	8 (1958)	87
		250-2200	S	Spec, Assign	Hidalgo	ARS	56A (1960)	9
FeC_6N_6	Ferrocyanide ion	-	-	Freq	Caglioti	AAN	22 (1957)	266
		450-2200	-	Freq	Caglioti	JINC	8 (1958)	87
		250-2200	-	Spec, Assign	Hidalgo	ARS	56A (1960)	9
$\text{FeC}_6\text{N}_6\text{Ca}_2\cdot 12\text{H}_2\text{O}$	Calcium ferrocyanide dodecahydrate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		300-880	S	Spec	Miller	SA	16 (1960)	135
		0.8-1.25 μ	Sol	Magnetic rotation	Ingersoll	JOSA	6 (1922)	663
		4.8-5.4 μ	Sol	Spec	Gordy	JCP	3 (1935)	664
$\text{FeC}_6\text{N}_6\text{K}_3$	Potassium ferricyanide	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		4.7-5.75 μ	S	Usage	Wiberly	AC	29 (1957)	210
		250-2200	-	Assign	Hidalgo	CPR	249 (1959)	233
		300-880	S	Spec	Miller	SA	16 (1960)	135
$\text{FeC}_6\text{N}_6\text{K}_4$	Potassium ferrocyanide	0.8-1.25 μ	Sol	Magnetic rotation	Ingersoll	JOSA	6 (1922)	663
		2-5 μ	S	Spec	Bonino	AAN	25 (1958)	401

	250-2200	-	Assign	Hidalgo	CPR	249 (1959)	233
$\text{FeC}_6\text{N}_6\text{K}_4 \cdot 3\text{H}_2\text{O}$	Potassium ferrocyanide trihydrate	S	Spec	Miller	AC	24 (1952)	1253
		S	Spec	Miller	SA	16 (1960)	135
$\text{FeC}_6\text{N}_6\text{Na}_4$	Sodium ferrocyanide	Sol	Spec	Gordy	JCP	3 (1935)	664
$\text{FeC}_6\text{N}_6\text{Na}_4 \cdot 10\text{H}_2\text{O}$	Sodium ferrocyanide decahydrate	S	Spec	Miller	AC	24 (1952)	1253
		S	Spec	Miller	SA	16 (1960)	135
$\text{FeC}_6\text{O}_{12}\text{K}_3 \cdot 3\text{H}_2\text{O}$	Iron (III)-oxalate complex (potassium salt) trihydrate	S	Assign	Schmelz	SA	9 (1957)	51
$\text{FeC}_7\text{H}_4\text{O}_3$	Cyclopentadienon iron dicarbonyl	S	Spec, Freq	Green	JCS	- (1960)	989
$\text{FeC}_7\text{H}_5\text{ClO}_2$	Cyclopentadienyl dicarbonmonoxide chloro iron (II)	Sol	Spec, Freq, Config.	Piper	JINC	1 (1955)	165
$\text{FeC}_8\text{H}_4\text{F}_3\text{O}_2\text{S}$	Thenoyl trifluoro-acetone iron chelate	Sol	Freq	Bellamy	JCS	- (1954)	4491
$\text{FeC}_8\text{H}_4\text{O}_4$	Cyclopentadienon iron tricarbonyl	S	Spec, Freq	Green	JCS	- (1960)	989
$\text{FeC}_8\text{H}_5\text{NO}_2$	Cyclopentadienyl di-carbonmonoxide cyano iron (II)	Sol	Spec, Freq, Config., Struct	Piper	JINC	1 (1955)	165
$\text{FeC}_8\text{H}_8\text{O}_2$	Cyclopentadienyl di-carbonmonoxide methyl iron (II)	Sol	Spec, Freq	Piper	JINC	3 (1956)	104

	2-16 μ	-	Spec	Wilkinson	JACS	76 (1954)	1970
	817-1420	-	Struct	Dunitz	JCP	23 (1955)	954
	600-3200	S	Spec	Wilkinson	JINC	2 (1956)	95
	300-3600	Sol,G	Spec, Struct, NCA, Freq assign	Lippincott	SA	10 (1958)	307
	-	S	Freq	Kazitsyna	DANS	127 (1959)	333
	1800-6600	S	Spec	Winter	SA	15 (1959)	1085
	2-15 μ	S	Spec	Wilkinson	JACS	76 (1954)	4281
	800-1800	S	Spec	Donald	JACS	82 (1960)	4191
	1700-2050	S	Struct	Lewis	JINC	7 (1958)	32
	-	Sol	Struct	Griffith	JCS	- (1958)	3993
	300-3600	Sol,G	Spec, Struct, Freq, Assign, NCA	Lippincott	SA	10 (1958)	307
	600-4000	S	Spec assign	Green	JCS	- (1960)	989
	600-4000	Sol	Spec	Green	JCS	- (1960)	989
	600-4000	Sol	Spec	Green	JCS	- (1960)	989
	-	-	Band study	Nesmeyanov	DANS	125 (1959)	1037
$FeC_{10}H_{10}Cl_4Ga$							
$FeC_{10}H_{12}N_2O_8$							
Na_2H_2O							
$FeC_{10}H_{20}N_3OS_4$							
$FeC_{10}H_{10}Cl_3NO_6$							
$FeC_{11}H_{10}O_5$							
$FeC_{11}H_{11}D$							
$FeC_{11}H_{12}$							
$FeC_{11}H_{12}$							

$\text{FeC}_{11}\text{H}_{12}\text{O}$	Ferrocenyl carbinol	-	Sol	H bond	Trifan	JACS 82 (1960)	5010
$\text{FeC}_{12}\text{H}_{10}\text{S}_2$	Iron (II)-pyridine, isothiocyanate complex	-	S	Freq assign	Mitchell	JCS - (1960)	1912
$\text{FeC}_{12}\text{H}_{10}\text{O}$	Iron-carbonmonoxide cyclopentadiene complex	450-4000	Sol	Spec, Freq	Piper	JINC 3 (1956)	104
$\text{FeC}_{12}\text{H}_{12}\text{O}$	Acetylferrocene	5.97 μ	-	Freq	Woodward	JACS 74 (1952)	3458
$\text{FeC}_{12}\text{H}_{12}\text{O}$	Ferrocene mono-carboxylic acid methyl ester	5.82 μ	-	Freq	Woodward	JACS 74 (1952)	3458
$\text{FeC}_{12}\text{H}_{14}$	Dimethylferrocene	-	-	Band study	Nesmeyanov	DANS 125 (1959)	1037
$\text{FeC}_{12}\text{H}_{14}$	Ethylferrocene	9-11.5 μ	-	Struct Band study	Rosenblum Nesmeyanov	CIL - (1958) DANS 125 (1959)	953 1037
$\text{FeC}_{12}\text{H}_{14}\text{O}$	Ferrocenyl methyl carbinol	-	Sol	H bond	Trifan	JACS 82 (1960)	5010
$\text{FeC}_{12}\text{H}_{14}\text{O}$	α -Hydroxy ethyl ferrocene	-	Sol	H bond	Kuhn	JACS 79 (1957)	6566
$\text{FeC}_{12}\text{H}_{14}\text{O}$	2-Ferrocenyl ethanol	-	Sol	H bond	Trifan	JACS 82 (1960)	5010
$\text{FeC}_{12}\text{H}_{18}\text{Cl}_2\text{N}_6$	Hexamethyl ferrocyanide chloride	-	-	Freq, Assign, Struct	Fabbri	ANCR 48 (1958)	909
$\text{FeC}_{12}\text{H}_{30}\text{I}_2\text{N}_6$	Iron (II)-biacetyl, dihydrazone complex iodide	-	S	Spec, Assign	Stonfer	JACS 82 (1950)	3491

FeC ₁₂ H ₃₆ O ₆	Hexaethanolo iron (II)	-	Sol	Spec	Furlani	GCI	87 (1957)	371
FeC ₁₃ H ₁₀ O ₂	Iron-carbonmonoxide cyclopentadienyl phenyl complex	450-4000	Sol	Spec, Freq	Piper	JINC	3 (1956)	104
FeC ₁₃ H ₁₆	iso-Propylferrocene	-	-	Band freq	Nesmeyanov	DANS	125 (1959)	1037
FeC ₁₃ H ₁₆ O	Ferrocenyl dimethyl carbinol	-	Sol	H bond	Trifan	JACS	82 (1960)	5010
FeC ₁₄ H ₁₄ Cl ₂ N ₄ · xH ₂ O	Iron (II)-bis- (pyridinal)-ethylene- diamine complex chloride polyhydrate	600-4000	S	Assign	Bush	JACS	78 (1956)	1137
FeC ₁₄ H ₁₆	Tetrahydroindenyl cyclopentadienyl iron	-	-	Band study	Nesmeyanov	DANS	125 (1959)	1037
FeC ₁₄ H ₁₆	Tetramethylene ferrocene	-	-	Band study	Nesmeyanov	DANS	125 (1959)	1037
FeC ₁₄ H ₁₆ O	1-Acetyl-1'-ethyl- ferrocene	9-11.5/μ	-	Struct	Rosenblum	CIL	- (1958)	953
FeC ₁₄ H ₁₆ O	1-Acetyl-2'-ethyl- ferrocene	9-11.5/μ	-	Struct	Rosenblum	CIL	- (1958)	953
FeC ₁₄ H ₁₆ O	1-Acetyl-β-ethyl- ferrocene	9-11.5/μ	-	Struct	Rosenblum	CIL	- (1958)	953
FeC ₁₄ H ₁₆ O	1:1'-Dimethyl-2- acetylferrocene	9-11.5/μ	-	Struct	Rosenblum	CIL	- (1958)	953

$\text{FeC}_{14}\text{H}_{16}\text{O}$	1:1'-Dimethyl-3-acetylferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL - (1958)	953
$\text{FeC}_{14}\text{H}_{18}$	t-Butylferrocene	-	-	Band study	Nesmeyanov	DANS 125 (1959)	1037
$\text{FeC}_{14}\text{H}_{18}$	Diethylferrocene	-	-	Band study	Nesmeyanov	DANS 125 (1959)	1037
$\text{FeC}_{14}\text{H}_{18}$	Mesitylene cyclopentadiene iron (0)	600-4000	Sol	Spec	Green	JCS - (1960)	989
$\text{FeC}_{14}\text{H}_{16}\text{Cl}_2\text{O}$ _{3 197}	Iron (III)-dimethyl sulfoxide complex perchlorate dimethyl sulfoxide	650-4000	S	Assign, Spec	Cotton	JPC 64 (1960)	1534
$\text{FeC}_{15}\text{H}_{21}\text{O}$	Iron (III)-acetyl acetate	625-5000	S	Spec, Struct	West	JINC 5 (1958)	295
$\text{FeC}_{16}\text{H}_{14}$	Phenylferrocene	3-16 μ 9-11.5 μ -	Sol - -	Spec Struct Band study	Panson Rosenblum Nesmeyanov	JACS 76 (1954) CIL - (1958) DANS 125 (1959)	2187 953 1037
$\text{FeC}_{16}\text{H}_{18}\text{O}$	1:1'-Diacetyl-2-ethylferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL - (1958)	953
$\text{FeC}_{16}\text{H}_{18}\text{O}$	1:1'-Diacetyl-3-ethylferrocene	9-11.5 μ	S	Struct	Rosenblum	CIL - (1958)	953
$\text{FeC}_{16}\text{H}_{22}$	Diisopropylferrocene	-	-	Band study	Nesmeyanov	DANS 125 (1959)	1037
$\text{FeC}_{18}\text{H}_{14}$	Dibenzferrocene	2-15 μ	Sol	Spec	Panson	JACS 76 (1954)	2024
$\text{FeC}_{18}\text{H}_{16}\text{O}$	1-Acetyl-1'-phenylferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL - (1958)	953
$\text{FeC}_{18}\text{H}_{16}\text{O}$	1-Acetyl-2-phenylferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL - (1958)	953
$\text{FeC}_{18}\text{H}_{16}\text{O}$	1-Acetyl-3-phenylferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL - (1958)	953

$\text{FeC}_{18}\text{H}_{16}\text{O}$	2-Acetyl-2'-phenyl-ferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL - (1958)	953
$\text{FeC}_{18}\text{H}_{16}\text{O}$	2-Acetyl-3-phenyl-ferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL - (1958)	953
$\text{FeC}_{18}\text{H}_{16}\text{O}$	2-Acetyl-4-phenyl-ferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL - (1958)	953
$\text{FeC}_{18}\text{H}_{18}$	Ethylphenylferrocene	-	-	Band study	Nesmeyanov	DANS 125 (1959)	1037
$\text{FeC}_{18}\text{H}_{24}\text{O}$	1,1'-Diisopropyl-2-acetylferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL - (1958)	953
$\text{FeC}_{18}\text{H}_{24}\text{O}$	1,1'-Diisopropyl-3-acetylferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL - (1958)	953
$\text{FeC}_{18}\text{H}_{26}$	Di-t-butylferrocene	-	-	Band study	Nesmeyanov	DANS 125 (1959)	1037
$\text{FeC}_{18}\text{H}_{36}\text{I}_2\text{N}_6$	Iron (II)-biacetyl bis-methylimine complex iodide	600-4000	S	Assign	Bush	JACS 78 (1956)	1137
$\text{FeC}_{18}\text{H}_{48}\text{O}_6$	Hexaisopropanolo iron (II)	-	Sol	Spec	Furlani	GCI 87 (1957)	371
$\text{FeC}_{19}\text{H}_{16}\text{O}_3$	(O-Carbomethoxy-phenyl)-ferrocenyl ketone	6.02 μ	-	Freq	Woodward	JACS 74 (1952)	3458
$\text{FeC}_{19}\text{H}_{23}\text{N}$	1-Cyano-1-dicyclopentanyl iron-2-phenyl ethylene	4.5-14.32 μ	-	Band study	Howser	JOC 23 (1958)	2006
$\text{FeC}_{21}\text{H}_{15}\text{O}_6$	Iron (III)-tropolonate	-	S	Band freq	Bryant	JOC 19 (1954)	1889
$\text{FeC}_{21}\text{H}_{24}\text{I}_2\text{N}_2\text{O}_2\text{H}_2\text{O}$	Iron (II)-pyridinal methylimine complex iodide monohydrate	600-4000	S	Assign	Bush	JACS 78 (1956)	1137

$\text{FeC}_{22}\text{H}_{18}$	Diphenylferrocene	-	-	Band study	Nesmeyanov	DANS	125 (1959)	1037
$\text{FeC}_{22}\text{H}_{18}$	1:1'-Diphenylferrocene	3-16 μ	Sol	Spec	Panson	JACS	76 (1954)	2187
$\text{FeC}_{24}\text{H}_{20}$	1:1'-Diphenyl-2-acetyl-ferrocene	9-11.5 μ	S	Struct	Rosenblum	CIL	- (1958)	953
$\text{FeC}_{24}\text{H}_{20}$	1:1'-Diphenyl-3-acetyl-ferrocene	9-11.5 μ	-	Struct	Rosenblum	CIL	- (1958)	953
$\text{FeC}_{24}\text{H}_{22}$	Ditolylferrocene	-	-	Band study	Nesmeyanov	DANS	125 (1959)	1037
$\text{FeC}_{24}\text{H}_5\text{N}_3\text{O}_6\text{P}$	Ferric-di-n-butyl-phosphate	714-5000	S	Interaction study	Smith	JINC	9 (1959)	150
$\text{FeC}_{24}\text{H}_{60}\text{O}_6$	Hexaisobutanolo-iron (II)	-	Sol	Spec	Furlani	GCI	- (1957)	371
$\text{FeC}_{27}\text{H}_{18}\text{N}_3\text{O}_8$	Iron (III)-8-hydroxy-quinolate	8-15 μ	S	Spec Assign, Spec	Charles Charles	AC SA	25 (1953) 8 (1956)	530A 1
$\text{FeC}_{29}\text{H}_{28}\text{N}_4\text{O}_3$	4-Monoformyl deuterohaem dimethyl ester	600-1800	Sol	Spec, Assign	Falk	AJSR	4A (1951)	579
$\text{FeC}_{30}\text{H}_{24}\text{Cl}_2\text{N}_6\text{O}_8$	Iron (II)-2,2'-bipyridine complex perchlorate	600-4000 600-2000	S	Assign Interpretation	Bush Schilt	JACS JINC	78 (1956) 9 (1959)	1137 211
$\text{FeC}_{30}\text{H}_{24}\text{Cl}_2\text{N}_6\text{O}_{12}$	Iron (III)-2,2'-bipyridine complex perchlorate	600-2000	S	Interpretation	Schilt	JINC	9 (1959)	211
$\text{FeC}_{32}\text{H}_{32}\text{N}_4\text{O}_4$	Deuterohaem dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR	4A (1951)	579
$\text{FeC}_{34}\text{H}_{26}$	1,3,1',3'-Tetraphenyl-ferrocene	3-16 μ	S	Spec	Panson	JACS	76 (1954)	2187
$\text{FeC}_{34}\text{H}_{32}\text{N}_4\text{O}_4$	Protohaem free acid	670-4000	S	Spec, Assign	Falk	AJSR	4A (1951)	579

$\text{FeC}_{34}\text{H}_{32}\text{N}_4\text{O}_6$	Diformyl deuterohaem dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$\text{FeC}_{34}\text{H}_{34}\text{N}_4\text{O}_5$	Monocetyl deuterohaem dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$\text{FeC}_{34}\text{H}_{36}\text{N}_4\text{O}_4$	Rhodohaem dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$\text{FeC}_{36}\text{H}_{24}\text{Cl}_2\text{N}_6 \cdot 6\text{H}_2\text{O}$	Iron (II)-1,10-phenanthroline complex chloride hexahydrate	600-4000	S	Assign	Bush	JACS 78 (1956)	1137
$\text{FeC}_{36}\text{H}_{24}\text{Cl}_2\text{N}_6\text{O}_8$	Iron (II)-1,10-phenanthroline complex perchlorate	600-4000	S	Spec	Schilt	JINC 9 (1959)	211
$\text{FeC}_{36}\text{H}_{24}\text{Cl}_3\text{N}_2\text{O}_2 \cdot \text{H}_2\text{O}$	Iron (III)-1,10-phenanthroline complex perchlorate monohydrate	600-2000	S	Spec	Schilt	JINC 9 (1959)	211
$\text{FeC}_{36}\text{H}_{30}$	1,1'-Dibenzohydryl ferrocene	3-16/ μ	Sol	Spec	Panson	JACS 76 (1954)	2187
$\text{FeC}_{36}\text{H}_{30}\text{Br}_2\text{O}_2\text{P}_2$	Iron (II)-bromide-Triphenylphosphine oxide addition compound	1100-1300	S	Assign	Sheldon	JACS 80 (1958)	4775
$\text{FeC}_{36}\text{H}_{30}\text{N}_2\text{O}_2$	Iron-nitric oxide, triphenylphosphine complex	1700-2050	Sol	Freq	Lewis	JINC 7 (1958)	32

$\text{FeC}_{36}\text{H}_{34}\text{N}_4\text{O}_6$	Diacetyl deuterohaem dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$\text{FeC}_{36}\text{H}_{36}\text{N}_4\text{O}_4$	Protohaem dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$\text{FeC}_{36}\text{H}_{38}\text{N}_4\text{O}_4$	Protoporphyrin dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$\text{FeC}_{36}\text{H}_{40}\text{N}_4\text{O}_4$	Mesohaem dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$\text{FeC}_{36}\text{H}_{40}\text{N}_4\text{O}_6$	Haematachaem dimethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$\text{FeC}_{46}\text{H}_{34}$	1,2,4,1',2',4'-Hexa-phenylferrocene	3-16 μ	S	Spec	Panson	JACS 76 (1954)	2187
$\text{FeC}_{48}\text{H}_{52}\text{N}_4\text{O}_{16}$	Urchaem (I) octamethyl ester	670-4000	S	Spec, Assign	Falk	AJSR 4A (1951)	579
$\text{FeC}_{72}\text{H}_{60}\text{Cl}_3\text{O}_{16}\text{P}_4$	Iron (III)-triphenylphosphine oxide complex perchlorate	900-1300	S	Freq	Cotton	JCS - (1960)	2199
FeH	Iron hydride	-	-	FC	Platt	JCP 18 (1950)	932
$\text{FeHNO}_5\text{P}\cdot\text{xH}_2\text{O}$	Nitrosoferrous hydrogen phosphate hydrate	- 1700-2050	Sol S	Struct Struct	Griffith Lewis	JCS - (1958) JINC 7 (1958)	3993 32

$\text{FeH}_4\text{NO}_4\text{P}_2\text{H}_2\text{O}$	2-15 μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	493
Ferrous ammonium orthophosphate monohydrate							
$\text{FeH}_5\text{N}_6\text{O}_5\text{S}$	1700-1875	S	Struct	Griffith	JCS	- (1958)	3993
Iron (II)-ammonia, nitric oxide complex sulfate							
$\text{FeH}_8\text{Cl}_2\text{N}_4$	15-35 μ	-	Freq	Sacconi	N	186 (1960)	549
Iron (II)-hydrazine complex chloride							
$\text{FeH}_8\text{N}_6\text{O}_5\text{S}_2$	0.5-1.3 μ 0.8-1.1 μ	Sol L	Optical properties Beer's law	Pfund Chatterjee	JOSA JCP	29 (1939) 20 (1952)	56 344
Ferrous ammonium sulfate							
$\text{FeH}_{10}\text{Cl}_2\text{NO}_6$	-	-	Struct	Griffith	JCS	- (1958)	3993
Iron (II)-nitric oxide, water complex chloride							
$\text{FeH}_{10}\text{NO}_{10}\text{S}$	-	Sol	Struct	Griffith	JCS	- (1958)	3993
Iron (II)-nitric oxide, water complex sulfate							
$\text{FeH}_{10}\text{NO}_{10}\text{Se}$	1700-1875	-	Struct	Griffith	JCS	- (1958)	3993
Iron (II)-nitric oxide, water complex selenate							
$\text{FeH}_{12}\text{F}_6\text{N}_3$	1400-4000	S	Spec	Crocket	JACS	82 (1960)	4158
Ammonia hexafluoro ferrate (III)							
$\text{FeH}_{12}\text{O}_6$	-	-	Freq, FC	Schultz	JCP	10 (1942)	194
Hexaquo-iron (II)	-	Sol	Spec	Furlani	GCI	- (1957)	371

$\text{FeH}_{15}\text{C}_1\text{N}_6\text{O}$	Iron (II)-ammonia, nitric oxide complex chloride	1700-1875	S	Struct	Griffith	JCS - (1958)	3993
$\text{FeH}_{15}\text{N}_6\text{O}_5\text{S}$	Iron (II)-ammonia, nitric oxide complex sulfate	1700-1875	S	Struct	Griffith	JCS - (1958)	3993
$\text{FeH}_{18}\text{N}_6$	Hexamine iron (II)	-	Sol	Spec	Furlani	GCI - (1957)	371
$\text{FeBr}_8\text{O}_2\text{P}_2$	Phosphorous oxybromide iron (II) bromide	1100-1300	S	Bonding	Sheldin	JACS 80 (1958)	4775
FeCl_3	Ferric chloride	0.8-1.25 μ 1-15 μ 190-700	Sol Sol G	Magnetic rotation Spec Spec	Ingersoll Lagerqvist Wilmshurst	JOSA 6 (1922) AF 12 (1957) JMS 5 (1960)	663 491 343
FeCl_6	Hexachloro iron (II)	-	Sol	Spec	Furlani	GCI - (1957)	571
FeF_4	Iron (II)-complex fluoro ion	-	S	Freq, Struct	Peacock	JCS - (1959)	2762
FeF_4	Iron (II)-complex fluoro ion	-	S	Freq, Struct	Peacock	JCS - (1959)	2762
FeI_3O_9	Ferric iodate	-	S	Spec, Struct	Dasent	JCS - (1960)	2429
$\text{FeN}_2\text{O}_2\text{SK}$	Iron (III)-nitric oxide, sulfide complex (potassium salt)	1700-2050	S	Freq	Lewis	JINC 7 (1958)	32
FeN_3O_9	Ferric nitrate	2-16 μ	S	Spec	Meloche	JINC 6 (1958)	104

$\text{FeN}_3\text{O}_9 \cdot 9\text{H}_2\text{O}$	Ferric nitrate monohydrate	2-16 μ 700-1600 300-880	S S S	Spec, Freq Freq, Assign Spec	Miller Ferraro Miller	AC JMS SA	24 (1952) 4 (1960) 16 (1960)	1253 99 135
FeN_4O_4	Iron (III)-nitrate, nitric oxide complex	1700-1875	S	Struct	Griffith	JCS	- (1958)	3993
FeO	Iron monoxide	7000-14000	-	Spec	Bass	PK	87 (1952)	214
$\text{FeO}_4\text{P}_2\text{H}_2\text{O}$	Iron orthophosphate dihydrate	2-15 μ	S	Band freq, I, Assign	Corbridge	JCS	- (1954)	493
$\text{FeO}_4\text{P}_4\text{H}_2\text{O}$	Iron (III)-phosphate tetrahydrate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
FeO_4S	Ferrous sulfate	0.8-1.25 μ 0.8-1.1 μ	Sol L	Magnetic rotation Beer's law	Ingersoll Chatterjee	JOSA JCP	6 (1922) 20 (1952)	663 344
$\text{FeO}_4\text{S}_7\text{H}_2\text{O}$	Ferrous sulfate heptahydrate	2-16 μ 300-880	S S	Spec, Freq Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
FeO_4Mg	Magnesium ferrite	280-4000	S	Spec, Assign, FC, I, Thermo.	Waldron	PR	99 (1955)	1727
$\text{Fe}_2\text{C}_4\text{H}_{10}\text{N}_4\text{O}_4\text{S}_2$	Nitrosylthioethyanato iron	1700-2050	S	Struct	Lewis	JINC	7 (1958)	32
$\text{Fe}_2\text{C}_9\text{O}_9$	Iron enneacarbonyl	2-21 μ 2-12.5 μ	S S	Spec, Assign Spec	Sheline Sheline	JACS JACS	72 (1950) 73 (1951)	1107 1615
$\text{Fe}_2\text{C}_{10}\text{H}_4\text{O}_6$	Repe Organo iron complex	600-4000	Sol	Spec, Assign	Green	JCS	- (1960)	989

$\text{Fe}_2\text{H}_{12}\text{O}_{10}$	Carbonmonoxide Iron-cyclopentadiene complex	600-5000	S	Struct	Piper	JINC	1 (1955)	165
$\text{Fe}_2\text{C}_2\text{H}_3\text{Cl}_4\text{N}_4$	Tris-(biacetyl dihydrazone)-iron (II)-tetra-chloroferrate (II)	600-4000	S	Assign	Bush	JACS	78 (1956)	1137
$\text{Fe}_2\text{C}_2\text{H}_{14}\text{O}_8$	Di-(77-cyclopentadienyl iron) tetra-carbonyl	4.5-6 μ	S	Struct	Stammreich	JINC	9 (1959)	3
$\text{Fe}_2\text{C}_2\text{H}_{22}$	Dimethylene diferrocene	-	-	Band study	Nesmeyanov	DANS	125 (1959)	1037
$\text{Fe}_2\text{C}_3\text{H}_{30}$	Diphenyl dimethylene diferrocene	-	-	Band study	Nesmeyanov	DANS	125 (1959)	1037
$\text{Fe}_2\text{H}_8\text{N}_2\text{O}_{16}\text{S}_4$	Ferric ammonium sulfate	0.777-2.8 μ 0.8-1.25 μ	Sol Sol	Transmission curves Magnetic rotation	Nichols Ingersoll	PR JOSA	1 (1893) 6 (1922)	1 663
$\text{Fe}_2\text{H}_8\text{N}_2\text{O}_{28}\text{S}_7$	Ammonium iron alum	0-1.4 μ	Sol	Spec	Coblentz	BBS	7 (1911)	619
$\text{Fe}_2\text{NO}_9\text{S}_2\cdot 13\text{H}_2\text{O}$	Iron (II)-sulphate, nitric oxide complex tridecahydrate	1700-1875	S	Struct	Griffith	JCS	- (1958)	3993
Fe_2O_3	α -Ferric oxide	4000-14500	S	Spec	Morin	PR	93 (1954)	1195
$\text{Fe}_2\text{O}_3\cdot\text{H}_2\text{O}$	Ferric oxide hydrate	-	-	H bond	Glemser	ZAUA	297 (1958)	175
$\text{Fe}_2\text{O}_4\text{Co}$	Cobalt ferrite	280-4000	S	Spec, Assign, FC, I, Thermo.	Waldron	Ph	99 (1955)	1727

Fe_2O_4	Manganese ferrite	280-4000	S	Spec, Assign, FC, I, Thermo.	Waldron	PH	99 (1955)	1727
Fe_2O_3	Ferric sulfate	0.8-1.25 μ	Sol	Magnetic rotation	Ingersoll	JOSA	6 (1922)	663
$\text{Fe}_2\text{O}_3 \cdot x\text{H}_2\text{O}$	Ferric sulfate polyhydrate	300-880	S	Spec	Miller	SA	16 (1960)	135
$\text{Fe}_3\text{C}_3\text{O}_{12}$	Iron tetracarbonyl (trimer)	2-12.5 μ 1818-2105	S, Sol S	Spec, Struct Spec, Struct	Sheline Dahl	JACS JCP	73 (1951) 27 (1957)	1615 323
Fe_3O_4	Iron ferrite	280-4000	S	Spec, Assign, FC, I, Thermo.	Waldron	PH	99 (1955)	1727
$\text{Fe}_4\text{H}_2\text{N}_2\text{O}_8\text{S}$	Roussin's black salt	1700-2050	S	Struct	Lewis	JINC	7 (1958)	32
$\text{Fe}_7\text{C}_{18}\text{N}_{18}$	Ferricferrocyanide	2-15 μ	S	Spec	Harkins	AC	31 (1959)	541

Fr. COMPOUNDS

FrH	Francium hydride	-	-	FC	Sheline	JCP	18 (1950)	927
Fr ₂	Francium	-	-	Freq	Clark	TFS	33 (1937)	1398

Ga. COMPOUNDS

$\text{Ga}_2\text{H}_7\text{O}$	Dimethyl gallium hydroxide	2-16 μ	S, Sol	Spec	Kenny	JACS	76 (1954)	4839
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$\text{GaC}_{27}\text{H}_{16}\text{N}_3\text{O}_3$	Gallium (III)-8-hydroxyquinolate	-	S	Spec	Charles	AC	25 (1953)	530
GaH	Gallium monohydride	-	-	FC	Sheline	JCP	18 (1950)	927
GaBr	Gallium bromide	-	-	Microwave	Mandel	BAPS	2 (1956)	284
$\text{Ga}^{69}\text{Br}^{79}$	Gallium bromide (isotopic)	-	-	Spec, Mol. Const.	Barrett	PR	109 (1958)	1572
GaCl	Gallium chloride	-	-	Microwave	Mandel	BAPS	2 (1956)	284
$\text{Ga}^{69}\text{Cl}^{35}$	Gallium chloride (isotopic)	-	-	Spec, Mol. Const.	Barrett	PR	109 (1958)	1572
GaF_4	Gallium (III)-complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
GaI	Gallium iodide	-	-	Microwave	Mandel	BAPS	2 (1956)	284
$\text{Ga}^{69}\text{I}^{127}$	Gallium iodide (isotopic)	-	-	Spec, Mol. Const.	Barrett	PR	109 (1958)	1572
GaP	Gallium phosphide	6-26 μ	S	Freq, Assign	Kleinman	PR	118 (1960)	110
GaAs	Gallium arsenide	-	-	Spec	Briggs	PR	93 (1954)	912
		-	S	Spec	Braunstein	PR	99 (1955)	1892
		0.85-25 μ	S	Absorption measurement	Spitzer	PR	114 (1959)	59
GaSb	Gallium antimonide	-	-	Spec	Briggs	PR	93 (1954)	912A
		-	S	Spec	Plunt	PR	96 (1954)	576
		-	S	Spec	Collins	PR	98 (1955)	227A
		-	S	Spec	Braunstein	PR	99 (1955)	1892
Ga_2C_2	Gallium carbide	-	-	Freq, Thermo.	Chupka	JPC	62 (1958)	611
Ga_2O_3	Gallium oxide	410-1200	S	Assign	Kolesova	OS	6 (1959)	38
Ga_2Te_3	Gallium telluride	-	-	Activation energy	Harbeck	ZN	139 (1958)	775

Ge COMPOUNDS

GeCH_3Cl_3	Methyl trichlorogermane	-	-	Mol. Const.	IANS	22 (1958)	1307
GeCH_6	Methylgermane	-	-	Band study Mol. Const.	OS JCP	5 (1958) 30 (1959)	530 1210
GeC_2H_8	Dimethylgermane	-	G	Group freq	JACS	75 (1953)	6080
$\text{GeC}_3\text{H}_7\text{Cl}_3$	Isopropylgermanium trichloride	-	Sol	Spec	JACS	73 (1951)	5486
$\text{GeC}_3\text{H}_7\text{Cl}_3$	n-Propylgermanium trichloride	-	Sol	Spec	JACS	73 (1951)	5486
$\text{GeC}_4\text{H}_{12}$	Tetraethylgermane	-	-	Freq Spec, Freq, Assign FC	JCP JACS JCP	14 (1946) 69 (1947) 18 (1950)	389 1410 595
		-	-	FC	JCP	18 (1950)	602
		598-3720 1242	G,L	I, Assign	JACS	75 (1953)	4141
			-	Freq	TFS	51 (1955)	1465
$\text{GeC}_4\text{H}_{12}\text{O}_4$	Tetramethoxygermane	580-2955	L,Sol	Spec, I	JACS	75 (1953)	718
$\text{GeC}_8\text{H}_{20}\text{O}_4$	Tetraethoxygermane	695-2930	L,Sol	Table, I	JACS	75 (1953)	718
$\text{GeC}_8\text{H}_{20}$	Tetraethylgermane	1-16 μ	G	Spec	P	4 (1933)	39
$\text{GeC}_{16}\text{H}_{36}\text{O}_4$	Tetra-n-butoxygermane	699-2920	L,Sol	Table, I	JACS	75 (1953)	718
$\text{GeC}_{18}\text{H}_{46}$	Triphenylgermane	1002-4200	Sol	Freq	JACS	75 (1953)	6080
$\text{GeC}_{18}\text{H}_{16}$	Triphenylgermanol	-	-	Ident H bond	JACS JACS	76 (1954) 82 (1960)	77 6269
$\text{GeC}_{20}\text{H}_{48}\text{O}_2$	Methyltriphenylgermane-carboxylate	-	-	Ident	JACS	76 (1954)	77
$\text{GeC}_{20}\text{H}_{44}\text{O}_4$	Tetra-n-pentoxygermane	699-2910	L,Sol	I	JACS	75 (1953)	718

$\text{GeC}_{24}\text{H}_{20}\text{O}$	Tetraphenylgermane	1089 625-900 8-11 μ	Sol Sol S	Freq Substitution Band freq	Kross Margoshes Nottes	JACS SA CIL	77 (1955) 7 (1955) - (1959)	5858 14 298
$\text{GeC}_{24}\text{H}_{44}\text{O}$	Tetracyclohexylsilane	670-2946	Sol, L	I	Johnson	JACS	75 (1953)	718
$\text{GeC}_{24}\text{H}_{52}\text{O}$	Tetra-n-hexoxygermane	667-2895	L, Sol	I	Johnson	JACS	75 (1953)	718
$\text{GeC}_{25}\text{H}_{20}\text{O}$	Benzyltriphenyl- germane	-	Sol	Freq	Brook	JACS	82 (1960)	5102
$\text{GeC}_{37}\text{H}_{30}$	Triphenylmethyl- triphenylgermane	-	-	Comparison	Brook	JACS	76 (1954)	77
GeH	Germanium hydride	-	-	FC FC	Platt Sheline	JCP JCP	18 (1950) 18 (1950)	932 927
GeHCl_3	Trichloroermane	300-4000	- G	FC Spec	Krishnamachari Lindeman	IJP SA	29 (1955) 9 (1957)	384 47
$\text{Ge}^{70}\text{HCl}_3^{35}$	Trichloroermane (isotopic)	-	-	Microwave	Venkateswarlu	JCP	21 (1953)	1713
$\text{Ge}^{72}\text{HCl}_3^{35}$	Trichloroermane (isotopic)	-	-	Microwave	Venkateswarlu	JCP	21 (1953)	1713
$\text{Ge}^{74}\text{HCl}_3^{35}$	Trichloroermane (isotopic)	-	-	Microwave	Venkateswarlu	JCP	21 (1953)	1713
$\text{Ge}^{70}\text{HCl}_3^{37}$	Trichloroermane (isotopic)	-	-	Microwave	Venkateswarlu	JCP	21 (1953)	1713

$\text{Ge}^{72}\text{HCl}_3^{37}$	Trichlorogermene (isotopic)	-	-	Microwave	Venkateswarlu	JCP	21 (1953)	1713
$\text{Ge}^{74}\text{HCl}_3^{37}$	Trichlorogermene (isotopic)	-	-	Microwave	Venkateswarlu	JCP	21 (1953)	1713
GeH_3D	Germane-d ₁	1520	G	Spec, Freq, Anal	Lindeman	JCP	22 (1954)	1723
$\text{GeH}_3\text{Br}^{79}$	Bromogermene (isotopic)	-	-	Microwave	Mays	JCP	20 (1952)	1695
GeH_3Cl	Monochlorogermene	-	G	Spec, Assign, Thermo. Mol. Const.	Lord	JCP	22 (1954)	542
$\text{Ge}^{70}\text{H}_3\text{Cl}^{35}$	Monochlorogermene (isotopic)	-	G	Microwave	Dailey	PR	76 (1949)	136
$\text{Ge}^{72}\text{H}_3\text{Cl}^{35}$	Monochlorogermene (isotopic)	-	G	Microwave	Dailey	PR	76 (1949)	136
$\text{Ge}^{74}\text{H}_3\text{Cl}^{35}$	Monochlorogermene (isotopic)	-	G	Microwave	Dailey	PR	76 (1949)	136
$\text{Ge}^{74}\text{H}_3\text{Cl}^{37}$	Monochlorogermene (isotopic)	-	G	Microwave	Dailey	PR	76 (1949)	136
$\text{Ge}^{76}\text{H}_3\text{Cl}^{37}$	Monochlorogermene (isotopic)	-	G	Microwave	Dailey	PR	76 (1949)	136

GeH ₄	Germane	1-13 μ	G	Spec	Steward	PR	48 (1935)	861
		-	-	Assign	Murphy	JCP	8 (1940)	71
		9-13 μ	-	Freq	Straley	PR	58 (1940)	1002
		-	G	Rot.	Straley	PR	60 (1941)	65A
		9-13 μ	G	Forbidden bands	Tindal	PR	60 (1941)	65A
		-	-	Quant. Mech.	Wu	JCP	9 (1941)	195
		10-14 μ	G	Spec	Straley	PR	62 (1942)	161
		750-1050	G	Freq	Nielsen	JOSA	34 (1944)	521
		-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	FC	Heath	TFS	46 (1950)	137
		-	G	Band freq	Burgess	JOSA	43 (1953)	1058
		-	-	Bond dist.	Huggins	JACS	75 (1953)	4126
		800	G	Freq	Lindeman	JCP	22 (1954)	1723
		-	-	FC	Venkateswarlu	JCP	23 (1955)	2365
		-	-	FC	Pistorius	JCP	27 (1957)	965
GeH ₈ F ₆ N ₂	Diammonium germanium hexafluoride	-	S	Band freq	Cox	JCS	- (1954)	1798
		-	-	-	-	-	-	-
GeDCl ₃	Trichlorogermane-d ₁	300-4000	G	Spec	Lindeman	SA	9 (1957)	47
		-	-	-	-	-	-	-
GeD ₃ Cl	Monochlorogermane-d ₃	-	G	Freq, Assign, Thermo.	Lord	JCP	22 (1954)	542
		-	-	NCA, FC	Krishnamachari	IJP	29 (1955)	147
GeBr ₄	Germanium tetrabromide	-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	Force field	Heath	TFS	44 (1948)	561
		-	-	Force field	Heath	TFS	44 (1948)	878
		-	-	FC	Linnett	TFS	48 (1952)	592
		-	-	Freq	Waltz	JCP	20 (1952)	307
		-	-	FC	Venkateswarlu	JCP	23 (1955)	2365
		-	-	Freq	Hahn	JCP	24 (1956)	921
		-	-	FC	Pistorius	JCP	28 (1958)	514
		-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	Force field	Heath	TFS	44 (1948)	561
GeCl ₄	Germanium tetrachloride	-	-	Force field	Heath	TFS	44 (1948)	878
		-	-	Force field	Heath	TFS	44 (1948)	878
		-	-	Force field	Linnett	TFS	48 (1952)	592
		-	-	Freq	Woltz	JCP	20 (1952)	307
		-	-	FC	Bowers	JCP	21 (1953)	1117
		-	-	FC	Gaunt	TFS	50 (1954)	546
		-	-	FC	Gaunt	TFS	50 (1954)	546

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GeF ₄	-	-	FC	Krishnamachari	IJP	29 (1955)	384
	-	-	FC	Venkateswarlu	JCP	23 (1955)	2365
	396	-	Freq	Hahn	JCP	24 (1956)	921
	300-4000	G	Spec	Lindeman	SA	9 (1957)	47
	-	-	FC	Pistorius	JCP	28 (1958)	514
Germanium tetrafluoride	-	G	Band study	Caunt	N	168 (1951)	557
	5-15 μ	G	Spec, Freq, Assign, FC Thermo.	Caunt	TFS	48 (1952)	873
	-	-	Spec, Freq, Assign	Voelz	JCP	20 (1952)	1662
Germanium monoxide	2-38 μ	G	Spec, Freq, Assign	Woltz	JCP	20 (1952)	307
	-	-	FC	Baughan	TFS	53 (1957)	1046
Germanium monoxide monohydrate	-	-	Spec	Dupuis	HTC	79 (1960)	518
	-	-	Spec, Struct	Dupuis	HTC	79 (1960)	518
Germanium dioxide	0.185-8.5 μ	-	Spec	Shaw	PR	51 (1937)	146
	300-1650	S	Spec	Kaiser	PR	100 (1956)	1264
	-	-	Freq	Cohen	PCS	7 (1958)	301
	300-4000	S	Spec, Assign, Freq	Lippincott	JRNB	61 (1958)	61
Germanium dioxide monohydrate	2-15 μ	S	Freq, Spec	Shaw	JPC	64 (1960)	174
	-	-	Spec	Dupuis	HTC	79 (1960)	518
Bis(trimethylgermanium) oxide	400-1500	L	Freq, Assign	Brown	SA	16 (1960)	595
	-	-	Ident	Brook	JACS	76 (1954)	77
Triphenylgermyl triphenylgermane carboxylate	-	-	FC	Gordy	JCP	14 (1946)	305
	400-4000	G,S	FC	Dows	JCP	24 (1956)	1029
	2078-2114	G	Spec, Freq	Dows	JCP	24 (1956)	1117
Dimethylgermanium sulfide trimer	400-1500	S,Sol	Freq, Assign	Brown	SA	16 (1960)	595

Hf COMPOUNDS

HfH	Hafnium hydride	-	-	Force const.	Platt	JCP	18 (1950)	932
HfN ₄ O ₁₂ ·4H ₂ O	Hafnium nitrate tetrahydrate	700-1600	S	Freq, Assign	Ferraro	JMS	4 (1960)	99

Hg COMPOUNDS

HgCH ₃ Br	Methyl mercury bromide	-	-	Microwave	Gordy	JCP	22 (1954)	92
HgCH ₃ Cl	Methyl mercury chloride	-	-	Microwave	Gordy	JCP	22 (1954)	92
HgCClF ₃ S	Trifluoromethyl thio mercuric chloride	-	-	Ident	Haszeldine	JCS	- (1953)	3219
Hg ₂ C ₃ H ₂ N ₂ S ₂	Mercuric rubeanate	400-4000	Sol	Struct	Barcelo	SA	10 (1958)	8245
Hg ₂ C ₆ H ₆	Dimethyl mercury	-	-	FC	Thompson	PRS	A160 (1937)	539
		-	-	Freq, Assign	Gutowasky	JCP	17 (1949)	128
		-	-	FC	Sheline	JCP	18 (1950)	602
Hg ₂ C ₈ H ₈ Cl ₂ N ₂	Mercury (II)-ethylenediamine complex chloride	280-5000	-	Struct	Brodersen	ZAUA	298 (1958)	142
Hg ₂ C ₆ F ₆ S ₂	Bis (trifluoro-methyl thio) mercury	-	-	Ident	Haszeldine	JCS	- (1953)	3219
Hg ₂ C ₂ N ₂	Mercuric cyanide	2100-2800 250-2200	S -	FC Spec, FC, Freq, Struct Assign	Linnett Jones Hidalgo	JCS JCP CFR	- (1937) 27 (1957) 249 (1959)	1398 665 223

	S,Sol	Struct	CPR	249 (1959)	2079
	S	Spec, Assign	AKS	56A (1960)	9
	S	Spec	SA	16 (1960)	135
	S	Spec	AC	24 (1952)	1253
	S	Spec	SA	16 (1960)	135
	S	Freq, Assign	JCS	- (1960)	1912
	S,L	Assign, Freq	JACS	82 (1960)	6124
	Sol	Spec	JACS	73 (1951)	3300
	S,L	Assign, Freq	JACS	82 (1960)	6124
	L	Assign, Spec	SA	15 (1959)	360
	S	Thermo.	SA	15 (1959)	726
	S	Spec, Struct	JCS	- (1960)	5105
	S	Spec, Struct	JCS	- (1960)	5105
	-	FC	PKS	160 (1937)	539
	L	Assign, Spec	SA	15 (1959)	360
	S	Spec, Struct	JCS	- (1960)	5105
	L	Spec, Assign	SA	15 (1959)	360
	S	Spec, Assign	ARS	56A (1960)	9
	S,Sol	Struct	CPR	248 (1959)	2079

$\text{HgC}_{10}^{\text{H}} \text{N}_{12} \text{O}_{21} \text{Na}_2 \text{P}_5$	$\text{HgC}_{10}^{\text{H}} \text{N}_{12} \text{O}_{21} \text{Na}_2 \text{P}_5$	Mercury (II)-ethylene-diamine tetraacetic acid complex (sodium salt) 2.5 hydrate	800-1800	S	Freq, Assign	Sawyer	JACS	81 (1959)	816
$\text{HgC}_{10}^{\text{H}} \text{N}_{21} \text{O}_{15} \text{P}$	-	Di-n-butylphosphinyl mercuric acetate	-	-	Spec	Fox	JACS	75 (1953)	3967
$\text{HgC}_{16}^{\text{H}} \text{N}_{36} \text{O}_{82} \text{P}_2$	714-5000	Mercury (II)-di-n-butylphosphate	-	S	Interaction study	Smith	JINC	9 (1959)	150
$\text{HgC}_{17}^{\text{H}} \text{I}_{20} \text{NO}_3$	2-16 μ	Morphine mercuric iodide	-	S	Spec	Levi	AC	26 (1954)	1040
$\text{HgC}_{17}^{\text{H}} \text{N}_{28} \text{O}_8$	-	2-Acetoxymercurimethyl-5,6-bis-(2,2-dimethyl-1,3-dioxolan-4-yl)-p-dioxane	-	-	Reference	Rosen	JACS	77 (1955)	762
$\text{HgC}_{22}^{\text{H}} \text{N}_{42} \text{N}_{42} \text{O}_{82} \text{S}_2$	-	Pantethine mercuric mercaptide	-	-	Absorption	Wittle	JACS	75 (1953)	1694
$\text{HgC}_{30}^{\text{H}} \text{O}_{50} \text{I}_2$	-	Bis-[5,6-bis-(2,2-dimethyl-1,3-dioxolan-4-yl)-2-p-dioxonyl methyl]-mercury	-	-	Ident, Struct	Rosen	JACS	77 (1955)	762
$\text{HgC}_{36}^{\text{H}} \text{Cl}_{24} \text{N}_{26} \text{O}_8$	600-2000	Mercury (II)-1:10-phenanthroline complex perchlorate	-	S	Spec	Schilt	JINC	9 (1959)	211
HgH	-	Mercury hydride	-	-	7f-type doubling theory	Mulliken	Ph	38 (1931)	85
	-		-	-	Vibrations	Oldenberg	Ph	37 (1931)	194
	-		-	-	Rotation	Oldenberg	PR	37 (1931)	1550
	-		-	-	Rotation-vibration coupling const.	Pekeris	Ph	45 (1934)	98
	-		-	-	Thermo.	Hulburt	JCP	9 (1941)	61
	-		-	-	FC	Wa	PR	71 (1947)	118
	-		-	-	FC	Platt	JCP	18 (1950)	932
	-		-	-	FC	Sheline	JCP	18 (1950)	927

HgH	Mercury hydride ion	-	-	-	Potential function	Glockler	JCP	20 (1952)	1448
		-	-	-	Potential function	Beckel	JCP	24 (1956)	553
		-	-	-	Rotation-vibration coupling const.	Pekeris	PR	45 (1934)	98
Hg ₂ BrN	Mercuric amidobromide	2-35 μ	S	-	Assign	Nakagawa	SA	9 (1957)	199
Hg ₆ Br ₂ N ₂	Mercury (II)-ammonia complex bromide	400-1600	S	-	NCA, Assign	Bertin	JACS	80 (1958)	525
Hg ₆ ClN ₂	Mercury (I)-ammonia complex chloride	-	-	-	Freq	Wilmshurst	CJC	38 (1960)	467
Hg ₆ Cl ₂ N ₂	Mercury (II)-ammonia complex chloride	400-1600	S	-	NCA, Assign	Bertin	JACS	80 (1958)	525
HgD	Mercury deuteride	-	-	-	Potential function	Beckel	JCP	24 (1956)	553
HgBrCl	Mercuric chloride bromide	-	-	-	Interaction theory	Duchesne	JCP	19 (1951)	1191
HgBrI	Mercuric bromide iodide	-	-	-	Interaction theory	Duchesne	JCP	19 (1951)	1191
HgBr ₂	Mercuric bromide	300-880	-	-	Force field Spec	Linnett Miller	TFS SA	45 (1949) 16 (1960)	844 135
HgCl ₂	Mercury monochloride	0-2.7 μ	-	-	Residual rays Dispersion	Schaefer Korff	TFS RMP	25 (1929) 4 (1932)	841 471
HgCl ₂	Mercuric chloride	95 μ 117-300 μ	S	-	Residual rays Dispersion	Weniger Korff	JOSA RMP	7 (1923) 4 (1932)	517 471
		322 300-880	-	-	Force field Freq Spec	Linnett Hahn Miller	TFS JCP SA	45 (1949) 24 (1956) 16 (1960)	844 921 135
HgCl ₂ ³⁵	Mercuric chloride (isotopic)	-	-	-	Isotope effect theory	Salant	PR	42 (1932)	812

$\text{HgCl}^{2+}\text{Cl}^{2-}$	Mercuric chloride (isotopic)	-	-	Isotope effect theory	Salant	PR	42 (1932)	812
HgCl_4	Mercuric tetrachloride ion	265	-	Freq	Hahn	JCP	24 (1956)	921
HgI_2	Mercuric iodide	300-880	-	Force field Spec	Linnett Miller	TFS SA	45 (1949) 16 (1960)	844 135
HgI_2O_6	Mercuric iodate	-	S	Spec, Struct	Dasent	JCS	- (1960)	2429
HgNO_3	Mercurous nitrate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
$\text{HgNO}_3 \cdot \text{H}_2\text{O}$	Mercurous nitrate monohydrate	700-1600 300-880	S S	Freq, Assign Spec	Ferraro Miller	JMS SA	4 (1960) 16 (1960)	99 135
HgN_2O_6	Mercuric nitrate	2-16 μ 2-15 μ	S S	Spec Spec	Meloche Addison	JINC JCS	6 (1958) - (1960)	104 613
$\text{HgN}_2\text{O}_6 \cdot \text{H}_2\text{O}$	Mercuric nitrate monohydrate	700-1600 300-880	S S	Freq, Assign Spec	Ferraro Miller	JMS SA	4 (1960) 16 (1960)	99 135
HgO_4S	Anhydrous mercury (II) sulfate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
HgS	Mercuric sulphide	300-880	S	Spec	Miller	SA	16 (1960)	135
HgSe	Mercuric selenide	0.8-15 μ	S	Assign	Redfield	BAPS	2 (1957)	121
$\text{Hg}_2\text{C}_6\text{H}_{14}\text{Cl}_4\text{N}_2$	Mercury (II) chloride dimethyl piperazine complex	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
Hg_2Cl_2	Mercurous chloride	91-118 μ 300-880	S S	Residual rays Residual rays Spec	Weniger Schaefer Miller	JOSA TFS SA	7 (1923) 25 (1929) 16 (1960)	517 841 135
$\text{Hg}_2\text{I}_2\text{O}_6$	Mercurous iodate	-	S	Spec, Struct	Dasent	JCS	- (1960)	2429

$\text{Hg}_2\text{N}_2\text{O}_3$	Mercury (I)-nitrate	-	S	Band freq	Arora	JACS	73 (1951)	1015
$\text{Hg}_2\text{O}_4\text{S}$	Anhydrous mercury (I)-sulphate	2-16 μ 300-880	S S	Spec Spec	Meloche Miller	JINC SA	6 (1958) 16 (1960)	104 135
$\text{Hg}_3\text{O}_8\text{P}_2$	Mercuric orthophosphate	290-650	S	Assign	Daval	CPR	239 (1954)	249
<u>In COMPOUNDS</u>								
$\text{InC}_{27}\text{H}_{18}\text{N}_3\text{O}_3$	Indium (III)-8-hydroxyquinolate	8-15 μ	S S	Spec Assign, Spec	Charles Charles	AC SA	25 (1953) 8 (1956)	530 1
InH	Indium monohydrate	-	-	FC	Sheline	JCP	18 (1950)	927
$\text{In}^{115}\text{Br}^{79}$	Indium bromide (isotopic)	-	G	Microwave	Barrett	Ph	99 (1955)	666
$\text{In}^{115}\text{Br}^{81}$	Indium bromide (isotopic)	-	G	Microwave	Barrett	PR	99 (1955)	666
$\text{In}^{115}\text{Cl}^{35}$	Indium chloride (isotopic)	-	G -	Microwave Spec, Mol. Const.	Barrett Barrett	Ph PR	99 (1955) 109 (1958)	666 1572
InF_6	Indium (IV)-complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
$\text{In}^{115}\text{I}^{127}$	Indium iodide	-	-	Spec, Mol. Const.	Barrett	PR	109 (1958)	1572
InAs	Indium arsenide	-	-	Spec Anomalous optical behavior Calculations	Briggs Hrostowski Matossi	PR PR ZN	93 (1954) 95 (1954) 139 (1958)	912A 1683 767
InSb	Indium antimonide	3.2-7 μ	S S	Spec Spec	Tanenbaum Burststein	Ph Ph	91 (1953) 93 (1954)	1561 632

K COMPOUNDS

$KCH_2O_3P_3$	Potassium trifluoromethylphosphonate	-	-	Group freq	Emeleus	JCS	- (1955)	563
$KCHN_6O_2$	Potassium 5-Nitroamino-tetrazole	2-15 μ	S	Spec, Freq	Lieber	AC	23 (1951)	1594
$KCHO_3$	Potassium bicarbonate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		11-12.5 μ	S	Spec	Underwood	JACS	77 (1955)	317
		600-4000	S	Assign	Braunholtz	JCS	- (1959)	868
KCH_3O_3S	Potassium methyl sulfonate	300-880	S	Spec	Miller	SA	16 (1960)	135
		-	L	Spec, Freq	Gerding	EffC	77 (1958)	374
KCH_4BrN_2S	Thiourea potassium bromide	2-40 μ	S	Spec	Stewart	JCP	26 (1957)	248
KCH_4IN_2S	Thiourea potassium iodide	2-40 μ	S	Spec	Stewart	JCP	26 (1957)	248
KCN	Potassium cyanide	4.3-5.4 μ	Sol	Spec	Gordy	JCP	3 (1935)	664
		2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		2100	Sol	Spec	Jones	JCP	22 (1954)	965
		2020-2160	Sol	Spec	Penneman	JCP	24 (1956)	293
		-	S	Usage	Wiberly	AC	29 (1957)	210
KCNO	Potassium cyanate	300-880	S	Spec	Miller	SA	16 (1960)	135
		2.5-7.5 μ	Sol	Spec	Gordy	JCP	3 (1935)	664
		2-14 μ	Sol	Spec, Freq, Assign	Williams	JACS	62 (1940)	2442
		2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
KCNs	Potassium thiocyanate	300-880	S	Spec	Miller	SA	16 (1960)	135
		2.5-7.5 μ	Sol	Spec	Gordy	JCP	3 (1935)	664
		2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		2-15.5 μ	S	Spec	HacsKaylo	AC	26 (1954)	1410
KCH_4IN_2S	Thiourea potassium iodide	2-14 μ	S	Spec	Wiberly	AC	29 (1957)	210
		700-4400	S	Spec, Freq	Jones	JCP	28 (1958)	1234
KCH_4IN_2S	Potassium thiocyanate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104

Chemical	Wavenumber	Assignment	Spec, Struct	Tramer	CPR	Year	Page
KONS	300-880	Potassium isothiocyanate	S	Miller	SA	249 (1959)	2531
			S			16 (1960)	135
KCN ₇	400-4000	Potassium tetrazolylazide	S	Waddington	JCS	- (1959)	2499
			S	Mitchell	JCS	- (1960)	1912
KC ₂ H ₃ OS ₂	2-15 μ	Methyl potassium xanthate	S	Lieber	AC	23 (1951)	1594
			S	Lieber	JACS	73 (1951)	1313
KC ₂ H ₅ O ₂ S	2.8-15 μ	Ethyl potassium oxyxanthate	S	Pearson	APS	12 (1958)	116
			S	Pearson	APS	12 (1958)	116
KC ₂ H ₆ O ₄ P	-	Dimethyl potassium phosphate	-	Maarsen	FIC	76 (1957)	724
			S	Pearson	APS	12 (1958)	116
KC ₃ H ₅ OS ₂	2.8-15 μ	Potassium ethyl xanthate	S	Tatlock	JOC	17 (1952)	555
			S	Cardwell	JCS	- (1953)	3740
KC ₃ H ₉ OSi	1200-5000	Potassium trimethyl silanolate	S	Cardwell	JCS	- (1953)	3740
			S	Cardwell	JCS	- (1953)	3740
KC ₄ H ₁₀ DO ₄	1200-5000	Potassium maleate-d ₁	S	Langer	Ph	33 (1929)	1100
			S	Valasek	Ph	45 (1934)	654
KC ₄ H ₃ O ₄	-	Potassium hydrogen maleate	S	Baker	JCP	27 (1957)	689
			S	Stekhanov	IANS	22 (1958)	1109
KC ₄ H ₆ O ₆ Na ₄ H ₂ O	-	Rochelle salt	-	Bernard	CPR	250 (1960)	3819
			S	Jenecks	ABB	88 (1960)	193
KC ₄ H ₇ N ₃ O ₃	2-9 μ	Potassium asparagine	Sol	Pearson	APS	12 (1958)	116
			S				

$KC_4H_9O_2S$	Butyl potassium oxyxanthate	2.8-15 μ	S	Spec	Pearson	APS	12 (1958)	116
$KC_4H_{10}O_4P$	Diethyl potassium phosphate	-	-	Band freq Spec	Bell Maarsen	JACS MTC	76 (1954) 76 (1957)	5185 724
$KC_5H_3N_2O_4$	Potassium orotate	2-12 μ	Sol	Spec, Group freq, Assign	Lacher	JPC	59 (1955)	615
$KC_5H_6DO_4K$	Potassium glutarate-d ₄	680-2500	-	Spec	Hadzi	MC	11 (1959)	715
$KC_5H_7O_2$	Potassium acetylaceto- nate	625-5000	S	Spec, Struct	West	JINC	5 (1958)	295
$KC_5H_7O_4$	Potassium glutarate	680-2500	-	Spec	Hadzi	MC	11 (1959)	715
$KC_5H_9N_2O_3$	Glutamine potassium salt	2-9 μ	Sol	Spec, Freq	Jencks	ABB	88 (1960)	193
$KC_5H_9OS_2$	Potassium butyl- xanthate	2.8-15 μ	S	Spec	Pearson	AFS	12 (1958)	116
$KC_6H_4N_2O_6$	4,6-Dinitrobenzofuroxan potassium salt	4.8-8.3 μ	-	Spec, Freq	Gaughran	JACS	76 (1954)	2333
$KC_6H_4ClN_2O_3S$	Potassium o-chloro- benzenediazosulfonate	600-1800	S	Spec, Assign	LeFevre	AJC	6 (1953)	341
$KC_6H_4ClN_2O_3S$	Potassium p-chloro- benzenediazosulfonate	600-1800	S	Spec, Assign	LeFevre	AJC	6 (1953)	341
KC_6H_5	Phenyl potassium	600-4000	S	Spec, Freq, Assign	Lanpher	JOC	21 (1956)	830
$KC_6H_5N_2O$	cis-Potassium benzene diazotate	600-1800	S	Spec, Assign	LeFevre	AJC	6 (1953)	341
KC_6H_5NO	trans-Potassium benzene diazotate	600-1800	S	Spec, Assign	LeFevre	AJC	6 (1953)	341
$KC_6H_5O_2S$	Potassium benzene- sulphinatate	700-3300	S	Struct, Assign, H bond	Detone	JCS	- (1955)	3163

Chemical Formula	Potassium hexanoate (A form)	730-710	S	Freq	Chapman	JCS	- (1957)	4489
$KC_6H_{11}O_2$	Di- <i>i</i> -propylpotassium phosphate	-	-	Spec	Maarsen	KJC	76 (1957)	724
$KC_7H_{15}OS$	Potassium thiobenzoate	2.5-16 μ	Sol	Struct	Nyquist	SA	15 (1959)	514
$KC_7H_5O_2$	Potassium benzoate	1554-1398	S	Band freq	Stimson	JCP	22 (1954)	1942
$KC_7H_6NO_2$	Potassium <i>m</i> -amino-benzoate	1566-1400	S	Band freq	Stimson	JCP	22 (1954)	1942
$KC_7H_6NO_2$	Potassium <i>o</i> -amino-benzoate	1555-1390	S	Band freq	Stimson	JCP	22 (1954)	1942
$KC_7H_6NO_2$	Potassium <i>p</i> -amino-benzoate	1555-1400	S	Band freq	Stimson	JCP	22 (1954)	1942
$KC_7H_7N_2O_2$	Potassium <i>p</i> -methoxy-benzenediazotate	600-1800	S	Spec, Assign	LeFevre	AJC	6 (1953)	341
$KC_7H_{11}O_2S$	Cyclohexyl potassium oxyxanthate	2.8-15 μ	S	Spec	Pearson	APS	12 (1958)	116
$KC_8H_7O_2$	Potassium phenyl acetate	650-3500	S	Spec, Freq, H bond Band study	Davies Hales	JCS JCS	- (1951) - (1954)	2858 3145
$KC_8H_9O_4$	Potassium penicillate	650-4000	S, Sol	Spec	Ford	JACS	72 (1950)	4529
KC_9H_6NO	Potassium 8-hydroxy-quinolate	- 8-15 μ	S	Spec	Charles	AC	25 (1953)	530
KC_9H_6NO	Potassium 2-quinolyl oxide	-	S	Spec, Assign	Charles	SA	8 (1956)	1
KC_9H_6NO	Potassium 2-quinolyl oxide	-	S	Spec, Struct	Gibson	JCS	- (1955)	4340
$KC_9H_{10}N_2O_3$	Potassium ethyl 1-methoxypicrate	-	S	Freq, Struct	Foster	JCS	- (1954)	2153

$KC_{10}H_5O_5S$	Potassium-1,2-naphthoquinone sulfonate	1600-1800	S	Group freq	Josien	JCP	21 (1953)	331
$KC_{10}H_{21}O_2S$	n-Decylpotassium oxyxanthate	2.8-15 μ	S	Spec	Pearson	APS	12 (1958)	116
$KC_{16}H_{15}O_4$	Potassium hydrogen bisphenylacetate	650-3500	S	Spec, Band freq, H bond, Struct, Group freq	Davies	JCS	- (1951)	2858
$KC_{18}H_{35}O_2$	Potassium stearate	- 6-8 μ	- S	Struct Spec	Gray Ellis	JPC N	53 (1949) 181 (1958)	23 181
$KC_{20}H_{15}O_5 \cdot H_2O$	Monopotassium phenolphthalein monohydrate (red salt)	1016-1746	-	Group freq, Struct	Davies	JCS	- (1954)	120
$KC_{20}H_{15}O_5 \cdot 2H_2O$	Monopotassium phenolphthalein dihydrate (white salt)	998-1730	-	Group freq	Davies	JCS	- (1954)	120
$KC_{24}H_{39}O_2$	Potassium 9-phenylstearate	-	S	Group freq	Kagarise	JPC	59 (1955)	271
KH	Potassium hydride	-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	FC	Platt	JCP	18 (1950)	932
		-	-	FC	Sheline	JCP	18 (1950)	927
		-	-	FC, Potential function	Lippincott	JCP	23 (1955)	1131
		-	-	FC	Baughan	TFS	53 (1957)	1046
KHF_2	Potassium hydrogen fluoride	- 1-16 μ	-	H bond, Spec Reflection	Buswell	JCP	8 (1940)	362
		-	-	Quant. Mech.	Kelelaar	JCP	9 (1941)	775
		-	-	Bond energy	Glockler	JCP	10 (1942)	607
		-	-	Anal	Davies	JCP	15 (1947)	739
		-	-	H bond, Thermo.	Halverson	KMP	19 (1947)	87
		-	-		Westrum	JACS	71 (1949)	1940

	4.5-8.5 μ	S	Spec	Ketelaar	JCP	19 (1951)	654
	700-5800	S	Assign	Newman	JCP	19 (1951)	1207
	-	Sol	Spec, Assign	Jones	JCP	22 (1954)	781
	1200-1700	S	Spec	Ketelaar	JCP	24 (1956)	624
KH ₂ O ₆	-	S	Spec, Struct	Dasent	JCS	- (1960)	2429
KHO	2-4 μ	Sol	Spec	Angstrom	PR	3 (1914)	47
	1-3 μ	Sol	Spec	Grantham	PR	18 (1921)	339
	0.8-1.75 μ	Sol	Spec	Collins	PR	20 (1922)	486
	0.6-2.8 μ	Sol	Assign	Gordy	JCP	2 (1934)	621
	2.8-6 μ	Sol	Spec, Assign	Plyler	JCP	2 (1934)	470
	3-5.4 μ	Sol	Spec	Plyler	JCP	2 (1934)	565
	1.5-2.8 μ	-	Assign	Barr	JCP	4 (1936)	92
	50-150 μ	Sol	Band study	Cartwright	JCP	5 (1937)	776
	6-33 μ	G	Absorption	Spinar	SA	12 (1958)	244
	3000-5000	S	Spec	Buchanan	JCP	31 (1959)	870
	-	-	Struct	Ibera	JCP	33 (1960)	1164
	300-4000	S	Band freq	Snyder	JCP	33 (1960)	1171
KHO ₄ S	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
	600-4000	S	Group study	Braunholtz	JCS	- (1959)	868
	300-880	S	Spec	Miller	SA	16 (1960)	135
KH ₂ NO ₃	500-4000	S	Assign	Vuagnat	JCP	26 (1957)	77
KH ₂ O ₂ P	2-15 μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	493
KH ₂ O ₄ P	1-25 μ	S	Spec	Oberly	JCP	20 (1952)	740
	1400-3500	-	H bond, Spec	Rundle	JCP	20 (1952)	1487
	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
	2-15 μ	S	Spec, I, Assign	Corbridge	JCS	- (1954)	493
	400-10000	S	Spec, Assign	Murphy	JCP	22 (1954)	1322
	-	S	H bond	Pimental	JCP	24 (1956)	639
	300-3000	S	Freq, Spec	Blinic	MP	1 (1957)	391
	2-5 μ	S	Spec, H bond	Lazarar	BASU	21 (1957)	29
	600-4000	S	Group study	Braunholtz	JCS	- (1959)	868
	1500-3000	-	Spec	Lazarev	FIT	2 (1960)	3026
	300-880	S	Spec	Miller	SA	16 (1960)	135

KH ₂ O ₄ As	Potassium dihydrogen arsenate	1-25 μ	S	Spec	Oberly	JCP	20 (1952)	740
		2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		4000-10000	S	Spec, Assign	Murphy	JCP	22 (1954)	1322
		300-3000	S	Freq, Spec, Quant. Mech.	Blinc	MP	1 (1957)	391
		600-4000	S	Group study	Braunholtz	JCS	- (1959)	868
KH ₃ NO ₃ P	Monopotassium phosphar amidate	300-880	S	Spec	Miller	SA	16 (1960)	135
		2-15 μ	S	Group freq	Corbridge	JCS	- (1954)	493
KH ₄ B	Potassium borohydride	600-4000	S	Comparison	Waddington	JCS	- (1958)	4783
		1-16 μ	-	Reflection	Kelelaar	JCP	9 (1941)	775
		-	-	Anal	Halverson	RMP	19 (1947)	87
KDF ₂	Potassium hydrogen fluoride-d ₁	-	Sol	Spec, Assign	Jones	JCP	22 (1954)	781
		-	-	Spec	Buchanan	JCP	31 (1959)	870
KDO	Potassium hydroxide-d ₁	3000-5000	S	Struct	Ibers	JCP	33 (1960)	1164
		-	-	Spec	Buchanan	JCP	31 (1959)	870
KD ₂ NO ₃ S	Potassium sulphamate-d ₂	500-4000	S	Assign	Vuagnat	JCP	26 (1957)	77
		-	-	Spec	Buchanan	JCP	31 (1959)	870
KD ₂ O ₄ P	Potassium dihydrogen phosphate-d ₂	1400-4500	-	H bond, Spec	Rundle	JCP	20 (1952)	1487
		300-3000	S	Freq, Spec, Quant. Mech.	Blinc	MP	1 (1957)	391
		1500-3000	S	Spec	Lazarev	FTJ	2 (1960)	3026
KD ₂ O ₄ As	Potassium dihydrogen arsenate-d ₂	300-3000	S	Freq, Spec, Quant. Mech.	Blinc	MP	1 (1957)	391
		600-4000	S	Group study	Braunholtz	JCS	- (1959)	868
KBr	Potassium bromide	-	S	Freq	Nichols	PR	21 (1923)	712A
		82 μ	S	Residual rays	Weniger	JOSA	7 (1923)	517
		82.6 μ	S	Residual rays	Schaefer	TFS	25 (1929)	841
		-	-	Crystal growing	Strong	PR	36 (1930)	1663
		22.9 μ	S	Reflectivity	Strong	PK	37 (1931)	1565
		25-50 μ	S	Transmission	Strong	PR	38 (1931)	1818
		0-8.7 μ	-	Dispersion	Korff	RMP	4 (1932)	471
-	-	Diapersion	Strong	PR	45 (1934)	877		
-	-	Filters	Barnes	PR	49 (1936)	732		
-	S	Films	Plummer	JOSA	26 (1936)	434		

50-150 μ	Sol	Ionic theory	Cartwright	JCP	55 (1937)	776
-	-	Freq	Huggins	JCP	5 (1937)	143
-	S	Crystals	Stockbarger	JOSA	27 (1937)	416
-	-	Crystal growing	Chamberlain	ISI	9 (1938)	322
3-5.4 μ	Sol	Spec	Plyler	JCP	6 (1938)	316
83 μ	S	Residual rays	Seifert	ISI	11 (1940)	365
400-3000	S	Transmission	Wells	JAP	11 (1940)	137
-	S	Crystal growth	West	JOSA	35 (1945)	26
-	-	FC	Gordy	JCP	14 (1946)	305
-	S	Compar	Gore	JOSA	37 (1947)	23
24-34 μ	S	Spec	Plyler	JkNB	41 (1948)	125
-	S	Review	Williams	ISI	19 (1948)	135
-	S	Bands	Burstein	Ph	76 (1949)	1254
0.2-15 μ	S	Crystals	Friedman	JOSA	39 (1949)	795
-	-	Polarization	Szigeti	TFS	45 (1949)	155
100-600	S	Spec	McCurbin	JOSA	40 (1950)	537
-	S	Freq	Roberts	Ph	77 (1950)	258
-	-	Freq	Szigeti	PHS	204 (1950)	51
-	-	Freq	Rittner	JCP	19 (1951)	1030
1-25 μ	S	Refr. index	Stephens	JOSA	42 (1952)	286
-	S	Calibration	Downie	JOSA	43 (1953)	941
-	S	Fabrication	Ryason	JOSA	43 (1953)	928
2-75 μ	S	Spec	Schiedt	APS	7 (1953)	75
0.4-25 μ	S	Refr. index	Stephens	JOSA	43 (1953)	110
-	-	Disk	Clauson-Kass	ACS	8 (1954)	1088
-	-	Pressed disk	Ford	JSI	31 (1954)	338
1-15 μ	S	Filters	Gaunt	JSI	31 (1954)	315
2-15 μ	S	Spec	Hausdorff	APS	8 (1954)	131
2-10 μ	S	Temp.	Ingebrigtsen	AC	26 (1954)	1765
-	S	Quant. Anal	Kirkland	AC	27 (1955)	1537
-	S	Filter	Menziere	AC	27 (1955)	327
-	S	I	Schiedt	AC	27 (1955)	318A
-	S	Reaction	Stewart	AC	27 (1955)	318A
-	-	FC	Baughar	TFS	53 (1957)	1046
-	S	Cells for volatile soln	Black	AC	29 (1957)	169
50-5000	-	Spec	Brackett	JOSA	47 (1957)	636
-	-	Spec	Lord	JOSA	47 (1957)	689
2-14 μ	G	Freq	Rice	JCP	27 (1957)	573
450-3800	S	Spec	Wiberly	AC	29 (1957)	210
17-55 μ	S	Freq	Prevel	SA	15 (1959)	557
-	S	Transmittance	Plyler	JRNb	64C (1960)	55

KBrO ₃	Potassium bromate	2-16 μ	S	Spec	Miller	AC	24	(1952)	1253
KCl	Potassium chloride	2-8 μ	S	Spec	Coblentz	BBS	7	(1911)	619
		1-2.1 μ	Sol	Spec	Callow	JCS	109	(1916)	55
		11.5-25 μ	S	Spec	Coblentz	JOSA	4	(1920)	432
		-	S	Dispersion	Marvin	PR	17	(1921)	412
		-	S	Freq	Nichols	PK	21	(1923)	712A
		107 μ	S	Transmission	Weniger	HSI	7	(1923)	517
		63.4 μ	S	Residual rays	Schaefer	TFS	25	(1929)	841
		-	-	Crystal growing	Strong	PR	36	(1930)	1663
		20-100 μ	-	Transmittivity	Strong	PR	38	(1931)	1818
		40-80 μ	S	Filters	Barnes	PR	43	(1933)	31
		35-120 μ	S	Spec	Barnes	JOSA	26	(1936)	428
		-	S	Filters	Barnes	PR	49	(1936)	732
		50-200 μ	-	Dispersion	Cartwright	PH	49	(1936)	101
		50-150 μ	Sol	Band freq	Cartwright	JCP	5	(1937)	776
		-	-	Theory	Huggins	JCP	5	(1937)	143
		3-5.4 μ	Sol	Spec	Plyler	JCP	6	(1938)	316
		63 μ	S	Residual rays	Seifert	HSI	11	(1940)	365
		-	S	Freq	Foldy	PR	60	(1941)	64A
		-	S	Freq	Iona	PH	60	(1941)	822
		-	-	FC, Bond dist.	Gordy	JCP	14	(1946)	305
		14-24 μ	S	Spec	Plyler	JRNB	41	(1948)	125
		0.5-1.3 μ	S	Bands	Bernstein	PR	76	(1949)	1254
		0.2-15 μ	S	Crystals	Friedman	JOSA	39	(1949)	795L
		-	-	Polarizability	Szigeti	TFS	45	(1949)	155
		-	S	Theory, Freq	Roberts	PK	77	(1950)	258
		-	-	Freq, Theory	Szigeti	PKS	204	(1950)	51
		-	-	Freq	Rittner	JCP	19	(1951)	1030
		-	-	Coupling	Duchesne	JCP	20	(1952)	1804
		-	S	Fabrication	Ryason	JOSA	43	(1953)	928
		2-15 μ	S	Spec	Schiedt	APS	7	(1953)	75
		-	S	Disk	Ford	JSI	31	(1954)	338
		1-15 μ	S	Filters	Gaunt	JSI	31	(1954)	315
		43-70 μ	S	Refl. curves	Keriakes	PR	98	(1955)	553
		-	S	Study	Lax	PR	97	(1955)	39
		-	S	Filters	Menzies	AC	27	(1955)	327A
		-	S	Reaction	Stewart	AC	27	(1955)	318A
		-	-	Band freq	Haas	PR	103	(1956)	564
		-	-	Thermo.	Baughan	TFS	53	(1957)	1046

		2-25 μ	Sol	Spec	Falk	CJC	35 (1957)	1195
		-	-	Spec	Lord	JOSA	47 (1957)	689
		-	G	Spec	Rice	JCP	27 (1957)	573
		-	-	Mol. Const.	Garrison	JA	19 (1958)	546
		17-55 μ	S	Transmittance	Plyler	JRNB	64C (1960)	55
KCl-ClNa	Sodium chloride - Potassium chloride - Mix crystal	-	-	Vib., Spec, Theory	Matossi	JCP	19 (1951)	161
KClO ₃	Potassium chlorate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		1-15 μ	S	Spec, Assign	Ramdas	PIAS	35 (1952)	249
		1-22 μ	S	Assign	Ramdas	PIAS	37 (1953)	451
		300-880	S	Spec	Miller	SA	16 (1960)	135
KClO ₄	Potassium perchlorate	-	S	Spec	Taylor	TFS	25 (1929)	830
		3-14.5 μ	S	Spec, Assign	Taylor	TFS	25 (1929)	856
		400-1300	S	Spec	Cohn	JCS	- (1952)	4282
		2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		290-650	S	Assign	Duval	CPR	239 (1954)	249
		300-880	S	Spec	Miller	SA	16 (1960)	135
KCl B ₄	Potassium tetrachloro- borate	600-3500	S, L	Spec	Kynaston	JCS	- (1960)	1772
KI	Potassium iodide	-	-	Vib., Freq	Nichols	PR	21 (1923)	712
		82 μ	S	Reflection faction	Weniger	JOSA	7 (1923)	517
		-	-	Crystal growing	Strong	PR	36 (1930)	1663
		25-50 μ	S	Transmission	Strong	PR	37 (1931)	1565
		22.9 μ	S	Reflectivity	Strong	PR	38 (1931)	1818
		8.7 μ	-	Dispersion	Korff	TFS	4 (1932)	471
		-	-	Christianson filter	Barnes	Ph	49 (1936)	732
		50-200 μ	-	Absorption	Cartwright	PR	49 (1936)	101
		50-150 μ	Sol	Absorption	Cartwright	JCP	5 (1937)	776
		-	-	Freq	Huggins	JCP	5 (1937)	143
		3-6.5 μ	-	Spec	Plyler	Ph	51 (1937)	1017
		3-5.4 μ	Sol	Spec	Plyler	JCP	6 (1938)	316
		4.75 μ	Sol	Absorption	Barr	JCP	7 (1939)	8
		94 μ	S	Residual rays	Seffert	RSI	11 (1940)	365
		-	S	Crystal studies	West	JOSA	35 (1945)	26

KF ₆ Si	Potassium fluoro-silicate	488-735	-	Band study	delattre	JCP	20 (1952)	1180
KNO ₂	Potassium nitrite	6-15 μ 2-16 μ	Sol S	Struct Spec	Williams Miller	JACS AC	61 (1934) 24 (1952)	2987 1253
	-	700-4000	S	Freq, Assign Spec, FC, Freq	Newman Weston	JCP JCP	20 (1952) 27 (1957)	444 683
	-	2-15 μ 300-880	S S	Assign Spec	Greenberg Miller	JCP SA	33 (1960) 16 (1960)	900 135
	Potassium nitrate	2-14 μ 6-16 μ 2-16 μ 2-15 μ 2-16 μ	Sol Sol S S S	Freq, Spec Freq Spec Spec Spec	Angstrom Williams Miller Lane Meloche	PH JACS AC JCP JINC	3 (1914) 61 (1949) 24 (1952) 22 (1954) 6 (1958)	47 1382 1253 1855 104
KNO ₃	Potassium nitrate	1200-500 450-3800	Sol Sol	Freq Freq	Vasenkov Frevel	IANS SA	22 (1958) 15 (1959)	1125 557
	-	700-1600	S	Freq	Anbar	JCS	- (1960)	1242
	-	2-15 μ 300-880	S S	Freq, Assign Assign Spec	Ferraro Greenberg Miller	JMS JCP SA	4 (1960) 33 (1960) 16 (1960)	99 900 135
	Potassium nitrate (isotopic)	800-840 11.3-12.5 μ	S S	Freq, Spec Spec, FC	Decius Decius	JCP JCP	22 (1954) 23 (1955)	1941 1290
KN ¹⁵ O ₃	Potassium nitrate (isotopic)	800-840 11.3-12.5 μ	S S	Freq, Spec Spec, FC	Decius Decius	JCP JCP	22 (1954) 23 (1955)	1941 1290
	Fermy's salt	650-1300	S	Struct, Assign	Griffith	JINC	7 (1958)	38
KN ₃	Potassium azide	635-3100	S	Freq, FC	Gray	TFS	53 (1957)	901
	Potassium superoxide	-	S	Spec, Struct	Brame	JINC	4 (1957)	90
K ₂	Potassium	-	G	Mol. Const.	Crane	PR	36 (1930)	421
	-	0.96-1.17 μ	S	Franck-Condon diagram Spec	Loomis Meggers	PR JRNH	39 (1932) 10 (1933)	89 669
	-	-	S	Freq	Rosen	PH	43 (1933)	5
	-	-	S	Mol. Const. FC	Pekeris Sutherland	PR JCP	45 (1934) 8 (1940)	98 161

K_2HNO_3	-	-	Spec Thermo. FC	Adel Hulbart Gordy	Ph JCP JCP	59 (1941) 9 (1941) 14 (1946)	915 61 305
Potassium hydroxyl-amine disulphonate	-	S	Assign, Struct, Spec	Yamoda	BCSJ	32 (1959)	721
Dipotassium trifluoromethyl phosphonate	-	-	Freq	Emeleus	JCS	- (1955)	563
Potassium carbonate	5-12 μ	S	Emission Spec	Pfund Plyler Miller	JOSA JCP AC	23 (1933) 4 (1936) 24 (1952)	270 157 1253
	2-9-4 μ	Sol	Spec	Meloche	JINC	6 (1958)	104
	2-16 μ	S	Spec	Miller	SA	16 (1960)	135
	300-880	S	Spec				
Potassium carbonate 1.5 hydrate	-	S	Band freq	Underwood	JACS	77 (1955)	317
Potassium oxalate monohydrate	2-15 μ	S	Spec, Assign	Schmelz	SA	9 (1957)	51
Dipotassium malonate	680-2500	-	Spec	Hadzi	NC	11 (1959)	715
Dipotassium malonate polyhydrate	2-15 μ	S	Spec, Freq, Assign	Schmelz	JACS	81 (1959)	287
Dipotassium succinate- d_1	680-2500	-	Spec	Hadzi	NC	11 (1959)	715
Dipotassium succinate	680-2500	-	Spec	Hadzi	NC	11 (1959)	715
Dipotassium dimethyl glyoximate	1800-3200	S	Spec, H bond	Blinc	JCS	- (1958)	4536
Dipotassium 2,6-dihydroxy-1,4-benzoquinone	5-15 μ	S	Spec, Struct	Edwards	JAPC	10 (1960)	246

Chemical Formula	Compound Name	Ident	Morton	JACS	77 (1955)	3151
$K_2C_7H_5NO_9S_2$	Potassium-4-nitro-toluene-2,6-disulfonate	-	Morton	JACS	77 (1955)	3151
$K_2C_{18}H_{10}O_4$	Dipotassium salt of 2,5-dihydroxy-3,6-diphenyl-1,4-benzoquinone	S 5-15 μ	Edwards	JAPC	10 (1960)	246
$K_2C_{20}H_{12}O_4$	Dipotassium phenolphthalein	S 1070-1800	Davies Davies	JCS JPR	- (1954) 15 (1954)	120 305
K_2HO_4P	Dipotassium phosphate	S 2-16 μ	Miller	AC	24 (1952)	1253
		S 2-15 μ	Corbridge	JCS	- (1954)	493
		S 600-4000	Braunholtz	JCS	- (1959)	868
		S 650-5000	Pustinger	SA	15 (1959)	909
		S 300-880	Miller	SA	16 (1960)	135
		- 420-3600	Ryskin	OS	8 (1960)	606
$K_2HO_4P \cdot 3H_2O$	Potassium hydrogen phosphate trihydrate	- 420-3600	Ryskin	OS	8 (1960)	606
$K_2H_2O_7P_2$	Dipotassium dihydrogen pyrophosphate	S 650-5000	Pustinger	SA	15 (1959)	909
$K_2H_2NO_6P_2$	Dipotassium dihydrogen imido diphosphate	S 650-5000	Pustinger	SA	15 (1959)	909
$K_2H_6N_4O_8P_4$	Dipotassium tetraphosphonitriate	S 2-15 μ	Corbridge	JCS	- (1954)	4555
K_2DO_4P	Dipotassium hydrogen phosphate-d ₁	- 420-3600	Ryskin	OS	8 (1960)	606
K_2FO_3P	Dipotassium monofluoro phosphate	S 650-5000	Corbridge Pustinger	JCS SA	- (1954) 15 (1959)	4555 909
K_2O_3	Dipotassium trioxide	S -	Giguere	JACS	76 (1954)	5891

$K_2O_3S_2H_2O$	Potassium sulfite dihydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$K_2O_3S_2H_2O$	Potassium thiosulfate monohydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
K_2O_3Si	Potassium metasilicate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
K_2O_4S	Potassium sulfate	8-10 μ 3-14.5 μ - 2-16 μ 290-650 7.5-10.5 μ 2-16 μ 300-880	L S - S S S S S	Reflection Spec, Assign Interpretation of spec Spec Assign Spec, Anal Spec Spec	Plyler Taylor Duval Miller Duval Tai Meloche Miller	PR TFS CPR AC CPR AC JINC SA	28 (1929) 25 (1929) 227 (1948) 24 (1952) 239 (1954) 29 (1957) 6 (1958) 16 (1960)	284 856 1153 1253 249 1430 104 135
K_2O_4Se	Potassium selenate	220-3500	S	Spec, Struct	Duval	ZE	64 (1960)	582
$K_2O_4Se_2$	Potassium selenate	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
$K_2O_5S_2$	Potassium metabisulfide	2-16 μ -	S -	Spec Struct	Miller Taylor	AC JCP	24 (1952) 28 (1958)	1253 625
$K_2O_7S_2$	Potassium pyrosulfite	300-880	S	Spec	Miller	SA	16 (1960)	135
$K_2O_7B_4.5H_2O$	Potassium tetraborate pentahydrate	2-15 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$K_2O_8S_2$	Potassium persulfate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$K_3H_2N_2O_7P_3$	Potassium diimido trimetaphosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$K_3H_3N_3O_6P_3$	Potassium trimeta-phosphimate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909

$K_3H_3N_3O_3P_3 + K_3D_3N_3O_3P_3$	Potassium trimeta- phosphimate + Potassium trimeta- phosphimate-d ₃	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$K_3O_3P_4$	Potassium orthophosphate	2-16 μ 2-16 μ - 300-880	S S - S	Spec Spec FC Spec	Miller Meloche Pistorius Miller	AC JINC JCP SA	24 (1952) 6 (1958) 28 (1958) 16 (1960)	1253 104 514 135
$K_4C_4H_{12}N_2O_8$	Ethylenediamine tetraacetic acid potassium salt	800-3000	S	Spec, Freq	Swayer	JACS	80 (1958)	1597
$K_4HNO_4P_6$	Potassium imido diphosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$K_4H_4N_4O_4P_4$	Potassium tetra- metaphosphimate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$K_4O_4P_7$	Tetrapotassium pyro- phosphate	2-15 μ 1-40 μ -	S - Sol	Spec, Assign, Freq, I Spec, Freq Struct	Corbridge Mutschin Simon	JCS ZAC ZAUA	- (1954) 160 (1958) 301 (1959)	493 81 154
$K_4O_4P_7 \cdot xH_2O$	Tetrapotassium pyro- phosphate polyhydrate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$K_4O_4P_8 \cdot xH_2O$	Tetrapotassium peroxy- diphosphate polyhydrate	720-3270	S	I, Freq	Corbridge	JCS	- (1954)	4555
$K_5O_5P_{10}$	Pentapotassium tri- phosphate	2-15 μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	493
<u>La</u>	<u>COMPOUNDS</u>							
LaC_2	Lanthanum carbide	-	-	Freq, Thermo.	Chupka	JFC	62 (1958)	611

$\text{LaC}_{15}\text{H}_{21}\text{O}_6$	Lanthanum acetyl acetate	625-5000	S	Spec, Struct	West	JINC	5 (1958)	295	
$\text{LaC}_{24}\text{H}_{54}\text{N}_2\text{O}_{12}\text{P}_3$	Lanthanum-di-n-butyl phosphate	714-5000	S	Interaction study	Smith	JINC	9 (1959)	150	
$\text{LaC}_{27}\text{H}_{18}\text{N}_2\text{O}_2$	Lanthanum (III)-8- hydroxyquinolate	- 8-15 μ	S S	Spec Assign, Spec	Charles Charles	AC SA	25 (1953) 8 (1956)	530 1	
LaCl_3	Lanthanum chloride	1-15 μ	Sol	Spec	Lagerquist	AF	12 (1957)	491	
LaF_3	Lanthanum fluoride	-	S	Spec	Freed	JCP	8 (1940)	840	
LaF_4	Lanthanum (III)-complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762	
$\text{LaN}_3\text{O}_9\cdot 5\text{H}_2\text{O}$	Lanthanum nitrate pentahydrate	700-1600	S	Freq, Assign	Ferraro	JMS	4 (1960)	99	
LaO_4P	Lanthanum ortho- phosphate	290-650	S	Assign	Duval	CPR	239 (1954)	249	
$\text{La}_2\text{O}_2\text{S}$	Lanthanum oxysulfide	-	-	IR sens. phosphor and activators	Pitha	JACS	69 (1947)	1870	
<u>Li COMPOUNDS</u>									
LiCH_3	Methyl lithium	-	-	I, Struct	Rodinov	DANS	123 (1958)	113	
LiC_2H_5	Ethyl lithium	-	-	I, Struct	Rodinov	DANS	123 (1958)	113	
		-	Sol	Spec	Nikiten	DANS	124 (1959)	873	
		-	Sol	Band study	Rodinov	DANS	125 (1959)	562	
$\text{LiC}_2\text{H}_6\text{O}_2\text{P}$	Lithium dimethyl phosphinate	698-1420	S	I, Freq	Corbridge	JCS	- (1954)	4555	
$\text{LiC}_5\text{H}_5\text{O}_4$	gem-Dihydroxy lithium propionate	600-3000	S	Freq, Spec	Anderson	SA	12 (1958)	233	

$\text{LiC}_x\text{H}_y\text{O}_z \cdot \text{H}_2\text{O}$	Li thiumpyruvate monohydrate	650-4000	S	Spec, Assign	Long	TFS	56 (1960)	1570
$\text{LiC}_3\text{H}_5\text{O}_4 \cdot \text{H}_2\text{O}$	Propyl lithium	-	Sol	Band study	Rodinov	DANS	125 (1959)	562
$\text{LiC}_3\text{H}_3\text{O}_3$	Lithium pyruvate-d ₃	650-4000	S	Spec, Assign	Long	TFS	56 (1960)	1570
LiC_4H_9	Butyl lithium	-	- Sol	I, Struct Band study	Rodinov Rodinov	DANS DANS	123 (1958) 125 (1959)	113 562
$\text{LiC}_5\text{H}_7\text{O}_2$	Lithium acetyl acetate	625-5000	S	Spec, Struct	West	JINC	5 (1958)	295
$\text{LiC}_5\text{H}_{11}$	Amyl lithium	-	Sol	Band study	Rodinov	DANS	125 (1959)	562
LiC_6H_6	p-Iodophenyl lithium	-	G,S	Spec	Rodinov	DANS	128 (1959)	728
LiC_6H_5	Phenyl lithium	625-900 600-4000	Sol S	Vibrations Spec, Freq, Assign	Margoshes Lanpher	SA JOC	7 (1955) 21 (1956)	14 830
		-	-	I, Struct	Rodinov	DANS	123 (1958)	113
		-	G,S	Spec	Rodinov	DANS	128 (1959)	728
LiC_7H_7	p-Tolyl lithium	-	-	I, Struct	Rodinov	DANS	123 (1958)	113
$\text{LiC}_7\text{H}_{11}$	Amyl lithium acetylide	-	-	Spec, Struct, Freq	Shigorin	DANS	129 (1959)	121
$\text{LiC}_7\text{H}_{11}$	O-Tolyl lithium	-	-	I, Struct	Rodinov	DANS	123 (1958)	113
$\text{LiC}_8\text{H}_{18}\text{O}_4\text{P}$	Lithium-di-n-butyl phosphate	714-5000	S	Interaction study	Smith	JINC	9 (1959)	150
$\text{LiC}_9\text{H}_{11}$	Mesityl lithium	-	G,S	Spec	Rodinov	DANS	128 (1959)	728
$\text{LiC}_9\text{H}_{13}\text{O}_7$	Lithium-1,2-o-isopropylidene-D-glucosufuranurate	2-15 μ	S	Spec	Tipson	JRNB	62 (1959)	257
$\text{LiC}_{10}\text{H}_7$	α -Naphthyl lithium	-	G,S G,S	Spec, I, Struct Spec	Rodinov Rodinov	DANS DANS	123 (1958) 128 (1959)	113 728

$\text{LiC}_{10}\text{H}_7$	β -Naphthyl lithium	-	G,S	Spec	Rodinov	DANS	128 (1959)	728
$\text{LiC}_{12}\text{H}_{25}$	Dodecyl lithium	-	-	I, Struct	Rodinov	DANS	123 (1958)	113
		-	Sol	Band study	Rodinov	DANS	125 (1959)	562
$\text{LiC}_{16}\text{H}_{33}$	Hexadecyl lithium	-	Sol	Band study	Rodinov	DANS	125 (1959)	562
$\text{LiC}_{24}\text{H}_{39}\text{O}_2$	Lithium stearate	6-8 μ	S	Spec	Ellis	N	181 (1958)	181
$\text{LiC}_{24}\text{H}_{39}\text{O}_2$	Lithium-9-phenyl stearate	-	S	Group study	Kagaraise	JPC	59 (1955)	271
LiH	Lithium hydride	-	-	Quant. Mech.	Hutchisson	PR	40 (1932)	340
		-	-	FC	Badger	JCP	2 (1934)	128
		-	-	L-uncoupling	Crawford	PR	45 (1934)	737
		-	-	Potential curve	Crawford	PR	49 (1936)	640
		-	-	Potential curve	Rosenbaum	JCP	6 (1938)	16
		-	-	FC	Sutherland	JCP	8 (1940)	161
		-	-	FC	Glockler	JCP	10 (1942)	606
		-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	Interatomic distance	Wu	PR	71 (1947)	118
		-	-	FC	Platt	JCP	18 (1950)	932
		-	-	FC	Sheline	JCP	18 (1950)	927
		-	-	FC	Mitra	JCP	22 (1954)	564
		970-1500	G	Spec	Klemperer	JCP	23 (1955)	2452
		-	-	FC	Baughan	TFS	53 (1957)	1046
		7 μ	G	Vibrations	James	JCP	32 (1960)	728
LiHO	Lithium hydroxide	1-4 μ	S	Spec	Grantham	PR	18 (1921)	339
		0.8-1.75 μ	Sol	Spec	Collins	PR	20 (1922)	486
		0.6-2.8 μ	Sol	Assign	Gordy	JCP	2 (1934)	621
		2.8-6 μ	Sol	Spec, Assign	Plyler	JCP	2 (1934)	470
		-	S	Spec, Freq	Jones	JCP	22 (1954)	217
		6-33 μ	G	No spec could be recorded	Spinar	SA	12 (1958)	244
		3000-5000	S	Spec	Buchanan	JCP	31 (1959)	870
		2500-8000	S	Spec, Assign	Wickersheim	JCP	31 (1959)	863
$\text{LiHO}\cdot\text{H}_2\text{O}$	Lithium hydroxide hydrate	-	S	Spec, Freq	Jones	JCP	22 (1954)	217
		-	S	Spec	Drouard	CPH	249 (1959)	665

LiHO.HDO	LiOH hydroxide hydrate-d ₁	-	S	Freq	Jones	JCP	22 (1954)	217
LiHO.D ₂ O	LiOH hydroxide hydrate-d ₂	-	S	Freq	Jones	JCP	22 (1954)	217
LiH ₂ N	Lithium amide	3 μ	S	Freq	Mason	JCS	- (1958)	3619
LiH ₂ O ₂ P	Lithium phosphinate	2-15 μ	S	Group freq, I, Assign	Corbridge	JCS	- (1954)	493
LiH ₄ Al	Lithium aluminium hydride	3-15 μ	Sol S,Sol	Freq, Assign Spec	Lippincott Dautel	JCP ZE	17 (1949) 64 (1960)	1351 1234
LiH ₄ B	Lithium borohydrate	-	-	Freq	Price	JCP	17 (1949)	217
LiD	Lithium hydride-d ₁	2-14 μ 600-4000	S S	Spec, Assign Comparison	Price Waddington	JCP JCS	17 (1949) - (1958)	1044 4783
LiDO	Lithium hydroxide-d ₁	-	-	Potential curve FC	Crawford Glockler	PK JCP	49 (1936) 10 (1942)	640 606
LiBr	Lithium bromide	-	S S	Freq Spec	Jones Buchanan	JCP JCP	22 (1954) 31 (1959)	217 870
		3000-5000						
		-	-	Freq	Huggins	JCP	5 (1937)	143
		-	S	Freq	Roberts	PK	77 (1950)	258
		-	-	Freq	Rittner	JCP	19 (1951)	1030
		-	-	FC	Baughan	IFS	53 (1957)	1046
		700-465	G	Freq	Klemperer	JCP	26 (1957)	618
		-	-	Freq	Berkowitz	JCP	29 (1958)	1386
		570-630	G	Mol. Const.	Klemperer	JCP	33 (1960)	1534
LiCl	Lithium chloride	50-150 μ	Sol	Absorption	Cartwright	JCP	5 (1937)	776
		-	-	Freq	Huggins	JCP	5 (1937)	143
		-	S	Freq	Roberts	PK	77 (1950)	258
		-	-	Freq	Rittner	JCP	19 (1951)	1030
		-	-	FC	Baughan	IFS	53 (1957)	1046
		425-700	G	Freq	Klemperer	JCP	26 (1957)	618
		-	-	Freq	Berkowitz	JCP	29 (1958)	1386
		570-630	G	Mol. Const.	Klemperer	JCP	33 (1960)	1534

Li_2O	Lithium perchlorate	400-4000	Sol	Spec	Pullin	TFS	54 (1958)	11
	Lithium fluoride	-	S	Freq	Nichols	PR	21 (1923)	712
		1-15 μ	S	Spec	Barnes	PR	49 (1936)	648
		-	-	Christianson filter	Barnes	PR	49 (1936)	732
		30-120 μ	S	Spec	Barnes	JOSA	26 (1936)	428
		-	-	Freq	Huggins	JCP	5 (1937)	143
		1-40 μ	S	Spec	Barnes	JOSA	28 (1938)	140
		0-6 μ	S	Dispersion	Wright	KSI	15 (1944)	22
		-	-	Comparison of prism	Gore	JOSA	37 (1947)	23
		16-25 μ	S	Reflection filter	Plyler	PR	72 (1947)	165
		14-25 μ	S	Reflection	Plyler	JOSA	37 (1947)	746
		2-14 μ	S	Spec	White	JOSA	37 (1947)	713
		-	S	Dispersion	Williams	KSI	19 (1948)	135
		-	-	Polarizability theory	Szigeti	TFS	45 (1949)	155
		-	S	Ident	Ballard	JOSA	40 (1950)	798
		0.3-2.5 μ	S	Refr. Index	Durie	JOSA	40 (1950)	878
		0-3 μ	S	Dispersion	Lecomte	JPR	11 (1950)	67
		100-600 μ	S	Spec	McCurbin	JOSA	40 (1950)	537
		-	S	Freq	Roberts	PR	77 (1950)	258
		-	-	Freq	Szigeti	PHS	204 (1950)	51
		-	S	Optical properties	Ballard	JOSA	41 (1951)	772
		-	-	Freq	Rittner	JCP	19 (1951)	1030
		0.4-6 μ	S	Refractive index	Tilton	JRMB	47 (1951)	25
		-	-	Calibration data	Downie	JOSA	43 (1953)	941
		-	-	Quant. Mech.	Benson	JCP	22 (1954)	469
		13-60 μ	S	Vibrations	Lax	PR	97 (1955)	39
		-	-	Mol. Const.	Haas	PR	103 (1956)	564
		-	-	FC	Baughan	TFS	53 (1957)	1046
		-	-	Spec	Brackett	JOSA	47 (1957)	636
		50-500	-	Spec	Lord	JOSA	47 (1957)	689
		825-860	G	Rotational struct	Vidale	JPC	64 (1960)	314
		-	Sol	Absorption	Cartwright	JCP	5 (1937)	776
		50-150 μ	-	Freq	Huggins	JCP	5 (1937)	143
		-	S	Freq	Roberts	PR	77 (1950)	258
		-	-	Freq	Rittner	JCP	19 (1951)	1030
		-	-	Pressed disk	Ford	JSI	31 (1954)	338
		425-700	G	Freq	Klemperer	JCP	26 (1957)	618

LiI

Lithium iodide

Sol

Absorption

Cartwright

JCP

776

	-	570-630	G	Freq Mol. Const.	Berkowitz Klemperer	JCP JCP	29 (1958) 33 (1960)	1386 1534
$\text{LiI} \cdot 3\text{H}_2\text{O}$		800-4000	S	Group study	Lucchesi	JACS	78 (1956)	1347
LiIO_3		-	S	Spec, Struct	Dasent	JCS	- (1960)	2429
LiNO_3		6-16 μ 2-16 μ 450-3800 2-15 μ 300-880	Sol S Sol S S	Freq Spec Freq Assign Spec	Williams Meloche Frevel Greenberg Miller	JACS JINC SA JCP SA	61 (1939) 6 (1958) 15 (1959) 33 (1960) 16 (1960)	1382 104 557 900 135
LiN_3		635-3100	S	Freq, FC	Gray	TFS	53 (1957)	901
LiO_4SK		22-310 μ	S	Reflectance & transmittance	Weniger	JOSA	7 (1923)	517
Li_2		1.28-1.87 μ	- S - - - - - - - - - Sol	7T-type doubling theory Spec Freq FC Mol. Const. Potential function FC Potential function Thermo. FC FC FC Spec	Mulliken Meggers Rosen Badger Pekeris Linnett Sutherland Clark Hulburt Gordy Wu Baughan Fowles	PR JHNB PR JCP PR TFS JCP TFS JCP JCP JCP PR TFS JCS	38 (1931) 10 (1933) 43 (1933) 2 (1934) 45 (1934) 36 (1940) 8 (1940) 37 (1941) 9 (1941) 14 (1946) 71 (1947) 53 (1957) - (1957)	85 669 5 128 98 1123 161 299 61 305 118 1046 3329
Li_2CO_3		2-16 μ 2-16 μ 300-880	S S S	Spec Spec Spec	Miller Meloche Miller	AC JINC SA	24 (1952) 6 (1958) 16 (1960)	1253 104 135
$\text{Li}_2\text{C}_2\text{H}_2\text{O}_5\text{F}$		-	-	Freq	Ketelaar	RTC	78 (1959)	190

$\text{Li}_2\text{C}_2\text{O}_4$	Lithium oxalate	370-1650	S	Assign	Schmelz	SA	9 (1957)	51
$\text{Li}_2\text{HPO}_3 \cdot \text{H}_2\text{O}$	Dilithium ortho-phosphate monohydrate	2-15 μ	S	Group freq, I, Assign	Corbridge	JCS	- (1954)	493
$\text{Li}_2\text{FP}_3 \cdot 3\text{H}_2\text{O}$	Dilithium monofluorophosphate trihydrate	-	S	I, Freq	Corbridge	JCS	- (1954)	4555
Li_2O_2	Lithium peroxide	2-16 μ	S	Spec, Struct	Brame	JINC	4 (1957)	90
$\text{Li}_2\text{O}_2 \cdot 8\text{H}_2\text{O}$	Lithium peroxide octahydrate	2-16 μ	S	Spec, Struct	Brame	JINC	4 (1957)	90
Li_2O_4	Lithium sulfate	7.5-10.5 μ	S	Spec	Tai	AC	29 (1957)	1430
$\text{Li}_2\text{O}_4 \cdot \text{S} \cdot \text{H}_2\text{O}$	Lithium sulfate monohydrate	2-16 μ	S	Spec, Freq	Miller	AC	24 (1952)	1253
		2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
		300-880	S	Spec	Miller	SA	16 (1960)	135
$\text{Li}_3\text{O}_4\text{P}$	Trilithium orthophosphate	2-15 μ	S	Spec, Assign, Freq, I	Corbridge	JCS	- (1954)	493
		650-290	S	Assign	Daval	CPH	239 (1954)	249
$\text{Li}_3\text{O}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$	Lithium phosphate hemihydrate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
$\text{Li}_4\text{O}_7\text{P}_2 \cdot 2\text{H}_2\text{O}$	Tetralithium pyrophosphate dihydrate	2-15 μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	493
$\text{Li}_4\text{O}_8\text{P}_2 \cdot x\text{H}_2\text{O}$	Tetralithium peroxy diphosphate polyhydrate	767-3220	S	I, Freq	Corbridge	JCS	- (1954)	4555

Mg COMPOUNDS

Mg	Compound	770-1425	S	I, Group freq	Corbridge	JCS	-	(Year)	4555
MgCH ₃ O ₃ P	Magnesium methyl phosphonate		S			JCS	-	(1954)	4555
MgCO ₃	Magnesium carbonate	0.8-20 μ 2-16 μ	S S	Reflectance Spec	Agnew MeLoche	JOSA JINC	43 6	(1953) (1958)	999 104
MgC ₂ H ₅ Br	Ethyl magnesium bromide	1-14 μ	Sol	Spec, Anal	Plum	JCP	5	(1937)	172
MgC ₂ H ₅ I	Ethyl magnesium iodide	1-13 μ	Sol	Spec, Struct	Plum	JCP	5	(1937)	172
MgC ₂ O ₄ ·2H ₂ O	Magnesium oxalate dihydrate	2-16 μ	S	Spec	Hunt	AC	22	(1950)	1478
MgC ₄ N ₄ K ₂	Magnesium (II)-cyanide complex (potassium salt)	250-2200	-	Assign	Hidalgo	CPR	249	(1959)	233
MgC ₅ H ₇ O ₂	Acetylacetone magnesium chelate	-	Sol	Freq	Bellamy	JCS	-	(1954)	4491
MgC ₆ H ₅ Pr	Phenyl magnesium bromide	1-13 μ	Sol	Spec	Plum	JCP	5	(1937)	172
MgC ₆ H ₅ I	Phenyl magnesium iodide	1-13 μ	Sol	Spec	Plum	JCP	5	(1937)	172
MgC ₆ Cl ₆ O ₄	Magnesium trichloroacrylate	700-1600	-	Spec	Duval	RTC	69	(1950)	391
MgC ₇ H ₅ O ₂	Salicylaldehyde magnesium chelate	-	S	Group freq	Bellamy	JCS	-	(1954)	4491

$\text{MgC}_{10}\text{H}_{10}$	Magnesium cyclo-pentadiene	600-3200 4.7 μ	S G	Spec Struct	Wilkinson Cotton	JINC JACS	2 (1956) 80 (1958)	95 269
$\text{MgC}_{10}\text{H}_{12}\text{N}_2\text{O}_8\text{Na}_2\cdot 4\text{H}_2\text{O}$	Magnesium (II)-ethylenediamine tetraacetic acid complex (sodium salt) tetrahydrate	800-3000	S	Spec, Freq	Sawyer	JACS	80 (1958)	1597
$\text{MgC}_{10}\text{H}_{14}\text{O}_4$	Magnesium acetyl acetate	625-5000	S	Spec, Struct	West	JINC	5 (1958)	295
$\text{MgC}_{14}\text{H}_{20}\text{O}_4$	Magnesium (II)-methylacryl acetone complex	1200-1800	S	Assign, Mol. Const.	Charette	SA	16 (1960)	689
$\text{MgC}_{16}\text{H}_{28}\text{O}_4$	Magnesium (II)-pivaloyl acetone complex	1200-1800	S	Assign, Mol. Const.	Charette	SA	16 (1960)	689
$\text{MgC}_{18}\text{H}_{12}\text{N}_2\text{O}_2$	Magnesium (II)-8-hydroxy-quinolate	- 2-16 μ 8-15 μ 700-800	S S S L	Spec Spec Assign, Spec Struct	Charles Stone Charles Sidorov	AC JACS SA OS	25 (1953) 76 (1954) 8 (1956) 6 (1959)	530 4997 1 812
$\text{MgC}_{18}\text{H}_{12}\text{N}_2\text{O}_2\cdot 2\text{H}_2\text{O}$	Magnesium - 8-quinolinolate dihydrate	2-16 μ	S	Spec	Stone	JACS	76 (1954)	4997
$\text{MgC}_{20}\text{H}_{16}\text{N}_2\text{O}_2$	2-Methyl-8-hydroxy-quinoline magnesium (II) chelate	8-15 μ	S	Assign, Spec	Charles	SA	8 (1956)	1
$\text{MgC}_{20}\text{H}_{16}\text{N}_2\text{O}_2$	4-Methyl-8-hydroxyquinoline magnesium (II) chelate	8-15 μ	S	Assign, Spec	Charles	SA	8 (1956)	1

MgC ₂₈ H ₂₈ N ₄	Magnesium octamethyl porphin	400-4000	S	Spec, H bond	Mason	JCS	- (1958)	976
MgC ₃₆ H ₇₀ O ₄	Magnesium stearate	2-15 μ 6-8 μ	S S	Spec Spec	Kendall Ellis	APS N	7 (1953) 181 (1958)	179 181
MgC ₅₅ H ₇₄ N ₄ O ₆	Chlorophyll-b	640-3500	S, Sol	Spec, Freq, Assign	Weigl	JACS	75 (1953)	2173
MgC ₅₅ H ₇₂ N ₄ O ₅	Chlorophyll-a	640-3500	S, Sol	Spec, Freq, Assign	Weigl	JACS	75 (1953)	2173
MgC ₅₅ H ₇₂ N ₄ O ₅	Chlorophyll (Mixture of a and b)	0.776-2.83 μ 1.3-13.7 μ 1-14 μ 1-14 μ 1-14 μ	Sol Sol Sol - -	Transmission curves Band freq Spec Spec Spec	Nichols Stair Stair Loofbourow Aronoff	PH Ph JHNB RMP CH	1 (1893) 33 (1929) 11 (1933) 12 (1940) 47 (1950)	1 1092 703 267 175
MgC ₅₅ H ₇₆ N ₄ O ₆	Bacteriochlorophyll-a	630-5500	S, Sol	Spec, Freq, Assign	Weigl	JACS	75 (1953)	2173
MgC ₁₈₀₈ H ₃₀₁₀ O ₄	Magnesium polymethacryl acetone complex	1200-1800	S	Assign	Charette	SA	16 (1960)	689
MgH	Magnesium hydride	-	-	7f-type doubling theory FC Mol. Const. FC FC FC FC	Mulliken Badger Pekeris Wu Platt Sheline Mitra	PH JCP PH PH JCP JCP JCP	38 (1931) 2 (1934) 45 (1934) 71 (1947) 18 (1950) 18 (1950) 22 (1954)	85 128 98 118 932 927 564
MgH ⁺	Magnesium hydride ion	-	-	FC Mol. Const.	Badger Pekeris	JCP PR	22 (1934) 45 (1934)	128 98
MgH ₄ P ₃ H ₂ O	Magnesium hydrogen phosphate trihydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
MgH ₂ NO ₃ P ₃ ·7H ₂ O	Magnesium monoamido phosphate heptahydrate	-	-	Band study	Steiger	ZE	61 (1957)	1004

MgH_2O_2	Magnesium oxide hydrate (Brucite)	2-3.5 μ 2-4 μ 5-50 μ 2-16 μ	S S S S	Spec Struct Absorption Spec	Plyler Randall Cartwright Hunt	28 (1926) 31 (1928) 35 (1930) 22 (1950)	284 1131 415 1478
MgH_2O_2	Magnesium hydroxide	3000-5000	S	Spec, Freq	Benesi	30 (1959)	852
$MgH_2N_3O_6P_3Na_6H_2O$	Sodium magnesium triphosphonitrate hexahydrate	823-3175	S	I, Freq	Corbridge	- (1954)	4555
$MgH_4NO_4 \cdot 6H_2O$	Magnesium ammonium orthophosphate hexa- hydrate	2-15 μ	S	Freq, I, Assign	Corbridge	- (1954)	493
$MgH_4O_8P_2$	Magnesium biphosphate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	24 (1952) 16 (1960)	1253 135
$MgH_4O_8P_2 \cdot 6H_2O$	Magnesium phosphinate hexahydrate	2-15 μ	S	Freq, I, Assign	Corbridge	- (1954)	493
$MgH_6N_2O_6P_2$	Magnesium biphosphor- amidate	-	-	Band study	Steiger	61 (1957)	1004
$MgBr_2$	Magnesium bromide	1-13 μ -	Sol G	Spec, Anal Freq, FC	Plum Randall	5 (1937) 63 (1959)	172 758
$MgCl_2$	Magnesium chloride	0.8-2.3 μ 220-700 -	Sol G G	Spec Spec, FC Freq, FC	Collins Buchler Randall	20 (1922) 29 (1958) 63 (1959)	486 121 758
$MgCl_2^{35}Cl^{37}$	Magnesium chloride (isotopic)	-	-	Isotope effect	Salant	42 (1932)	812

$MgCl_2$	Magnesium chloride (isotopic)	-	-	Isotope effect	Salant	Ph	42 (1932)	812
$MgCl_2 \cdot 8H_2O$	Magnesium perchlorate	2-16 μ 2-25 μ 300-880	S	Spec, Qual. Anal Spec, Struct Spec	Miller Falk Miller	AC CJC SA	24 (1952) 35 (1957) 16 (1960)	1253 1195 135
MgF_2	Magnesium fluoride	- 0.4-1.6 μ 0.5-3.4 μ -	- - S S	FC Reflection Reflectance Mol. Const.	Badger Haas Rank Scott	JCP JOSA JOSA JOSA	2 (1934) 45 (1955) 45 (1955) 45 (1955)	128 945 69 69
MgF_4	Magnesium fluoride complex anion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
MgI_2	Magnesium iodide	-	-	Isotope effect	Salant	Ph	42 (1932)	812
MgN_2O_2	Magnesium hyponitrite	400-4000	S	Freq	LeFevre	AJC	10 (1957)	361
MgN_2O_6	Magnesium nitrate	0.8-2.3 μ 2-16 μ	Sol S	Spec Spec	Collins Meloche	Ph JINC	20 (1922) 6 (1958)	486 104
$MgN_2O_6 \cdot 6H_2O$	Magnesium nitrate hexahydrate	- 700-1600 300-880	S S S	Spec Freq, Assign Spec	Hafele Ferraro Miller	ZP JMS SA	148 (1957) 4 (1960) 16 (1960)	262 99 135
MgO	Magnesium oxide	1-8 μ 1-7 μ 6.7-33 μ 1-15.6 μ 0.2-5 μ 35-120 μ 1-13 μ -	S - S S S S S -	Emission Filter transmission Transmission Transmission, Reflection Optical properties Spec Christianson filter Use as window for HF	Coblentz Pfund Strong Barnes Strong Barnes Barnes Wahrhaftig	BBS PR FR PR JOSA JOSA PR JCP	5 (1908) 37 (1930) 36 (1931) 48 (1935) 25 (1935) 26 (1936) 49 (1936) 8 (1940)	159 1565 71 582 207 428 732 349

	2-14 μ	S	Spec	White	JOSA	37 (1947)	713
	-	-	Quant. Mech.	Horning	JCP	16 (1948)	1063
	2-14 μ	S	Spec, Struct	Willmott	N	162 (1948)	996
	100-600 μ	S	Spec	McCurbin	JOSA	40 (1950)	537
	-	-	Freq	Szigeti	PRS	204 (1950)	51
	1-10 μ	S	Transmission curve	Chasmar	JSI	28 (1951)	206
	9 μ	S	Transmission	Young	JSI	28 (1951)	207
	0.4-2.7 μ	S	Spec	Derksen	JOSA	42 (1952)	263
	1-8 μ	S	Spec	Plyler	JOSA	42 (1952)	266
	0.36-5.35 μ	S	Refr. Index	Stephens	JRNB	49 (1952)	249
	-	S	Refl. filter	Pastie	JOSA	43 (1953)	333
	1-21 μ	Sol	Spec, Freq	Momin	PLAS	37 (1953)	254
	0.6-2.4 μ	S	Reflectance, Spec	Sanders	JOSA	43 (1953)	58
	1-15 μ	S	Reflectance	Gier	JOSA	44 (1954)	558
	8-40 μ	S	Vib.	Lax	PR	97 (1955)	39
	-	-	Refraction index	Haas	PR	103 (1956)	564
	-	S	Spec, Hall effect	Yamaka	PR	101 (1956)	565
	-	-	Spec	Lord	JOSA	47 (1957)	689
	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
	300-880	S	Spec	Miller	SA	16 (1960)	135
	1-6 μ	S	Spec	Coblentz	BBS	6 (1910)	301
	2-15 μ	S	Spec	Harkins	AC	31 (1959)	541
	50-150 μ	Sol	Band study	Cartwright	JCP	5 (1937)	776
	290-650	S	Assign	Duval	CPR	239 (1954)	249
	7.5-10.5 μ	S	Spec	Tai	AC	29 (1957)	1430
	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
	300-880	S	Spec	Miller	SA	16 (1960)	135
	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
	300-880	S	Spec	Miller	SA	16 (1960)	135
	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
	10-500	-	Reflection, Transmission	Mitsuishi	JPSJ	13 (1958)	1236
$MgO_3S_2 \cdot 6H_2O$			Magnesium thio-sulfate hexahydrate				
MgO_3Si			Magnesium silicate				
MgO_4S			Magnesium sulfate				
$MgO_4S \cdot 7H_2O$			Magnesium sulfate heptahydrate				
$MgO_4B_2 \cdot 8H_2O$			Magnesium borite octahydrate				
$MgO_4Cr \cdot 7H_2O$			Magnesium chromate heptahydrate				
MgO_4Fe_2			Magnesium ferrite				

MgO Se. $6H_2O$	220-3500	S	Spec, Struct	Duval	ZE	64 (1960)	582
Magnesium selenate hexahydrate							
MgS	0.83-1.35 μ	S	Spec	Banks	JACS	72 (1950)	3173
Mg ₂ C ₄ H ₂ O ₁₄ ·5H ₂ O	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
Dimagnesium pyro-phosphate	2-15 μ	S	Group freq, I, Assign	Corbridge	JCS	- (1954)	493
Dimagnesium tetra-metaphosphate	-	-	Freq, Struct	Steiger	ZAUA	294 (1958)	1
Dimagnesium tetrameta-phosphate octahydrate	2-15 μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	493
Magnesium stannide	2-15 μ	S	Spec	Blunt	PR	100 (1955)	663
Magnesium orthophos-phate	2-15 μ 290-650	S S	Freq, I, Assign Assign	Corbridge Duval	JCS CPR	- (1954) 239 (1954)	493 249
Trimagnesium phosphate tetrahydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
Magnesium phosphate pentahydrate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
Magnesium arsenate	290-650	S	Assign	Duval	CPR	239 (1954)	249
Trimagnesium trimeta-phosphate decahydrate	2-15 μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	493
Basic magnesium carbonate trihydrate	2-16 μ 2-16 μ	S S	Spec Spec	Hunt Miller	AC AC	22 (1950) 24 (1952)	1478 1253
Manganese carbonate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104

Mn COMPOUNDS

MnCO₃

$\text{MnC}_4\text{N}_4\text{S}_4\text{K}_2 \cdot 6\text{H}_2\text{O}$	Manganese (II)-iso-thiocyanate complex (potassium salt) hexahydrate	-	S	Freq, Assign	Mitchell	JCS - (1960)	1912
$\text{MnC}_5\text{H}_5\text{O}_5$	Manganese penta-carbonyl hydride	400-3000	G	Freq, Assign	Cotton	JCS - (1959)	833
MnC_5DO_5	Manganese penta-carbonyl hydride-d ₁	400-3000	G	Freq, Assign	Cotton	JCS - (1959)	833
MnC_5BrO_5	Manganese penta-carbonyl bromide	1700-2200	-	Struct	Abel	JCS - (1959)	1501
MnC_5ClO_5	Manganese penta-carbonyl chloride	1700-2200	-	Struct	Abel	JCS - (1959)	1501
MnC_5IO_5	Manganese penta-carbonyl iodide	2-15 μ 1700-2200	S -	Spec Struct	Brainum Abel	JACS 76 (1954) JCS - (1959)	3831 1501
MnC_5N_5	Manganese (II)-cyanide complex anion	450-2200	-	Freq	Caglioti	JINC 8 (1958)	87
$\text{MnC}_5\text{N}_6\text{OK}_3$	Manganese (II)-cyanide, nitric oxide complex (potassium salt)	1700-2050	S	Freq	Lewis	JINC 7 (1958)	32
$\text{MnC}_6\text{H}_{16}\text{Br}_2\text{O}_3\text{S}_3 \cdot 6\text{H}_2\text{O}$	Manganese (II)-dimethylsulfoxide complex bromide hexahydrate	650-4000	S	Assign, Spec	Cotton	JFC 64 (1960)	1534
$\text{MnC}_6\text{H}_{18}\text{Cl}_2\text{O}_3\text{S}_3$	Manganese (II)-dimethylsulfoxide complex chloride	650-4000	S	Assign, Spec	Cotton	JFC 64 (1960)	1534
$\text{MnC}_6\text{H}_{18}\text{Cl}_2\text{O}_3\text{S}_3 \cdot 4\text{H}_2\text{O}$	Manganese (II)-dimethylsulfoxide complex perchlorate tetrahydrate	650-4000	S	Assign, Spec	Cotton	JFC 64 (1960)	1534

MnC ₆ N ₆	Manganese (I)-cyanide complex anion	-	S	Freq	Caglioti	AAN	22 (1957)	266
MnC ₆ N ₆	Manganese (II)-cyanide complex anion	2000-2200 250-2200	- S	Freq Spec, Assign	Caglioti Caglioti Hidalgo	AAN JINC AKS	22 (1957) 8 (1958) 56 (1960)	266 87 9
MnC ₆ N ₆	Manganese (III)-cyanide complex anion	2000-2200 250-2200	- S	Freq Spec, Assign	Caglioti Caglioti Hidalgo	AAN JINC AKS	22 (1957) 8 (1958) 56 (1960)	266 87 9
MnC ₆ N ₆ K ₃	Manganese (III)-cyanide complex (potassium salt)	250-2200	-	Assign	Hidalgo	CPR	249 (1959)	233
MnC ₇ H ₅ O ₄	π -Allyl manganese tetracarboxyl	-	-	Spec	Kaesz	ZN	15 (1960)	682
MnC ₇ H ₁₃ N ₃ O ₃	Diethylene triamine manganese tricarboxyl	1700-2100	S	Assign	Abel	JCS	- (1959)	2323
MnC ₈ H ₅ O ₃	Cyclopentadienyl tricarbonmonoxide manganese (I)	1700-2200 600-5000	Sol Sol	Spec, Struct Spec, Config.	Cotton Piper	JINC JINC	1 (1955) 1 (1955)	175 165
MnC ₈ H ₅ O ₅	σ -Allyl manganese pentacarboxyl	-	-	Spec	Kaesz	ZN	15 (1960)	682
MnC ₁₀ H ₇ O ₄	(π -Acetylcyclopentadienyl) manganese tricarboxyl	657-3110	S	Freq	Cotton	CIL	- (1958)	1368
MnC ₁₀ H ₁₀	Manganese cyclopentadiene	600-3200	S	Spec	Wilkinson	JINC	2 (1956)	95
MnC ₁₀ H ₁₂ N ₂ O ₈ Na ₂ ·2H ₂ O	Manganese (II)-ethylenediamine tetraacetic acid complex (sodium salt) dihydrate	800-1800	S	Freq, Assign	Sawyer	JACS	81 (1959)	816

$\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$	Manganese (II)- dimethylsulfoxide complex perchlorate	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)	1534
$\text{Mn}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$	Manganese carbon- monoxide 2,2'- dipyridine complex iodide	1700-2200	-	Struct	Abel	JCS	- (1959)	1501
$\text{Mn}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$	Manganese carbon- monoxide pyridine complex iodide	1700-2200	-	Struct	Abel	JCS	- (1959)	1501
$\text{Mn}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$	Manganese (II)- tropolonate	-	S	Freq	Bryant	JOC	19 (1954)	1889
$\text{Mn}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$	Manganese (II)- methacryl acetone complex	1200-1800	S	Assign	Charette	SA	16 (1960)	689
$\text{Mn}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$	Manganese (II)- pivaloyl acetone complex	1200-1800	S	Assign	Charette	SA	16 (1960)	689
$\text{Mn}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$	Manganese-di-n-butyl phosphate	714-5000	S	Interaction study	Smith	JINC	9 (1959)	150
$\text{Mn}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$	Manganese (II)-8- hydroxyquinolate	- 8-15 μ	S	Spec Assign, Spec	Charles Charles	AC SA	25 (1953) 8 (1956)	530 1
$\text{Mn}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$	2-Methyl-8-hydroxy- quinoline manganese (II) chelate	8-15 μ	S	Spec, Assign	Charles	SA	8 (1956)	1
$\text{Mn}(\text{C}_2\text{O}_4)_2 \cdot 2\text{H}_2\text{O}$	4-Methyl-8-hydroxy- quinoline manganese (II) chelate	8-15 μ	S	Spec, Assign	Charles	SA	8 (1956)	1

MnC ₃₉ H ₂₄ Cl ₂ N ₆ O ₈	Manganese (II)-2,2'-bipyridine complex perchlorate	600-2000	S	Interpretation	Schilt	JINC	9 (1959)	211
MnC ₃₆ H ₂₄ Cl ₂ N ₆ O ₈	Manganese (II)-1:10-phenanthroline complex perchlorate	600-2000	S	Spec	Schilt	JINC	9 (1959)	211
MnC ₃₉ H ₃₀ BrO ₃ P ₂	Manganese carbon-monoxide triphenylphosphine complex bromide	1700-2200	-	Struct	Abel	JCS	- (1959)	1501
MnC ₃₉ H ₃₀ BrO ₃ As ₂	Manganese carbon-monoxide, triphenylarsine complex bromide	1700-2200	-	Struct	Abel	JCS	- (1959)	1501
MnC ₃₉ H ₃₀ ClO ₃ P ₂	Manganese carbon-monoxide triphenylphosphate complex chloride	1700-2200	-	Struct	Abel	JCS	- (1959)	1501
MnC ₃₉ H ₃₀ ClO ₃ As ₂	Manganese carbon-monoxide triphenylarsine complex chloride	1700-2200	-	Struct	Abel	JCS	- (1959)	1501
MnC ₃₉ H ₃₀ IO ₃ P ₂	Manganese carbon-monoxide triphenylphosphate complex iodide	1700-2200	-	Struct	Abel	JCS	- (1959)	1501
MnC ₃₉ H ₃₀ IO ₃ As ₂	Manganese carbon-monoxide triphenylarsine complex iodide	1700-2200	-	Struct	Abel	JCS	- (1959)	1501

MnF ₄	Manganese (III)- complex fluoro ion	-	S	Freq, Struct	Peacock	JCS - (1959)	2762
MnF ₅	Manganese (IV)-complex fluoro ion	-	S	Freq, Struct	Peacock	JCS - (1959)	2762
MnI ₆ O ₁₈ K ₂	Potassium manganese (IV) iodate	-	S	Spec, Struct	Dasent	JCS - (1960)	2429
MnN ₂ O ₆	Manganese nitrate	2-15 μ	S	Spec	Addison	JCS - (1960)	613
MnO	Manganous oxide	1-8 μ	S	Emission	Coblentz	EBS 5 (1908)	159
MnO ₄	Perranganate ion	-	-	Freq	Taylor	TFS 25 (1929)	314
MnO ₄ S	Manganese sulfate	0-1.4 μ 0.8-1.25 μ	Sol	Spec	Coblentz	BBS 7 (1911)	619
MnO ₄ S.H ₂ O	Manganese sulfate monohydrate	2-16 μ	S	Magnetic rotation Spec	Ingersoll	JOSA 6 (1922)	663
MnO ₄ S.2H ₂ O	Manganese sulfate dihydrate	2-16 μ	S	Spec	Meloche	JINC 6 (1958)	104
MnO ₄ S.xH ₂ O	Manganese sulfate polyhydrate	300-880	S	Spec, Freq	Miller	AC 24 (1952)	1253
MnO ₄ K	Potassium permanganate	3-14.5 μ	S	Spec	Miller	SA 16 (1960)	135
MnO ₄ K	Potassium permanganate	3-14.5 μ	S	Spec, Assign	Taylor	TFS 25 (1929)	856
		-	S	Freq	Taylor	TFS 25 (1929)	860
		2-16 μ	S	Spec	Miller	AC 24 (1952)	1253
		1000	S	Freq	Barracrough	JCS - (1959)	3552
		300-880	S	Spec	Miller	SA 16 (1960)	135
MnO ₄ Na.3H ₂ O	Sodium permanganate trihydrate	2-16 μ 300-880	S	Spec	Miller	AC 24 (1952)	1253
			S	Spec	Miller	SA 16 (1960)	135
MnO ₉ B ₄ .8H ₂ O	Manganese tetraborate octahydrate	2-16 μ 300-880	S	Spec	Miller	AC 24 (1952)	1253
			S	Spec	Miller	SA 16 (1960)	135
Mn ₂ C ₅ H ₅ NOS ₂		1700-2050	S	Freq	Lewis	JINC 7 (1958)	32

$Mn_2C_8Br_2O_8$	Manganese carbonyl bromide (binuclear)	1700-2200	-	Struct	Abel	JCS	-	(1959)	1501
$Mn_2C_8Cl_2O_8$	Manganese carbonyl chloride (binuclear)	1700-2200	-	Struct	Abel	JCS	-	(1959)	1501
$Mn_2C_8I_2O_8$	Manganese carbonyl iodide (binuclear)	1700-2200	-	Struct	Abel	JCS	-	(1959)	1501
$Mn_2C_{10}O_{10}$	Manganese carbon-monoxide complex (binuclear)	450-3000	S, Sol	Spec, Struct	Cotton	JINC	2	(1956)	141
$Mn_2C_{14}H_{10}Cl_6N_2O_6Pt$	Cyclopentadienyl-dicarbomonoxide-nitrosonium-manganese (I)-hexachloroplatinate	600-5000	Sol	Spec, Config., Struct	Piper	JINC	1	(1955)	165
$Mn_2C_{14}H_{10}Cl_6N_2O_{12}Pt$	Ethyl pentacarbon-monoxide nitrosonium manganese hexachloroplatinate	-	S	Freq	Lewis	JINC	7	(1958)	32
$Mn_2C_{15}H_{15}N_5O_3$	Manganese cyclopentadiene, nitric oxide complex	5.6-6.8/ μ 1700-2050	Sol Sol	Struct, Freq Freq	Piper Lewis	JINC JINC	2 7	(1956) (1958)	38 32
Mn_2O_8Ba	Barium permanganate	300-880	S	Spec	Miller	SA	16	(1960)	135
Mn_2O_8Ca	Calcium permanganate	300-880	S	Spec	Miller	SA	16	(1960)	135
$Mn_2O_8Ca \cdot 4H_2O$	Calcium permanganate tetrahydrate	2-16/ μ	S	Spec	Miller	AC	24	(1952)	1253
$Mn_2O_{12}P_4 \cdot 9H_2O$	Dimanganese tetrametaphosphate nonahydrate	2-16/ μ	S	Freq, I, Assign	Corbridge	JCS	-	(1954)	493
$Mn_3O_8P_2$	Manganese orthophosphate	290-650	S	Assign	Duval	CPR	239	(1954)	249

$Mn_3O_8P_7 \cdot 7H_2O$	Trimanganese phosphate heptahydrate	2-16/ μ 2-16/ μ 300-880	S S S	Spec Comparison Spec	24 (1957) 6 (1958) 16 (1960)	AC JINC SA	Miller Meloche Miller	1253 104 155
$Mn_3O_8P_6 \cdot 11H_2O$	Trimanganese trimeta- phosphate hendeca- hydrate	2-15/ μ	S	Freq, I, Assign	-	JCS	Corbridge	493
<u>Mo</u> COMPOUNDS								
$MoCl_3O_9P_3$	Molybdenum carbon- monoxide phosphorus trichloride complex	1700-2100	Sol	Freq	-	JCS	Abel	2323
$MoCl_3O_9As_3$	Molybdenum carbon- monoxide arsenic trichloride complex	1700-2100	Sol	Freq	-	JCS	Abel	2323
$MoCl_3O_9Sb_3$	Molybdenum carbon- monoxide antimony trichloride complex	1700-2100	Sol	Freq	-	JCS	Abel	2323
$MoCl_4H_4N_4O_4$	Molybdenum (IV)- cyanide, hydroxide complex (potassium salt)	800-3500	S	Freq, Assign, Struct	-	JCS	Griffith	872
$MoCl_4H_4N_4O_4 \cdot 2H_2O$	Molybdenum (V)-cyanide hydroxide complex (potassium salt) dihydrate	800-3500	S	Freq, Assign, Struct	-	JCS	Griffith	872
$MoCl_5H_2N_6O_4K$	Molybdenum (III)- cyanide, hydroxide nitric oxide complex (potassium salt)	800-3500	S	Freq, Assign	-	JCS	Griffith	872

$\text{MoC}_5\text{H}_7\text{N}_5\text{O}_3\text{K}_4 \cdot \text{xH}_2\text{O}$	Molybdenum (IV)-cyanide, hydroxide complex (potassium salt) polyhydrate	800-3500	S	Freq, Assign, Struct	Griffith	JCS - (1959)	872
$\text{MoC}_6\text{H}_{12}\text{N}_6\text{S}_3$	Molybdenum (O)-carbon-monoxide thiourea complex	-	S	Freq	Cotton	CIL - (1960)	1219
$\text{MoC}_6\text{H}_6\text{N}_9\text{S}_6$	Molybdenum (III)-isothiocyanate complex (ammonium salt)	-	S	Freq, Assign	Mitchell	JCS - (1960)	1912
MoC_6O_6	Molybdenum hexacarbonyl	2-40/ μ	G, S	Spec, Assign, Thermo. NCA	Hawkins Murata Kawai	JCP 23 (1955) JCP 27 (1957) BCSJ 33 (1960)	2422 605 1008
$\text{MoC}_7\text{H}_5\text{NO}_3$	Molybdenum (I)-carbon-monoxide cyclopentadiene, nitric oxide complex	450-4000 1700-2050	Sol Sol	Spec, Freq Freq	Piper Lewis	JINC 3 (1956) JINC 7 (1958)	104 32
$\text{MoC}_8\text{H}_5\text{BrO}_3$	Molybdenum (II)-carbonmonoxide, cyclopentadiene complex bromide	450-4000	Sol	Spec, Freq	Piper	JINC 3 (1956)	104
$\text{MoC}_8\text{H}_5\text{ClO}_3$	Molybdenum (II)-carbonmonoxide, cyclopentadiene complex bromide	450-4000	Sol	Spec, Freq	Piper	JINC 3 (1956)	104
$\text{MoC}_8\text{H}_5\text{IO}_3$	Molybdenum (II)-carbonmonoxide, cyclopentadiene complex iodide	450-4000	Sol	Spec, Freq	Piper	JINC 3 (1956)	104
$\text{MoC}_8\text{H}_6\text{O}_3$	Molybdenum (II)-carbon-monoxide, cyclopentadiene complex hydride	450-4000	Sol	Spec, Freq	Piper	JINC 3 (1956)	104

$\text{MoC}_8\text{N}_8\text{K}_3$	Molybdenum (V)-cyanide complex (potassium salt)	2-32 μ	S	Spec, I	Brame	JINC 6 (1958)	99
$\text{MoC}_8\text{N}_8\text{K}_3 \cdot 2\text{H}_2\text{O}$	Molybdenum (V)-cyanide complex (potassium salt) dihydrate	2-32 μ	S	Spec, I	Brame	JINC 6 (1958)	99
$\text{MoC}_8\text{N}_8\text{K}_4$	Molybdenum (IV)-cyanide complex (potassium salt)	2-32 μ 250-2200	S -	Spec, I Assign	Brame Hidalgo	JINC CPH 6 (1958) 249 (1959)	99 233
$\text{MoC}_8\text{N}_8\text{K}_4 \cdot 2\text{H}_2\text{O}$	Molybdenum (IV)-cyanide complex (potassium salt) dihydrate	407-36 2-32 μ	S, Sol S	Spec Spec	Bonino Brame	AAN JINC 20 (1956) 6 (1958)	566 99
$\text{MoC}_9\text{H}_9\text{O}_3$	Molybdenum carbon-monoxide cyclopentadiene, methyl complex	450-4000	Sol	Spec, Freq	Piper	JINC 3 (1956)	104
$\text{MoC}_9\text{H}_9\text{O}_3\text{S}$	Molybdenum carbon-monoxide dimethyl sulfide complex	-	Sol	Freq	Cotton	CIL - (1960)	1219
$\text{MoC}_{10}\text{H}_{10}\text{O}_3$	Molybdenum carbon-monoxide cyclopentadiene ethyl complex	450-4000	Sol	Spec, Freq	Piper	JINC 3 (1956)	104
$\text{MoC}_{10}\text{H}_{12}$	Cyclopentadienyl molybdenum hydride	-	S	Spec, Struct	Fritz	ZN 15 (1960)	419
$\text{MoC}_{11}\text{H}_{12}\text{O}_3$	Molybdenum carbon-monoxide cyclopentadiene, isopropyl complex	450-4000	Sol	Spec, Freq	Piper	JINC 3 (1956)	104
$\text{MoC}_{14}\text{H}_8\text{N}_4\text{O}_4$	2,2'-Dipyridyl molybdenum tetra-carbonyl	1700-2100	Sol	Freq	Abel	JCS - (1959)	2323

Chemical Formula	Compound Name	Wavelength (μ)	State (S)	Measurement Type (Spec)	Researcher (Meloche)	Year (JINC)	Page (1958)
$\text{MoH}_8\text{N}_2\text{O}_4$	Ammonium molybdate	2-16 μ	S	Spec		6 (1958)	104
MoCl_5OK_2	Potassium molybdenyl pentachloride	1000	S	Freq	Barracrough	- (1959)	3552
MoF_4	Molybdenum tetra-fluoride	-	S	Freq, Struct	Peacock	- (1959)	2762
MoF_6	Molybdenum hexafluoride	2-40 μ	G	Spec, Freq, Assign	Burke	20 (1952)	447
		400-5000	G	Spec, Assign, Thermo.	Gaunt	49 (1953)	1122
		-	-	FC	Gaunt	50 (1954)	546
		741	-	Freq	Hahn	24 (1956)	921
		-	-	FC	Califano	25 (1958)	284
		-	-	John-Teller effect	Weinstock	31 (1959)	262
MoF_7	Molybdenum (VI)-complex fluoro ion	-	S	Freq, Struct	Peacock	- (1959)	2762
MoO_3	Molybdenum trioxide	1000	S	Freq	Barracrough	- (1959)	3552
MoO_4	Molybdate ion	-	-	FC	Pistorius	28 (1958)	514
$\text{MoO}_4\text{K}_2\cdot 5\text{H}_2\text{O}$	Potassium molybdate pentahydrate	2-16 μ	S	Spec	Miller	24 (1952)	1253
		300-880	S	Spec	Miller	16 (1960)	135
$\text{MoO}_4\text{Na}_2\cdot 2\text{H}_2\text{O}$	Sodium molybdate dihydrate	2-16 μ	S	Spec	Miller	24 (1952)	1253
		300-880	S	Spec	Miller	16 (1960)	135
MoS_2	Molybdenum sulfide	1-10 μ	S	Transmission, Reflection	Grandall	2 (1913)	343
		0.8-5.5 μ	S	Spec	Coblentz	14 (1918)	653
		0.5-2.4 μ	S	Optical properties	Coblentz	15 (1918)	121
		0.6-2 μ	S	Photoelectric properties	Coblentz	16 (1920)	595
		-	-	Photoelectric properties	Coblentz	Ph	340
		0.6-2.0 μ	S	Photoelectric properties	Coblentz	BBS	585
		0.4-1.4 μ	S	Thermo.	Coblentz	BBS	375
		0.5-4 μ	S	Spec	Nix	FWP	723

$\text{Mo}_2\text{C}_{10}\text{H}_{10}\text{N}_2\text{O}_{12}\text{Na}$ H_2O	Molybdenum ethylene diamine tetraacetic acid complex (sodium salt) monohydrate	800-1800	S	Spec	Donald	JACS	82 (1960)	4191	
$\text{Mo}_2\text{C}_4\text{H}_4\text{N}_2\text{O}_{14}$ $\text{Na}_4 \cdot 8\text{H}_2\text{O}$	Molybdenum (VI)- ethylenediamine tetraacetic acid complex (sodium salt) octahydrate	800-1800	S	Spec	Donald	JACS	82 (1960)	4191	
$\text{Mo}_2\text{C}_{15}\text{H}_{10}\text{O}_5$	Molybdenum cyclopenta- dienyl carbonyl	2-16 μ 1700-2200	S, Sol Sol	Spec, Freq, Struct Spec, Struct	Wilkinson Cotton	JACS JINC	76 (1954) 1 (1955)	209 175	
$\text{Mo}_2\text{C}_6\text{H}_4\text{N}_4\text{O}_4\text{S}_6$	Molybdenum-oxo,pyridinium ion, thiocyanate complex	-	S	Assign	Mitchell	JCS	- (1960)	1912	
$\text{Mo}_7\text{H}_{24}\text{N}_6\text{C}_{24}$	Ammonium heptamolybdate	2-15.3 μ	S	Spec	Hacskaylo	AC	26 (1954)	1410	
$\text{Mo}_7\text{H}_{24}\text{N}_6\text{O}_{24} \cdot 4\text{H}_2\text{O}$	Hexaammonium para- molybdate tetrahydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135	
<u>Na COMPOUNDS</u>									
$\text{NaCHF}_3\text{O}_2\text{P}$	Sodium trifluoro- methylphosphinate	-	-	Group freq Struct	Bennett Emeleus	JCS JCS	- (1954) - (1955)	3598 563	
$\text{NaCHF}_3\text{O}_2\text{P}$	Sodium trifluoromethyl acid phosphonite	-	-	Ident	Bennett	JCS	- (1954)	3896	
$\text{NaCHF}_3\text{O}_2\text{P}$	Sodium trifluoromethyl phosphonate	-	-	Ident, Freq Group study Ident	Bennett Emeleus Paul	JCS JCS JCS	- (1954) - (1955) - (1955)	3896 563 574	
NaCHO_2	Sodium formate	750-3200	S	IR, Assign Band study	Newman Margoshes	JCP JCP	20 (1952) 22 (1954)	1663 381	

NaCHO ₃	Sodium bicarbonate	2-16 μ	S	Spec, Anal H bond, Freq	Miller Rundle	AC	24 (1952)	1253
		11-12.5 μ	S	Spec, Freq	Underwood	JCP	20 (1952)	1487
		-	S	H bond	Pimental	JACS	77 (1955)	317
		600-4000	S	Group study	Braunholtz	JCP	24 (1956)	639
		300-880	S	Spec	Miller	JCS	- (1959)	868
			S			SA	16 (1960)	135
NaCH ₂ NO	Sodium formamide	650-3800	S	Spec, Freq, Assign	Evans	JCP	22 (1954)	1228
NaCH ₃ O ₃ S	Sodium methylsulfonate	-	-	Freq	Haszeldine	JCS	- (1954)	4228
		7-10 μ	S	Assign	Haszeldine	JCS	- (1955)	2901
		-	L	Spec, FC	Gerding	HC	77 (1958)	374
NaCH ₄ Br ₄ N ₂ S	Thiourea sodium bromide	2-40 μ	S	Spec	Stewart	JCP	26 (1957)	248
NaCH ₄ IN ₂ S	Thiourea sodium iodide	2-40 μ	S	Spec	Stewart	JCP	26 (1957)	248
NaCF ₃ O ₂ S	Sodium trifluoromethane sulphinate	9-10 μ	S	Assign	Haszeldine	JCS	- (1955)	2901
NaCF ₃ O ₃ S	Sodium trifluoromethane sulphonate	-	-	Group freq	Haszeldine	JCS	- (1954)	4228
		7-10 μ	S	Assign	Haszeldine	JCS	- (1955)	2901
NaCN	Sodium cyanide	2.5-7.5 μ	Sol	Spec	Gordy	JCP	3 (1935)	664
		2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		-	-	Usage	Wiberly	AC	29 (1957)	210
		2000-2500	S	Effect of heating	Rao	CIL	- (1958)	1436
		300-880	S	Spec	Miller	SA	16 (1960)	135
NaCNO	Sodium isocyanate	400-4000	S	Spec	Waddington	JCS	- (1959)	2499
NaCNS	Sodium thiocyanate	2.8-3.3 μ	Sol	Spec	Buswell	JFC	45 (1941)	543
		2-16 μ	S	Spec, Anal	Miller	AC	24 (1952)	1253
		-	S	Spec	Wiberly	AC	29 (1957)	210
		300-880	S	Spec	Miller	SA	16 (1960)	135
NaCN ₇	Sodium tetrazolylazide	2-15 μ	S	Spec, Freq	Lieber	AC	23 (1951)	1594
NaC ₂ HD ₂ O ₂	Sodium acetate-d ₂	400-3100	S	Freq, Assign	Jones	JCP	22 (1954)	1796
NaC ₂ H ₂ DO ₂	Sodium acetate-d ₁	400-3100	S	Freq	Jones	JCP	22 (1954)	1796

$\text{NaC}_3\text{H}_3\text{Cl}_2\text{O}_2$	Sodium 2,2-dichloro-propionate	2.5-11 μ 2.5-11 μ	Sol Sol	Spec Spec, Anal	Wright Potts	APS AC	9 (1955) 28 (1956)	105 1255
$\text{NaC}_3\text{H}_3\text{O}_3$	Sodium pyruvate	650-4000	S	Spec, Assign	Long	TFS	56 (1960)	1570
$\text{NaC}_3\text{H}_4\text{ClO}_2$	Sodium 2-chloro-1,3,5-triazine	2.5-11 μ 2.5-11 μ	Sol Sol	Spec Spec, Anal	Wright Potts	APS AC	9 (1955) 28 (1956)	105 1255
$\text{NaC}_3\text{H}_5\text{F}_3\text{O}_2\text{PS}$	Sodium ethyl trifluoro-methyl phosphono-thioate	740-830	S	Assign	McIvor	CJC	37 (1959)	869
NaC_3H_5	Allylsodium	2-3 μ	Sol	Struct	Kwata	BCSJ	33 (1960)	1091
$\text{NaC}_3\text{H}_5\text{O}_2$	Sodium propionate	2-15 μ 7-9 μ	S S	Spec, Anal Anal	Childers Meikeljohn	AC AC	27 (1955) 29 (1957)	737 329
$\text{NaC}_3\text{H}_6\text{IO}$	Sodium iodide acetone complex	400-4000	S,L	Complex study	Yamada	BCSJ	33 (1960)	666
$\text{NaC}_3\text{H}_6\text{NO}_2$	dl-Sodium alanine	600-4000	S,Sol	Spec	Gore	AC	21 (1949)	382
$\text{NaC}_3\text{H}_7\text{O}_3\text{S}$	Sodium 1-propane-sulfonate	- 725-1300	- -	Group freq Ident	Haszeldine Marvel	JCS JACS	- (1954) 76 (1954)	4228 61
$\text{NaC}_3\text{H}_7\text{O}_4\text{S}$	Sodium propyl sulfate	5-10 μ	-	Spec, Assign	Klotz	JPCC	52 (1948)	961
$\text{NaC}_3\text{H}_8\text{O}_2\text{PS}$	Sodium ethyl hydrogen methyl thiophosphonate	-	-	Spec, Freq	Popov	ZOK	29 (1954)	1998
$\text{NaC}_3\text{H}_9\text{OSi}$	Sodium trimethyl silonate	2-16 μ	L	Spec	Tatlock	JOC	17 (1952)	555
NaC_3D_5	Perdeuterallyl sodium	-	S	Struct	Lanpher	JACS	79 (1957)	5578
$\text{NaC}_3\text{Cl}_3\text{O}_2$	Sodium trichloro-acrylate	700-1600	-	Spec	Duval	RTC	69 (1950)	391
$\text{NaC}_4\text{H}_7\text{O}_2$	Sodium n-butyrate	2-15 μ 7-9 μ	S S	Spec Qual. Anal	Childers Meikeljohn	AC AC	27 (1955) 29 (1957)	737 329

$\text{NaC}_4\text{H}_8\text{NO}_2$	Sodium-DL- α -amino-butyrates	-	Sol, L	Spec	Takenishi	NKZ	81 (1960)	858
$\text{NaC}_4\text{H}_8\text{NO}_3$	dl-Threonine	600-4000 2-16 μ	Sol S	Spec Spec, Config.	Gore Bolhofer	AC JACS	21 (1949) 76 (1954)	382 1322
$\text{NaC}_4\text{H}_9\text{O}_3\text{S}$	Sodium butane sulfonate	-	-	Freq	Haszeldine	JCS	- (1954)	4228
$\text{NaC}_4\text{H}_{10}\text{O}_2\text{PS}$	Sodium ethyl hydrogen ethyl thiophosphate	-	-	Spec, Freq	Popov	ZOK	29 (1959)	1998
$\text{NaC}_4\text{H}_{10}\text{O}_2\text{PS}_2$	Sodium O,O-diethyl phosphorodithioate	740-1500	S	Assign	McIvor	CJC	37 (1959)	869
$\text{NaC}_4\text{H}_{10}\text{O}_3\text{PS}$	Diethyl sodium thiophosphate	-	-	Spec, Freq	Popov	ZOK	29 (1959)	1998
$\text{NaC}_4\text{H}_{10}\text{O}_4\text{P}$	Diethyl sodium phosphate	-	-	Spec	Maarsen	RTC	76 (1957)	724
$\text{NaC}_5\text{H}_4\text{NO}$	Sodium 2-pyridyl oxide	-	S	Spec, Freq, Assign	Gibson	JCS	- (1955)	4340
$\text{NaC}_5\text{H}_7\text{BrNO}_2$	Sodium γ -bromoallyl-glycinate	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{NaC}_5\text{H}_7\text{ClNO}_2$	Sodium γ -chloroallylglycinate	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{NaC}_5\text{H}_7\text{O}_2$	Sodium acetylacetonate	625-5000	S	Spec, Struct	West	JINC	5 (1958)	295
$\text{NaC}_5\text{H}_7\text{O}_3\text{S}$	8-Acetyl- β -mercapto-propionate, sodium salt	2-9 μ	Sol	Spec, Freq	Jencks	ABB	88 (1960)	193
$\text{NaC}_5\text{H}_8\text{ClO}_2$	Sodium DL- α -chloro-valerate	-	L, Sol	Spec, Assign	Takenishi	NKZ	81 (1960)	1382
$\text{NaC}_5\text{H}_8\text{NO}_2$	Sodium allyl glycinate	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
NaC_5H_9	Pentenylyl sodium	-	S	Struct	Larpher	JACS	79 (1957)	5578
$\text{NaC}_5\text{H}_9\text{O}_2$	Sodium n-valerate	2-15 μ	S	Spec	Childers	AC	27 (1955)	737

Chemical Formula	Sodium valinate	5-10 μ	Sol	Spec, Assign	Klotz	JPC	Year	Page
$\text{NaC}_5\text{H}_{10}\text{NO}_2$	Sodium valinate			Spec, Assign	Klotz	JPC	52 (1948)	961
$\text{NaC}_5\text{H}_{11}\text{O}_3\text{S}$	Sodium n-pentane-sulfonate	-	-	Freq	Haszeldine	JCS	- (1954)	4228
$\text{NaC}_6\text{H}_4\text{Br}_2\text{N}_2\text{O}_3$	Sodium 2,4,6-tribromo-benzenediazosulfonate	600-1800	S	Spec, Assign	LeFevre	AJC	6 (1953)	341
$\text{NaC}_6\text{H}_2\text{F}_2\text{O}_6$	Sodium trifluoro-acetate ditrifluoro acetic acid	600-4000	S	Spec, H bond	Klemperer	JCP	22 (1954)	1399
$\text{NaC}_6\text{H}_4\text{N}_2\text{O}$	6-Hydroxy pteridine sodium salt	-	S	Freq, Struct	Albert	JCS	- (1952)	1620
$\text{NaC}_6\text{H}_4\text{ClN}_2\text{O}_3\text{S}$	cis-Sodium o-chloro-benzenediazosulfonate	600-1800	S	Spec, Struct	LeFevre	AJC	6 (1953)	341
$\text{NaC}_6\text{H}_4\text{ClN}_2\text{O}_3\text{S}$	trans-Sodium-o-chloro-benzenediazosulfonate	600-1800	S	Spec, Struct	LeFevre	AJC	6 (1953)	341
$\text{NaC}_6\text{H}_4\text{ClN}_2\text{O}_3\text{S}$	Sodium p-chlorobenzene diazosulfonate	600-1800	S	Spec, Struct	LeFevre	AJC	6 (1953)	341
$\text{NaC}_6\text{H}_4\text{IN}_2\text{O}_3\text{S}$	Sodium o-iodobenzene-diazosulfonate	600-1800	S	Spec, Struct	LeFevre	AJC	6 (1953)	341
$\text{NaC}_6\text{H}_4\text{IN}_2\text{O}_3\text{S}$	Sodium p-iodobenzene-diazosulfonate	600-1800	S	Spec, Struct	LeFevre	AJC	6 (1953)	341
$\text{NaC}_6\text{H}_4\text{NO}_3$	Sodium p-nitrophen-oxide	1300-1600	S	Struct	Kross	JACS	78 (1956)	4223
$\text{NaC}_6\text{H}_4\text{N}_3\text{O}_3$	Sodium p-nitrobenzene-diazotate	600-1800	S	Spec, Assign	LeFevre	AJC	6 (1953)	341
NaC_6H_5	Phenyl sodium	625-900 600-4000	S S	Vibrations Spec, Freq assign	Margoshes Lanpher	SA JOC	7 (1955) 21 (1956)	14 830

$\text{NaC}_6\text{H}_5\text{O}$	Sodium phenoxide	970-1350	S	Spec, Struct, Assign Freq, I, Ident	Davies Hales	JCS JCS	- -	(1954) (1954)	120 3145
$\text{NaC}_6\text{H}_5\text{O}_2\text{S}$	Sodium benzenesulphinate	9-10 μ	S	Assign	Haszeldine	JCS	-	(1955)	2901
$\text{NaC}_6\text{H}_5\text{O}_3\text{S}$	Sodium benzenesulphonate	8-15 μ	S	Spec, Ident	Bonner	JACS	73	(1951)	3701
		625-900	-	Vibrations	Margoshes	SA	7	(1955)	14
		12-15 μ	S	Freq	Kross	JACS	78	(1956)	1332
$\text{NaC}_6\text{H}_4\text{NO}$	Sodium γ -methylallyl- glycinate	2-15 μ	S	Assign	Moreno	SA	16	(1960)	1386
$\text{NaC}_6\text{H}_{11}\text{O}$	Sodium caproate	5-10 μ	Sol	Spec, Assign	Klotz	JPCC	52	(1948)	961
		2-15 μ	S	Spec	Childers	AC	27	(1955)	737
		7-9 μ	S	Anal	Meiklejohn	AC	29	(1957)	329
$\text{NaC}_6\text{H}_{12}\text{NO}$	Sodium norleucinate	5-10 μ	-	Spec, Assign	Klotz	JPCC	52	(1948)	961
$\text{NaC}_6\text{H}_{14}\text{O}_4\text{P}$	Di- <i>i</i> -propyl sodium- phosphate	-	-	Spec	Maarsen	HfC	76	(1957)	724
$\text{NaC}_6\text{H}_{15}\text{OSi}$	Sodium triethyl silanolate	2-16 μ	S	Spec	Tatlock	JOC	17	(1952)	1555
$\text{NaC}_6\text{D}_2\text{F}_9\text{O}_6$	Sodium trifluoro- acetate ditrifluoro acetic acid- d_2	600-4000	S	Spec, H bond	Klemperer	JCP	22	(1954)	1399
$\text{NaC}_7\text{H}_4\text{NO}$	Sodium- <i>p</i> -nitrobenzoic acid	1300-1600	S, Sol	Struct	Kross	JACS	78	(1956)	4225
$\text{NaC}_7\text{H}_5\text{Br}_2\text{NO}_3\text{S}$	Sodium-4,6-dibromo-2- methylbenzenediazo sulphonate	600-1800	S	Spec, Assign	LeFevre	AJC	6	(1953)	341
$\text{NaC}_7\text{H}_5\text{O}$	Sodium benzoate	1380-1610	S	Spec, Assign, Struct	Davies	JCS	-	(1954)	120
		-	-	Band freq	Hales	JCS	-	(1954)	3145
		-	-	Band freq	Stimson	JCP	22	(1954)	1942
		625-900	-	CH out of plane	Margoshes	SA	7	(1955)	14
		12-15 μ	S	CH out of plane	Kross	JACS	78	(1956)	1332

$\text{NaC}_7\text{H}_5\text{O}_3$	Sodium salicylate	-	-	Band freq, I	Hales	JCS	- (1954)	3145
$\text{NaC}_7\text{H}_6\text{NO}_2$	Sodium m-amino-benzoate	1563-1410	S	Band freq	Stimson	JCP	22 (1954)	1942
$\text{NaC}_7\text{H}_6\text{NO}_2$	Sodium o-amino-benzoate	1518-1398	S	Band freq	Stimson	JCP	22 (1954)	1942
$\text{NaC}_7\text{H}_6\text{NO}_2$	Sodium p-amino-benzoate	1540-1410	S	Band freq	Stimson	JCP	22 (1954)	1942
$\text{NaC}_7\text{H}_7\text{O}$	Benzyl anion (sodium salt)	2-3 μ	Sol	Struct	Kuwata	BCSJ	33 (1960)	1091
$\text{NaC}_7\text{H}_7\text{O}_3$	p-Toluenesulfonic acid (sodium salt)	2-11 μ	S	Spec	Waldock	JPC	56 (1952)	654
$\text{NaC}_8\text{H}_7\text{O}_3$	Sodium o-methoxy-benzoate	-	-	Band freq, I	Hales	JCS	- (1954)	3145
$\text{NaC}_8\text{H}_7\text{O}_3$	Sodium methyl salicylate	-	-	Band freq, I	Hales	JCS	- (1954)	3145
$\text{NaC}_8\text{H}_7\text{O}_3$	Vanillin sodium salt	600-4000	S	Spec, Freq	Herzert	JOC	25 (1960)	405
$\text{NaC}_8\text{H}_7\text{O}_4$	Sodium vanillate	600-4000	S	Spec, Freq	Herzert	JOC	25 (1960)	405
$\text{NaC}_8\text{H}_9\text{O}_3\text{S}$	Sodium 2-phenylethane sulphonate	400-4000	S, Sol	Spec	Freeman	AJC	10 (1957)	227
$\text{NaC}_8\text{H}_{15}\text{O}_2$	Sodium caprylate	600-1800	S	Spec	Chapman	JCS	- (1958)	784
$\text{NaC}_9\text{H}_6\text{NO}$	Sodium 8-hydroxy-quinolate	-	S	Spec	Charles	AC	25 (1953)	530
$\text{NaC}_9\text{H}_9\text{O}_3$	Acetovanillone sodium salt	600-4000	S	Spec, Freq	Herzert	JOC	25 (1960)	405
$\text{NaC}_{10}\text{H}_{19}\text{O}_2$	Sodium caprate	650-1800	S	Spec	Chapman	JCS	- (1958)	784
$\text{NaC}_{11}\text{H}_{21}\text{O}_5 \cdot 2\text{H}_2\text{O}$	Sodium gladiolate dihydrate	-	S	Freq	Grove	JCS	- (1952)	3345

$\text{NaC}_{11}\text{H}_{14}\text{O}_6\text{P}$	Sodium diethyl-m-carboxyphenylphosphate	-	-	Freq, Assign	Ketelaar	RfC	78 (1959)	190
$\text{NaC}_{11}\text{H}_{14}\text{O}_6\text{P}$	Sodium diethyl-p-carboxyphenylphosphate	-	-	Freq, Assign	Ketelaar	RfC	78 (1959)	190
$\text{NaC}_{12}\text{H}_{23}\text{O}_3\text{S}$	Sodium p-diphenyl diazosulphonate	600-1800	S	Spec assign	LeFevre	AJC	6 (1953)	341
$\text{NaC}_{12}\text{H}_{23}\text{O}_2$	Sodium laurate	650-1800	S	Spec	Chapman	JCS	- (1958)	784
$\text{NaC}_{12}\text{H}_{25}\text{O}_4\text{S}$	Sodium dodecyl sulfate	5-10 μ	-	Spec, Group assign	Klotz	JFCC	52 (1948)	961
$\text{NaC}_{13}\text{H}_{28}\text{O}_3\text{S}$	Sodium-p-nitrobenzene-azosalicylate	1300-1600	Sol	Struct	Kross	JACS	78 (1956)	4225
$\text{NaC}_{16}\text{H}_{17}\text{N}_2\text{O}_4\text{S}$	Sodium penicillin-G	400-3400	S	Spec, Anal	Barnes	AC	19 (1947)	620
$\text{NaC}_{16}\text{H}_{17}\text{N}_2\text{O}_5\text{S}$	Sodium penicillin-x	400-3400	S	Spec, Anal	Barnes	AC	19 (1947)	620
$\text{NaC}_{16}\text{H}_{19}\text{O}_5$	Glucanolsodium salt	-	-	-	Ham	JACS	76 (1954)	6066
$\text{NaC}_{16}\text{H}_{25}\text{N}_2\text{O}_4\text{S}$	Sodium n-heptyl penicillin	400-3400	S	Spec, Anal	Barnes	AC	19 (1947)	620
$\text{NaC}_{16}\text{H}_{31}\text{O}_2$	Sodium palmitate	650-1800 650-4000	S S	Spec, Heat effect Spec	Chapman Kawano	JCS NKZ	- (1958) 81 (1960)	784 1805
$\text{NaC}_{18}\text{H}_{15}\text{OSi}$	Sodium triphenyl silanolate	2-16 μ	S	Spec	Tatlock	JOC	17 (1952)	1555
$\text{NaC}_{18}\text{H}_{29}\text{O}_3\text{S}$	Sodium p-(1-butyl-octyl) benzene sulfonate	2-16 μ	S	Spec, Group freq	Gray	JOC	20 (1955)	511
$\text{NaC}_{18}\text{H}_{29}\text{O}_3\text{S}$	Detergent sodium dodecyl benzene sulfonate	9.0-10.4 μ	Sol	Anal	Cirillo	AC	31 (1959)	959
$\text{NaC}_{18}\text{H}_{29}\text{O}_3\text{S}$	Sodium-m-dodecyl-benzene sulfonate	2-16 μ	S	Spec, Freq	Gray	JOC	20 (1955)	511

$\text{NaC}_{18}\text{H}_{29}\text{O}_3\text{S}$	Sodium-o-dodecyl- benzene sulfonate	2-16 μ	S	Spec, Freq	Gray	JOC	20 (1955)	511
$\text{NaC}_{18}\text{H}_{29}\text{O}_3\text{S}$	Sodium-p-dodecyl- benzenesulfonate	2-16 μ	S	Spec, Freq	Gray	JOC	20 (1955)	511
$\text{NaC}_{18}\text{H}_{31}\text{O}_4$	Sodium 9,14-diketo- stearate	600-3600	S	Ident	Davis	JACS	72 (1950)	124
$\text{NaC}_{18}\text{H}_{33}\text{O}_2$	cis-9-octadecenoic acid, sodium salt	-	-	Spec	Marron	AC	23 (1951)	548
$\text{NaC}_{18}\text{H}_{35}\text{O}_2$	Sodium stearate	650-1800	S	Spec	Chapman	JCS	- (1958)	784
		6-8 μ	S	Spec	Ellis	N	181 (1958)	181
		650-4000	S	Spec	Kawano	NKZ	81 (1960)	1805
$\text{NaC}_{19}\text{H}_{31}\text{O}_3\text{S}$	Sodium-p-(1-methyl- dodecyl) benzene sulfonate	2-16 μ	S	Spec, Group freq	Gray	JOC	20 (1955)	511
$\text{NaC}_{20}\text{H}_{17}\text{O}_8\text{P}_2$	Sodium- β -naphthyl- hydrogen phosphate- β -naphthyl dihydrogen phosphate complex	2-16 μ	S	Spec	Friedman	JACS	73 (1951)	5292
$\text{NaC}_{24}\text{H}_{39}\text{O}_2$	Sodium 9-phenyl stearate	-	S	Group freq	Kagarise	JPC	59 (1955)	271
NaH	Sodium hydride	-	-	Vibrations	Dunham	PR	41 (1932)	721
		-	-	FC	Badger	JCP	2 (1934)	128
		-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	FC	Platt	JCP	18 (1950)	932
		-	-	FC	Sheline	JCP	18 (1950)	927
		-	-	FC	Mitra	JCP	22 (1954)	564
		-	-	FC	Baughan	TFS	53 (1957)	1046
NaHF_2	Sodium hydrogen fluoride	-	S	Freq	Ketelaar	JCP	24 (1956)	624
NaHO	Sodium hydroxide	2-4 μ	Sol	Spec	Angstrom	Ph	3 (1914)	47
		1-3 μ	Sol	Spec	Grantham	Ph	18 (1921)	339

NaHO_3Se	Sodium hydrogen selenite	S	-	Spec	Simon	ZL	64 (1960)	209
NaHO_4S	Sodium bisulfate	S	2-16 μ 2-25 μ	Spec Spec	Miller Falk	AC CJC	24 (1952) 35 (1957)	1253 1195
$\text{NaHO}_4\text{S.H}_2\text{O}$	Sodium bisulfate monohydrate	S	300-880	Spec	Miller	SA	16 (1960)	135
$\text{NaH}_2\text{NO}_3\text{S}$	Sodium sulfamate	S	500-4000	Assign	Vuagnat	JCP	26 (1957)	77
$\text{NaH}_2\text{O}_2\text{P}$	Sodium phosphinate	S	2-15 μ	Freq, I	Corbridge	JCS	- (1954)	493
$\text{NaH}_2\text{O}_2\text{P.H}_2\text{O}$	Sodium phosphinate monohydrate	S	2-15 μ 300-880	Spec, Spec	Corbridge Miller	JCS SA	- (1954) 16 (1960)	493 135
$\text{NaH}_2\text{O}_4\text{P}$	Sodium dihydrogen phosphate	S	2-15 μ 300-3000	Freq, I, Assign Freq, Spec	Corbridge Blinc	JCS MP	- (1954) 1 (1957)	493 391
		Sol	2-25 μ	Spec	Falk	CJC	35 (1957)	1195
		S	700-3300	Quant. Mech.	Blinc	MP	1 (1958)	391
		S	-	Band study	Stekhanov	IANS	22 (1958)	1109
$\text{NaH}_2\text{O}_4\text{P.H}_2\text{O}$	Sodium dihydrogen phosphate monohydrate	S	2-16 μ 300-880	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$\text{NaH}_2\text{O}_4\text{P.2H}_2\text{O}$	Sodium dihydrogen phosphate dihydrate	S	2-15 μ	Spec	Corbridge	JCS	- (1954)	493
		S	-	Spec, Struct	Stekhanov	FIL	2 (1960)	2932

$\text{NaH}_3\text{NO}_3\text{P}_5$	Monosodium phosphor- amide	2-15 μ	S	Spec Bond character	Corbridge Steiger	JCS ZE	- (1954) 61 (1957)	493 1004
$\text{NaH}_3\text{O}_3\text{P}_2$	Monosodium hydrogen pyrophosphate	1-40 μ	-	Spec	Mutschin	ZAC	160 (1958)	81
$\text{NaH}_4\text{N}_2\text{O}_4\text{P}_3$	Sodium diimidotri- phosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
NaH_4B	Sodium borohydride	-	-	Freq	Price	JCP	17 (1949)	217
		2-14 μ	S	Spec	Price	JCP	17 (1949)	1044
		-	-	Spec	Stockmayer	JCP	21 (1953)	1311
		600-4000	S	Compar	Waddington	JCS	- (1958)	4783
$\text{NaH}_{12}\text{ClN}_4$	Tetramine sodium chloride	-	-	Freq	Wilmshurst	CJC	38 (1960)	467
$\text{NaH}_{12}\text{IN}_4$	Tetramine sodium iodide	-	-	Group freq	Leonard	JACS	77 (1955)	2029
$\text{Na}^+\text{H}_{12}\text{N}_4$	Tetramine sodium ion	-	-	Group freq	Leonard	JACS	77 (1955)	2029
NaD	Sodium deuteride	-	S	Freq	Sayre	JOP	18 (1950)	584
NaDO	Sodium hydroxide-d ₁	6.2-8.6 μ	Sol	Spec	Plyler	JCP	9 (1936)	157
		2500-2800	S	Spec, Struct	Busing	JCP	23 (1955)	933
		3000-5000	S	Spec	Buchanan	JCP	31 (1959)	870
$\text{NaD}_2\text{NO}_3\text{S}$	Sodium sulphamate-d ₂	500-4000	S	Assign	Vuagnat	JCP	26 (1957)	77
$\text{NaD}_2\text{O}_4\text{P}$	Sodium dihydrogen phosphate-d ₂	300-3000 700-3300	S S	Freq, Spec Quant. Mech.	Blinic Blinic	MP MP	1 (1957) 1 (1958)	391 391
NaBr	Sodium bromide	-	Sol	Spec	Plyler	JCP	2 (1934)	306
		-	S	Filter	Barnes	PK	49 (1936)	732
		-	-	Theory	Huggins	JCP	5 (1937)	143
		3-5.4 μ	Sol	Spec	Plyler	JCP	6 (1938)	316
		-	-	FC	Gordy	JCP	14 (1946)	305
		-	Sol	Photoelectric effect	Ogg	JCP	14 (1946)	295
		-	-	Polarization	Szigeti	IFS	45 (1949)	155

	Theory	Huggins	JCP	5	(1937)	143
-	Solvent effect	Plyler	PR	51	(1937)	1017A
-	Residual rays	Seifer	RSI	11	(1940)	365
S	Transmission	Wells	JAP	11	(1940)	137
S	Band spec	Buswell	JPC	45	(1941)	543
S	Dispersion	Wright	RSI	15	(1944)	22
L	Spec	Krishnan	N	156	(1945)	267
-	FC	Gordy	JCP	14	(1946)	305
S	Raman	Krishnan	PHS	187	(1946)	188
S	Compar.	Gore	JOSA	37	(1947)	23
S	Lattice vib.	Markham	PR	71	(1947)	473
S	Quant. Mech.	Hornig	JCP	16	(1948)	1063
-	Dispersion	Williams	RSI	19	(1948)	135
S	Bands	Bernstein	PR	76	(1949)	1254
-	Quant. Mech.	Rittner	JCP	17	(1949)	198
-	Polarization	Szigeti	TFS	45	(1949)	155
S	Dispersion	Lecomte	JPR	11	(1950)	67
S	Spec	McCurbin	JOSA	40	(1950)	537
S	Freq, Theory	Roberts	PR	77	(1950)	258
-	Freq, Theory	Szigeti	PRS	204	(1950)	51
-	Freq	Rittner	JCP	19	(1951)	1030
S	R. Ind.	Towler	JSI	28	(1951)	105
-	Calib.	Towler	JSI	29	(1952)	393
S	Reflectance	Agnew	JOSA	43	(1953)	823
S	Reflectance	Agnew	JOSA	43	(1953)	999
S	Grinding & Polishing	Baird	JOSA	43	(1953)	432
S	Calib.	Downie	JOSA	43	(1953)	941
S	Spec	Schiedt	AFS 7No.2	31	(1953)	75
-	Disk	Ford	JSI	31	(1954)	338
S	Refl. Curves	Lax	PR	97	(1955)	39
S	Reaction	Stewart	AC	27	(1955)	318A
-	Dielectric Const.	Haas	PR	103	(1956)	564
-	FC	Baughan	TFS	53	(1957)	1046
-	Spec	Brackett	JOSA	47	(1957)	636
-	Spec	Lord	JOSA	47	(1957)	689
G	Freq, Spec	Rice	JCP	27	(1957)	573
-	Spec, Freq	Berkowitz	JCP	29	(1958)	1386
S	Spec, Temp.	Haas	PR	117	(1960)	1497

		17-55 μ	S	Transmittance Spec	Plyler Schaeffer	JHNB PCS	64C (1960) 12 (1960)	55 233
NaCl^{35}	Sodium chloride	-	-	Spec	Garrison	DA	19 (1958)	546
NaClO_2	Sodium chlorite	-	-	Excited state	Duchesne	JCP	21 (1953)	2005
NaClO_3	Sodium chlorate	2-16 μ 1-22 μ 460-3200 300-880	S S S S	Spec Assign Freq, Assign Spec	Miller Hamdas Hollenberg Miller	AC PIAS SA SA	24 (1952) 37 (1953) 16 (1960) 16 (1960)	1253 451 1155 135
NaClO_4	Sodium perchlorate	-	-	Struct rules	Couturejh	JCP	15 (1947)	153
$\text{NaClO}_4 \cdot \text{H}_2\text{O}$	Sodium perchlorate monohydrate	-	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
NaF	Sodium fluoride	-	S - S S - - S Sol - -	Freq Freq Polarizability Freq Freq Freq Vib. Spec Mol. Const. Spec	Nichols Huggins Szigeti Szigeti Roberts Rittner Lax Maybury Haas Lord	PR JCP TFS PRS PR JCP PR JCP PR JOSA	21 (1923) 5 (1937) 45 (1949) 204 (1950) 77 (1950) 19 (1951) 97 (1955) 23 (1955) 103 (1956) 47 (1957)	712 143 155 51 258 1030 39 1277 564 689
NaFO_3	Sodium fluoro- sulfate	550-2400	S	Assign, Spec	Sharp	JCS	- (1957)	3761
NaF_4B	Sodium boro- fluoride	400-1400	S	Spec, Assign, Freq	Cote	PRS	210 (1951)	217
NaI	Sodium iodide	-	- - S - -	Christianson filter Freq Crystal studies FC Polarizability theory	Barnes Huggins West Gordy Szigeti	PR JCP JOSA JCP TFS	49 (1936) 5 (1937) 35 (1945) 14 (1946) 45 (1949)	732 143 26 305 155

	-	-	-	Freq	Roberts	PR	77 (1950)	258
	-	-	-	Freq	Szigeti	PKS	204 (1950)	51
	-	-	-	Freq	Rittner	JCP	19 (1951)	1030
	-	-	-	Pressed disk	Ford	JSI	31 (1954)	338
	-	-	G	Freq, Spec, Mol. Const.	Rice	JCP	27 (1957)	573
NaI·2H ₂ O	2.8-3.3 μ	Sol		Spec	Buswell	JPC	45 (1941)	543
	2.5 μ	S		Absorption	Lyon	PR	61 (1942)	482
NaIO ₃	2-16 μ	S		Spec	Miller	AC	24 (1952)	1253
	-	S		Spec, Struct	Dasent	JCS	- (1960)	2429
	300-880	S		Spec	Miller	SA	16 (1960)	135
NaIO ₄	-	-		Freq, Struct	Siebert	ZAUA	303 (1960)	162
NaNO ₂	6-15 μ	Sol		Struct	Williams	JACS	61 (1939)	2987
	2-16 μ	S		Spec	Miller	AC	24 (1952)	1253
	750-3000	S		Spec, Assign	Newman	JCP	20 (1952)	444
	700-4000	S		Spec, Freq, FC	Weston	JCP	27 (1957)	683
	-	Sol		Spec	Tramer	CPR	248 (1959)	354
	2-15 μ	S		Assign	Greenberg	JCP	33 (1960)	900
	300-880	S		Spec	Miller	SA	16 (1960)	135
NaN ¹⁴ O ₂	3-14 μ	S		Assign, Spec, FC, Freq	Sidman	JACS	79 (1957)	2675
NaN ¹⁵ O ₂	3-14 μ	S		Assign, Spec, FC, Freq	Sidman	JACS	79 (1957)	2675
NaNO ₃	22-310	S		Reflection, Transmission	Weniger	JOSA	7 (1923)	517
	-	-		Residual rays	Shaefer	TFS	25 (1929)	841
	6-16 μ	Sol		Freq	Williams	JACS	61 (1939)	1382
	2.8-3.3 μ	Sol		Spec	Buswell	JCP	45 (1941)	543
	-	S		Crystal studies	West	JOSA	35 (1945)	26
	2.5-15 μ	S		Bard study	Lawner	JOSA	42 (1952)	359
	2-16 μ	S		Spec	Miller	AC	24 (1952)	1253
	1-22 μ	S		Spec, Assign	Randas	PIAS	37 (1953)	441
	-	-		Absorption, Freq	Haas	P	22 (1956)	1286

	2-25 μ	Sol	Spec	Falk	CJC	35 (1957)	1195
	-	S	Spec	Hafele	ZP	148 (1957)	262
	3000-5000	S	Spec, Assign	Hexter	SA	10 (1958)	291
	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
	450-3800	Sol	Freq	Frevel	SA	15 (1959)	557
	-	S	Spec	Shultin	DANS	125 (1959)	767
	700-1500	S	Freq, Assign	Ferraro	JMS	4 (1960)	99
	2-15 μ	S	Assign	Greenberg	JCP	33 (1960)	900
	300-880	S	Spec	Miller	SA	16 (1960)	135
$\text{NaN}^{14}\text{O}_3$	800-840	S	Freq, Spec	Decius	JCP	22 (1954)	1941
$\text{NaN}^{15}\text{O}_3$	800-840	S	Freq, Spec	Decius	JCP	22 (1954)	1941
NaN_3	2-15 μ	S	Spec, Freq	Lieber	AC	23 (1951)	1594
	-	S	Freq	Lieber	JACS	73 (1951)	1313
	1.1 μ	S	Radiations	Rosenwasser	JCP	24 (1956)	184
	635-3100	S	Freq	Gray	TFS	53 (1957)	901
	300-880	S	Spec	Miller	SA	16 (1960)	135
NaO_2	-	S	Spec, Struct	Brame	JINC	4 (1957)	90
NaO_2As	2-16 μ	S	Spec, Anal	Miller	AC	24 (1952)	1253
	300-880	S	Spec	Miller	SA	16 (1960)	135
NaO_2B	2-15 μ	S	Freq, Struct	Krogh	ARK	12 (1958)	475
$\text{NaO}_2\cdot 2\text{H}_2\text{O}$	300-880	S	Spec	Miller	SA	16 (1960)	135
$\text{NaO}_2\cdot 4\text{H}_2\text{O}$	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
	300-880	S	Spec	Miller	SA	16 (1960)	135

Na ₂	Sodium	1.07-1.14 μ	S	Spec	Meggers	JhNB	10 (1933)	669
		-	-	FC	Badger	JCP	2 (1934)	128
		-	-	Quant. Mech.	Stearn	JCP	2 (1934)	410
		-	-	FC	Sutherland	JCP	8 (1940)	161
		-	-	Spec	Adel	PR	59 (1941)	915
		-	-	Thermo.	Hulbert	JCP	9 (1941)	61
		-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	Photoelectric effect	Ogg	JCP	14 (1946)	295
		-	-	FC	Wu	PR	71 (1947)	11
Na ₂ CH ₃ OP ₃ .6H ₂ O	Disodium methyl phosphonate hexahydrate	702-3230	S	Group freq	Corbridge	JCS	- (1954)	4555
Na ₂ CF ₃ O ₃ P	Disodium trifluoromethyl phosphonate	-	-	Freq	Bennett	JCS	- (1954)	3598
		-	-	Freq	Bennett	JCS	- (1954)	3896
		-	-	Freq	Emeleus	JCS	- (1955)	563
Na ₂ CO ₃	Sodium carbonate	0.3-7 μ	S	Reflectance	Hulbert	JOSA	17 (1928)	23
		0.6-2.8 μ	Sol	Assign	Gordy	JCP	2 (1934)	621
		2.8-6 μ	Sol	Spec, Assign	Plyler	JCP	2 (1934)	470
		1.5-2.8 μ	Sol	Assign	Barr	JCP	4 (1936)	92
		2.6-6.6 μ	Sol	Spec	Plyler	JCP	4 (1936)	157
		3-16 μ	S	Spec	Miller	AC	24 (1952)	1253
		11-12.5 μ	S	Spec, Freq	Underwood	JACS	77 (1955)	317
		2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104
		300-880	S	Spec	Miller	SA	16 (1960)	135
Na ₂ C ₂ H ₄ O ₄ S ₂	Disodium ethylene disulfonic acid	-	-	Group freq	Haszeldine	JCS	- (1954)	4228
Na ₂ C ₂ N ₁₀ .5H ₂ O	Disodium azotetrazolepenta-hydrate	2-15 μ	S	Spec, Freq	Lieber	AC	23 (1951)	1594
Na ₂ C ₂ O ₄	Disodium oxalic acid	2-15 μ	S	Spec, Anal	Childers	AC	27 (1955)	737
		360-1640	S	Assign	Schmelz	SA	9 (1957)	51
Na ₂ C ₃ H ₄ O ₄	Disodium malonate	2-15 μ	S	Spec, Anal	Childers	AC	27 (1955)	737
Na ₂ C ₃ H ₂ O ₄ .H ₂ O	Disodium malonate monohydrate	2-15 μ	S	Spec, Freq, Assign	Schmelz	JACS	81 (1959)	287

$\text{Na}_2\text{C}_4\text{H}_4\text{O}_4$	Sodium succinate	2-15 μ	S	Spec, Anal	Childers	AC	27 (1955)	737
$\text{Na}_2\text{C}_4\text{H}_6\text{N}_2\text{O}_2$	Disodium dimethyl glyoximate	1800-3200	S	Spec, Assign, H bond	Blin	JCS	- (1958)	4536
$\text{Na}_2\text{C}_5\text{H}_6\text{O}_4$	Disodium glutarate	2-15 μ	S	Spec	Childers	AC	27 (1955)	737
$\text{Na}_2\text{C}_6\text{H}_5\text{O}_5\text{S}$	Disodium S-acetylthiomalate	2-9 μ	Sol	Spec, Freq	Jencks	ABB	88 (1960)	193
$\text{Na}_2\text{C}_7\text{H}_4\text{O}_3$	Disodium salicylate	-	-	Band freq, I	Hales	JCS	- (1954)	3145
$\text{Na}_2\text{C}_7\text{H}_{10}\text{O}_4$	Disodium pimelate	2-15 μ	S	Spec, Anal	Childers	AC	27 (1955)	737
$\text{Na}_2\text{C}_{10}\text{H}_4\text{N}_2\text{O}_8\text{S}$	Naphthol yellow S	5-12 μ	Sol	Spec	Gibson	JRNB	18 (1922)	121
$\text{Na}_2\text{C}_{10}\text{H}_{14}\text{N}_2\text{O}_8$	Disodium dihydrogen versenate	650-3500	S	Spec, Freq, I	Chapman	JCS	- (1955)	1766
$\text{Na}_2\text{C}_{10}\text{H}_{14}\text{N}_5\text{O}_8 \cdot 2\text{H}_2\text{O}$	Ethylenediamine tetraacetic acid disodium salt dihydrate	800-3000	S	Spec, Freq	Sawyer	JACS	80 (1958)	1597
$\text{Na}_2\text{C}_{12}\text{H}_{10}\text{O}_2\text{Si}$	Disodium diphenylsilanolate	2-16 μ	S	Spec	Tatlock	JOC	17 (1952)	1555
$\text{Na}_2\text{C}_{20}\text{H}_{10}^{\text{O}_5}$	Uranine	1070-1800	S	Spec, Struct, Group freq	Davies	JCS	- (1954)	120
$\text{Na}_2\text{C}_{20}\text{H}_{12}\text{O}_4$	Phenolphthalein disodium salt	-	-	Struct	Davies	JPR	15 (1954)	305
$\text{Na}_2\text{C}_{20}\text{H}_{14}\text{O}_8$	2,5-Dihydroxy-3,6-bis-(p-methoxyphenyl) 1,4-benzoquinone disodium salt	5-15 μ	S	Spec, Struct	Davies	JPR	15 (1954)	305
$\text{Na}_2\text{HO}_3\text{P}$	Disodium orthophosphate	2-15 μ	S	Spec, Struct	Edwards	JAPC	10 (1960)	246
	Disodium orthophosphate	2-15 μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	493

$\text{Na}_2\text{HO}_3 \cdot 5\text{H}_2\text{O}$	Disodium orthophosphate pentahydrate	2-15 μ	S	Freq, I, Assign	Corbridge	JCS - (1954)	493
$\text{Na}_2\text{HO}_4\text{P}$	Disodium orthophosphate	2-15 μ	S	Freq, I, Assign	Corbridge	JCS - (1954)	493
$\text{Na}_2\text{HO}_4\text{P} \cdot 2\text{H}_2\text{O}$	Disodium orthophosphate dihydrate	2-15 μ	S	Freq, I, Assign	Corbridge	JCS - (1954)	493
$\text{Na}_2\text{HO}_4\text{P} \cdot 12\text{H}_2\text{O}$	Disodium phosphate dodecahydrate	2-16 μ	S	Spec	Miller	AC 24 (1952)	1253
$\text{Na}_2\text{HO}_4\text{As} \cdot 7\text{H}_2\text{O}$	Disodium orthoarsenate heptahydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC 24 (1952) SA 16 (1960)	1253 135
$\text{Na}_2\text{H}_2\text{NO}_3\text{P}$	Disodium monoamido phosphate	- 650-5000	- S	Band study Spec	Steiger Pustinger	ZE 61 (1957) SA 15 (1959)	1004 909
$\text{Na}_2\text{H}_2\text{O}_6\text{P}_2 \cdot x\text{H}_2\text{O}$	Disodium dihydrogen hypophosphate monohydrate	2-15 μ	S	Spec, I, Freq	Corbridge	JCS - (1954)	4555
$\text{Na}_2\text{H}_2\text{O}_7\text{P}_2$	Disodium hydrogen pyrophosphate	- 2-15 μ 1-40 μ	- S -	Freq Spec, I, Freq Freq, Spec	Bergman Corbridge Mutschin	JCS - (1952) JCS - (1954) ZAC - (1958)	847 493 160
$\text{Na}_2\text{FO}_3\text{P}$	Disodium monofluoro phosphate	- 650-5000	S S	I, Freq Spec	Corbridge Pustinger	JCS - (1954) SA 15 (1959)	4555 909
$\text{Na}_2\text{F}_6\text{Si}$	Sodium silicofluoride	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC 24 (1952) SA 16 (1960)	1253 135
Na_2O_2	Sodium peroxide	2-16 μ	S	Spec, Struct	Brame	JINC 4 (1957)	90
$\text{Na}_2\text{O}_2 \cdot 8\text{H}_2\text{O}$	Sodium peroxide octahydrate	2-16 μ	S	Spec, Struct	Brame	JINC 4 (1957)	90
$\text{Na}_2\text{O}_2 \cdot 8\text{D}_2\text{O}$	Sodium peroxide octahydrate-d ₁₆	2-16 μ	S	Spec, Struct	Brame	JINC 4 (1957)	90
$\text{Na}_2\text{O}_3\text{S}$	Sodium sulfite	2-16 μ	S	Spec	Miller	AC 24 (1952)	1253

$\text{Na}_2\text{O}_3\text{S}_2 \cdot 5\text{H}_2\text{O}$		2-16 μ 300-880	S S	Spec Spec	Anderson Miller	AC SA	25 (1953) 16 (1960)	1906 135
Sodium thiosulfate pentahydrate		0.8-2.3 μ 2-16 μ	Sol S	Spec Spec	Collins Miller	PR AC	20 (1922) 24 (1952)	486 1253
		0.6-2.7 μ 1000-1250 300-880	S S S	Dispersion Spec, Struct Spec	Vanderberg Hidaka Miller	AC ECSJ SA	26 (1954) 32 (1959) 16 (1960)	428 1317 135
$\text{Na}_2\text{O}_3\text{Si}$	Sodium metasilicate	2.8-6 μ	Sol	Spec, Assign	Plyler	JCP	2 (1934)	470
$\text{Na}_2\text{O}_3\text{Si} \cdot 5\text{H}_2\text{O}$	Sodium silicate penta- hydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$\text{Na}_2\text{O}_3\text{Se}$	Sodium selenite	2-16 μ	S	Spec	Miller	AC	24 (1952)	1253
$\text{Na}_2\text{O}_4\text{S}$	Sodium sulfate	2-4 μ 2.8-3.3 μ	Sol Sol	Spec Spec	Angstrom Buswell	PR JPC	3 (1914) 45 (1941)	47 543
		- 2-16 μ	- S	Interpretation of spec Spec	Duval Miller	CFR AC	227 (1948) 24 (1952)	1153 1253
		7.5-10.5 μ 2-16 μ 300-880	S S S	Spec Spec Spec	Tai Meloche Miller	AC JINC SA	29 (1957) 6 (1958) 16 (1960)	1430 104 135
$\text{Na}_2\text{O}_4\text{S} \cdot x\text{H}_2\text{O}$	Sodium sulfate poly- hydrate	0.9-1.13 μ	Sol	Band study	Hulburt	JPC	21 (1917)	5345
$\text{Na}_2\text{O}_4\text{B}_2$	Sodium metaborate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$\text{Na}_2\text{O}_4\text{Se}$	Sodium selenate	220-3500	S	Spec	Duval	ZE	64 (1960)	582
$\text{Na}_2\text{O}_4\text{Se} \cdot 10\text{H}_2\text{O}$	Sodium selenate decahydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$\text{Na}_2\text{O}_5\text{S}$	Sodium metabisulfate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$\text{Na}_2\text{O}_5\text{Se}_2$	Sodium pyroselenite	-	S	Freq	Simon	ZAUA	303 (1960)	39

Chemical Formula	Compound Name	Wavelength (μ)	Solubility	Measurement Type	Author	Year	Journal	Page
$\text{Na}_2\text{O}_6\text{P}_2\text{K}_2 \cdot 10\text{H}_2\text{O}$	Dipotassium disodium hypophosphate decahydrate	750-3275	S	I, Freq	Corbridge	(1954)	JCS	4555
$\text{Na}_2\text{O}_7\text{B}_4$	Sodium tetraborate	2.8-6 μ 2-15 μ	Sol S	Spec, Assign Freq, Struct	Plyler Krogh-Mol	2 (1934) 12 (1958)	JCP ANK	470 475
$\text{Na}_2\text{O}_7\text{B}_4$	Sodium tetraborate decahydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	24 (1952) 16 (1960)	AC SA	1253 135
$\text{Na}_2\text{O}_9\text{Si}_4$	Sodium disilicate	5-50 μ 20-130 μ	- -	Absorption Spec	Cartwright Barnes	35 (1930) 39 (1932)	PR Ph	415 562
$\text{Na}_3\text{HO}_7\text{P}_2 \cdot \text{H}_2\text{O}$	Trisodium hydrogen pyrophosphate monohydrate	1-40 μ	-	Spec, Freq	Mutschin	160 (1958)	ZAUC	81
$\text{Na}_3\text{H}_3\text{N}_3\text{O}_6\text{P}_3 \cdot 4\text{H}_2\text{O}$	Trisodium triphosphonitrate tetrahydrate	2-15 μ	S	Spec, Freq	Corbridge	(1954)	JCS	4555
$\text{Na}_3\text{H}_3\text{N}_3\text{O}_6\text{P}_3 \cdot 4\text{H}_2\text{O}$	Sodium trimetaphosphate tetrahydrate	650-5000	S	Spec	Pustinger	15 (1959)	SA	909
$\text{Na}_3\text{O}_3\text{PS} \cdot 10\text{H}_2\text{O}$	Trisodium phosphoromonothioate decahydrate	860-3430	G	I, Freq	Corbridge	(1954)	JCS	4555
$\text{Na}_3\text{O}_3\text{As}$	Sodium arsenate	290-650	S	Assign	Duval	239 (1954)	CPH	249
$\text{Na}_3\text{O}_4\text{P}$	Sodium orthophosphate	2-15 μ 290-650	S S	Freq, I, Assign Assign	Corbridge Duval	(1954) 239 (1954)	JCS CPH	493 249
$\text{Na}_3\text{C}_4\text{F}_4 \cdot 12\text{H}_2\text{O}$	Sodium orthophosphate dedecahydrate	2-16 μ 800-4000 2-16 μ 300-880	S S S S	Spec Freq Spec Spec	Miller Lucchesi Meloche Miller	24 (1952) 78 (1956) 6 (1958) 16 (1960)	AC JACS JINC SA	1253 1347 104 135
$\text{Na}_3\text{O}_6\text{B}_3$	Sodium metaborate	250-4000	-	Spec, Freq, Assign	Goubean	20 (1959)	ZPC	15
$\text{Na}_3\text{O}_9\text{P}_3$	Sodium trimetaphosphate	7-15 μ 2-15 μ	S S	Spec Spec, Freq, I, Assign	Corbridge Corbridge	27 (1955) (1955)	AC JCS	1383 493

$\text{Na}_3\text{O}_9\text{P}_3 \cdot \text{H}_2\text{O}$	2-15/ μ	S	Spec, Freq, I	Corbridge	JCS - (1954)	493
Trisodium trimeta- phosphate monohydrate						
$\text{Na}_3\text{O}_9\text{P}_3 \cdot 6\text{H}_2\text{O}$	2-15/ μ	S	Spec, Freq, Assign	Corbridge	JCS - (1954)	493
Trisodium trimeta- phosphate hexahydrate						
$\text{Na}_4\text{C}_{10}\text{H}_{12}\text{N}_2\text{O}_8$	650-3500	S	Spec, I, Group freq	Chapman	JCS - (1955)	1766
Ethylenediamine tetra- acetic acid sodium salt						
$\text{Na}_4\text{HMC}_6\text{P}_2$	650-5000	S	Spec	Pustinger	SA 15 (1959)	909
Sodium imidodiphos- phate						
$\text{Na}_4\text{H}_4\text{N}_4\text{O}_4\text{P}_4 \cdot 2.5\text{H}_2\text{O}$	2-15/ μ	S	Spec	Corbridge	JCS - (1954)	4555
Tetrasodium tetra- phosphonitrilate 2.5 hydrate						
$\text{Na}_4\text{H}_4\text{N}_4\text{O}_4\text{P}_4 \cdot 3\text{H}_2\text{O}$	650-5000	S	Spec	Pustinger	SA 15 (1959)	909
Sodium tetrameta- phosphimate tri- hydrate						
$\text{Na}_4\text{C}_6\text{P}_2 \cdot 10\text{H}_2\text{O}$	916-3320	S	I, Freq	Corbridge	JCS - (1954)	4555
Tetrasodium hypophos- phate decahydrate						
$\text{Na}_4\text{O}_7\text{P}_2$	-	-	Freq	Bergmann	JCS - (1952)	847
Tetrasodium pyro- phosphate	2-15/ μ	S	Freq, I, Assign	Corbridge	JCS - (1954)	847
	7-15/ μ	S	Spec	Corbridge	AC 27 (1955)	1383
	1-40/ μ	-	Spec, Freq	Mutschin	ZAC 160 (1958)	81
	-	Sol	Struct	Simon	ZAUA 301 (1959)	154
$\text{Na}_4\text{O}_7\text{P}_2 \cdot 10\text{H}_2\text{O}$	2-15/ μ	S	Freq, I	Corbridge	JCS - (1954)	493
Sodium pyrophosphate decahydrate	1-40/ μ	-	Spec, Freq	Mutschin	ZAC 160 (1958)	81
$\text{Na}_4\text{O}_8\text{P}_2 \cdot x\text{H}_2\text{O}$	720-3100	S	I, Freq	Corbridge	JCS - (1954)	4555
Tetrasodium peroxy- diphosphate poly- hydrate						
$\text{Na}_4\text{O}_{12}\text{P}_4$	2-15/ μ	S	Freq, Assign, I	Corbridge	JCS - (1954)	493
Tetrasodium tetra- metaphosphate	-	-	Freq, Struct	Steger	ZAUA 294 (1958)	1

$\text{Na}_4\text{O}_3\text{P}_4 \cdot 4\text{H}_2\text{O}$	Tetrasodium tetrameta- phosphate tetrahydrate	2-15 μ	S	Spec, Freq, Assign, I Freq, Struct	Corbridge Steger	JCS ZAUA	- (1954) 294 (1958)	493 1
$\text{Na}_5\text{O}_{10}\text{P}_3$ - I	Pentasodium tri- phosphate-I	2-15 μ 7-15 μ	S S	Spec, Freq, Assign, I Spec	Corbridge Corbridge	JCS AC	- (1954) 27 (1955)	493 1383
$\text{Na}_5\text{O}_{10}\text{P}_3$ - II	Pentasodium tri- phosphate-II	2-15 μ 7-15 μ	S S	Spec, Freq, Assign Spec	Corbridge Corbridge	JCS AC	- (1954) 27 (1955)	493 1383
$\text{Na}_5\text{O}_{10}\text{P}_3 \cdot 6\text{H}_2\text{O}$	Sodium triphosphate hexahydrate	2-15 μ	S	Spec, Assign, I, Freq	Corbridge	JCS	- (1954)	493

Nb COMPOUNDS

$\text{NbC}_{10}\text{H}_4\text{Br}_3$	Niobium (V)-cyclopenta- diene complex bromide	2-15 μ	S	Spec	Wilkinson	JACS	76 (1954)	4281
$\text{NbC}_{22}\text{H}_{21}\text{F}_6$	Tri-p-tolylmethyl hexafluoro niobiate	600-3400	S	Spec	Sharp	JCS	- (1957)	4804
NbCl_5	Niobium pentachloride	310-5000	S	Spec, Freq, Thermo., Struct	Gaunt	SA	10 (1958)	52
NbF_4	Niobium tetrafluoride	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
NbF_7	Niobium (V)-complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
NbO_3K	Potassium niobate	300-1000	S	Spec, Struct, I	Last	PR	105 (1957)	1740
NbO_3Na	Sodium niobate	300-1000	S	Spec, Struct, I	Last	PR	105 (1957)	1740

Nd COMPOUNDS

$\text{NdBr}_3\text{O}_9 \cdot 9\text{H}_2\text{O}$	Neodymium bromate	3 μ 0.55 μ	S S	Band study Spec, Freq	Benton Satten	PR JCP	73 (1948) 21 (1953)	536 637
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$\text{NiC}_2\text{H}_3\text{N}_3 \cdot 1/3\text{H}_2\text{O}$. Dicyanoamine nickel(II) clathrate of benzene. $1/3 \text{C}_6\text{H}_6$ hydrate	700-4000	S	Spec, Struct	Drago	JACS 80 (1958)	2667
$\text{NiC}_2\text{H}_3\text{N}_3 \cdot 1/3\text{H}_2\text{O}$. Dicyanoamine nickel(II) clathrate of benzene. $1/3 \text{C}_6\text{H}_6$ hydrate	700-4000	S	Spec, Struct	Drago	JACS 80 (1958)	2667
$\text{NiC}_2\text{H}_3\text{N}_3 \cdot 1/3\text{H}_2\text{O}$. Dicyanoamine nickel(II) clathrate of benzene. $1/3 \text{C}_6\text{H}_6$ hydrate	2-15 μ	S	Spec, Freq	Yamaguchi	JACS 80 (1958)	527
Nickel (II)-thiourea chloride complex	-	S	Freq assign	Mitchell	JCS - (1960)	1912
Nickel (II)-ammonia complex isothiocyanate	900-1100	S	H bond, Band study	Fujita	JACS 78 (1956)	3693
Nickel (II)-ethylene-diamine, water complex sulfate	-	-	Freq, Struct, FC	Bigorgne	BSCF - (1960)	1986
Nickel carbonmonoxide, phosphorous tri-chloride complex	-	-	Freq, Struct, FC	Bigorgne	BSCF - (1960)	1986
Nickel carbonmonoxide, phosphorous tri-fluoride complex	-	-	Freq, Struct, FC	Bigorgne	BSCF - (1960)	1986
Nickel (II)-thiocyanate	-	S	Freq assign	Mitchell	JCS - (1960)	1912
Nickel carbonmonoxide phosphorous tri-chloride complex	-	-	Freq, Struct, FC	Bigorgne	BSCF - (1960)	1986
Nickel carbonmonoxide phosphorous tri-fluoride complex	-	-	Freq, Struct, FC	Bigorgne	BSCF - (1960)	1986
Nickel (I)-cyanide, nitric oxide complex (potassium salt)	2000-2150	S	Struct	Griffith	JINC 7 (1958)	295
Nickel acetate	0.6-1.5 μ	Sol	Spec	Coblentz	EBS 14 (1918)	653

$\text{NiC}_4\text{H}_6\text{O}_4 \cdot 4\text{H}_2\text{O}$	Nickel acetate tetrahydrate	900-1100 400-5000	S S	H bond, Band study Spec	Fujita Nakamoto	JACS JACS	78 (1956) 79 (1957)	3963 4904
$\text{NiC}_4\text{H}_8\text{Cl}_2\text{O}_2$	Nickel (II)-dioxane complex chloride	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
$\text{NiC}_4\text{H}_8\text{N}_2\text{O}_4$	Nickel (II)-glycine complex	900-1100	S	H bond, Band study	Fujita	JACS	78 (1956)	3963
$\text{NiC}_4\text{H}_8\text{N}_2\text{O}_4 \cdot 2\text{H}_2\text{O}$	Nickel (II)-glycine complex dihydrate	2-15.5 μ 900-1100	S S	Spec, Group freq H bond, Band study	Sen Fujita	JACS JACS	77 (1955) 78 (1956)	211 3963
		2-7 μ 2-15 μ	S S	Chelation const. Assign	Rosenberg Saraceno	ACS JACS	10 (1956) 80 (1958)	840 5018
$\text{NiC}_4\text{H}_9\text{O}_3\text{P}$	Nickel (O)-carbonmonoxide trimethyl phosphine complex	-	-	Freq, Struct, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_4\text{H}_{20}\text{Cl}_2\text{N}_4\text{O}_{10}$	Nickel (II)-ethylene-diamine, water complex perchlorate	700-850	S	H bond, Band study	Fujita	JACS	78 (1956)	3963
NiC_4N_4	Nickel (II)-tetra-cyanide complex ion	250-2200	S	Spec, Assign	Hidalgo	ARS	56 (1960)	9
$\text{NiC}_4\text{N}_4\text{Ba}_4\text{H}_2\text{O}$	Nickel (II)-cyanide complex (barium salt) tetrahydrate	-	S	FC, Spec	McCullough	SA	16 (1960)	929
$\text{NiC}_4\text{N}_4\text{K}_4$	Nickel (II)-cyanide complex (potassium salt)	2.5-15 μ 2136 1600-2200	S S S	Spec, Struct Struct Spec, Struct	Sayed Griffith Sayed	JACS JINC JACS	78 (1956) 7 (1958) 80 (1958)	702 295 2047
		- 250-2200	S -	Spec, Assign Assign	Bonino Hidalgo	AAN CPR	26 (1959) 249 (1959)	137 233
$\text{NiC}_4\text{N}_4\text{Na}_2$	Nickel (II)-cyanide complex (sodium salt)	- 2050-2250	S Sol	Spec, Assign Spec	Bonino McCullough	AAN JINC	26 (1959) 13 (1960)	137 286
$\text{NiC}_4\text{N}_4\text{Na}_2 \cdot 3\text{H}_2\text{O}$	Nickel (II)-cyanide complex (sodium salt) trihydrate	-	S	FC, Spec	McCullough	SA	16 (1960)	929

NiC ₄ O ₄	Nickel carbonyl	-	-	Anal	Wilson	JCP	3 (1935)	59
		1-20 μ i	-	Anal	Bailey	JCP	6 (1938)	225
		4-23 μ i	L,G	Spec, Thermo., Assign	Crawford	JCP	6 (1938)	525
		-	-	FC	Walsh	TPS	43 (1947)	158
		-	-	FC	Sheline	JCP	18 (1950)	602
		-	-	FC, Struct	Nyholm	JCS	- (1953)	2670
		2045	-	Freq	Margoshes	JCP	22 (1954)	381
		270-10000	G	Freq, Assign	Jones	JCP	23 (1955)	2448
		-	-	NCA	Bigorgne	CPh	246 (1958)	1685
		400-4000	G,L	Spec, Assign, NCA, FC	Jones	JCP	28 (1958)	1215
NiC ₄ O ₄ ¹²	Nickel carbonyl (isotopic)	-	-	Thermo., Freq	Bernstein	JCP	22 (1954)	710
NiC ₄ O ₄ ¹³	Nickel carbonyl (isotopic)	-	-	Thermo., Freq	Bernstein	JCP	22 (1954)	710
NiC ₅ H ₅ NO	Nickel (I)-cyclopentadiene, nitric oxide complex	600-5000	Sol	Spec, Freq, Struct	Piper	JINC	1 (1955)	165
		20000-40000	-	Symmetry of complex	Cox	N	181 (1958)	1157
		1700-2050	Sol	Freq	Lewis	JINC	7 (1958)	32
NiC ₅ H ₇ O ₂	Acetylacetonone nickel chelate	-	Sol	Freq	Bellamy	JCS	- (1954)	4491
NiC ₆ H ₉ O ₆ P	Trimethoxyphosphine nickel tricarbonyl	-	-	Freq, Struct	Bigorgne	ESCF	- (1960)	1986
NiC ₆ H ₁₂ N ₂ O ₄	Nickel (II)-alanine complex (l & dl)	650-4000	S	Freq, Assign	Segnini	SA	16 (1960)	540
NiC ₆ H ₁₂ N ₂ O ₄ .2H ₂ O	Nickel (II)-alanine complex dihydrate	2-7 μ i	S	Chelation const.	Rosenberg	ACS	10 (1956)	840
NiC ₆ H ₁₂ N ₂ O ₄ .3H ₂ O	Nickel (II)-alanine complex trihydrate	650-4000	S	Freq assign	Segnini	SA	16 (1960)	540
NiC ₆ H ₁₂ N ₂ O ₄ .4H ₂ O	Nickel (II)-alanine complex tetrahydrate	900-1100	S	H bond	Fujita	JACS	78 (1956)	3963
		650-4000	S	Freq, Assign	Segnini	SA	16 (1960)	540

$\text{NiC}_6\text{H}_{16}\text{N}_6\text{S}_2$	Nickel (II)-ethylene-diamine isothiocyanate complex	-	S	Freq assign	Mitchell	JCS - (1960)	1912
$\text{NiC}_6\text{H}_{18}\text{Br}_2\text{O}_3\text{S}_3$	Nickel (II)-dimethyl sulfoxide complex bromide	650-4000	S	Spec, Assign	Cotton	JPC 64 (1960)	1534
$\text{NiC}_6\text{H}_{18}\text{Cl}_2\text{O}_3\text{S}_3$	Nickel (II)-dimethyl sulfoxide complex chloride	650-4000	S	Spec, Assign	Cotton	JPC 64 (1960)	1534
$\text{NiC}_6\text{H}_{24}\text{Cl}_2\text{N}_6$	Nickel (II)-ethylene-diamine complex chloride	450-1750	S	Spec, Config.	Powell	JCS - (1959)	791
$\text{NiC}_6\text{H}_{24}\text{N}_6\text{O}_6$	Nickel (II)-ethylene-diamine complex nitrate	3000-4000	S	H bond, Config.	Swink	ACH 13 (1960)	639
$\text{NiC}_6\text{H}_{26}\text{N}_{10}\text{S}_6 \cdot 4\text{H}_2\text{O}$	Nickel (II)-isothiocyanate complex (ammonium salt)tetrahydrate	-	S	Freq assign	Mitchell	JCS - (1960)	1912
$\text{NiC}_7\text{H}_5\text{O}_2$	Salicylaldehyde nickel chelate	-	S	Freq	Bellamy	JCS - (1954)	4491
$\text{NiC}_8\text{H}_4\text{F}_3\text{O}_3\text{S}$	Thenoyltrifluoroacetone nickel chelate	-	Sol	Freq	Bellamy	JCS - (1954)	4491
$\text{NiC}_8\text{H}_{12}\text{N}_4\text{O}_4$	Nickel (II)-dimethyl glyoxime complex- d_2	2-26 μ 2-16 μ 1400-4500	- S -	Freq Spec, H bond H bond, Spec	Godycki Voter Rundle	JCP 19 (1951) AC 23 (1951) JCP 20 (1952)	1205 1730 1487
$\text{NiC}_8\text{H}_{14}\text{N}_4\text{O}_4$	Nickel (II)-dimethyl glyoxime complex	2-26 μ 2-16 μ 1400-4500 - 2-6 μ	S S - S S	Freq Spec, H bond H bond, Spec Spec Spec	Godycki Voter Rundle Rundle Nakahara	JCP 19 (1951) AC 23 (1951) JCP 20 (1952) JACS 76 (1954) ECSJ 28 (1955)	1205 1730 1487 3101 473

$\text{NiC}_{10}\text{H}_{15}\text{O}_6\text{P}$	Nickel carbonmonoxide, triethoxyphosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{10}\text{H}_{10}$	Nickel (II)-cyclopentadiene complex	-	-	Struct	Wilkinson	JACS	75 (1953)	1011
		2-16 μ	S	Spec	Wilkinson	JACS	76 (1954)	1970
		775-1440	-	Struct, Freq	Dunitz	JCP	23 (1955)	954
$\text{NiC}_{10}\text{H}_8\text{D}_{10}\text{Cl}_2\text{N}_2\text{O}_4$	Nickel (II)- γ -chloro allylglycine complex-d ₄	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{NiC}_{10}\text{H}_8\text{D}_2\text{N}_2\text{O}_4$	Nickel (II)-allyl-glycine complex-d ₄	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{NiC}_{10}\text{H}_8\text{BrN}_2\text{O}_4$	Nickel (II)- γ -bromo-allylglycine complex	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{NiC}_{10}\text{H}_8\text{Cl}_4\text{N}_2\text{O}_4$	Nickel (II)- γ -chloro-allylglycine complex	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{NiC}_{10}\text{H}_{16}\text{N}_2\text{O}_4$	Nickel (II)-allylglycine complex	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$\text{NiC}_{10}\text{H}_{20}\text{N}_2\text{O}_4\text{Na}_2$	Nickel (II)-ethylene-diamine tetraacetic acid complex (sodium salt)	800-1800	S	Freq assign	Sawyer	JACS	81 (1959)	816
$\text{NiC}_{10}\text{H}_8\text{OP}_3$	Nickel (0)-carbon-monoxide, trimethyl phosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{10}\text{H}_8\text{O}_6\text{P}_3$	Nickel (0)-carbon-monoxide, trimethoxy phosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{12}\text{H}_8\text{N}_2\text{O}_2$	Nickel carbonmonoxide, pyridine complex	-	S	Freq, FC	Nyholm	JCS	- (1953)	2670

NiC	Formula	Compound	Wavenumber	State	Struct	Lumme	SK	Year	Page
NiC ₁₂ H ₁₈ N ₂ O ₄		Nickel (II)-2-pyridine carboxylic acid chelate	-	-				31 (1958)	294
NiC ₁₂ H ₁₆ H ₂ ^D N ₂ O ₄		Nickel (II)-1,2-cyclo- hexanedionedioxi- mide complex-d ₂	2-16 μ	S	Spec, H bond	Voter	AC	23 (1951)	1730
NiC ₁₂ H ₁₆ O ₂ As ₂		Nickel carbonmonoxide dimethylarsine, O- phenylene complex	-	S, Sol	Freq, FC	Nyholm	JCS	- (1953)	2670
NiC ₁₂ H ₁₈ N ₂ O ₄		Nickel (II)-cyclohexane- 1:2-dionedioxi- mide complex	2-16 μ 800-3200	S S	Spec, H bond Spec, H bond, Assign	Voter Blinc	AC JCS	23 (1951) - (1958)	1730 4536
NiC ₁₂ H ₂₀ N ₂ O ₄		Nickel (II)-methyl allylglycine complex	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
NiC ₁₂ H ₂₄ N ₂ O ₄		Nickel (II)-leucine complex	2-7 μ	S	Chelation	Rosenberg	ACS	10 (1956)	840
NiC ₁₂ H ₃₀ Cl ₂ N ₂ P ₂		Nickel (II)-biacetyl dihydrazone complex chloride	600-3500	S	Spec, Assign	Stoufer	JACS	82 (1960)	3491
NiC ₁₂ H ₃₀ N ₂ O ₆ P ₂		Nickel (II)-nitrate triethyl phosphine complex	700-4000 700-4000	S S	Assign Assign	Gatehouse Gatehouse	JCS JINC	- (1957) - (1958)	4222 75
NiC ₁₂ H ₃₆ Br ₂ O ₆ S ₆		Nickel (II)-dimethyl sulfoxide complex bromide	650-4000	S	Spec, Assign	Cotton	JPC	64 (1960)	1534
NiC ₁₂ H ₃₆ Cl ₂ O ₆ S ₆		Nickel (II)-dimethyl sulfoxide complex perchlorate	650-4000	S	Spec, Assign	Cotton	JPC	64 (1960)	1534
NiC ₁₃ H ₄₅ OP ₃		Nickel (O)-carbon- monoxide, triethyl phosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986

$\text{NiC}_{14}\text{H}_{10}\text{O}_2\text{S}_2$	Nickel-2-mercapto-troponate	-	S	Freq	Bryant	JOC	19 (1954)	1889
$\text{NiC}_{14}\text{H}_{20}\text{D}_2\text{N}_2\text{O}_4$	Nickel (II)-1,2-cycloheptane dione dioxime complex-d ₂	2-16 μ	S	Spec, H bond	Voter	AC	23 (1951)	1730
$\text{NiC}_{14}\text{H}_{20}\text{O}_4$	Nickel-methacronyl acetone complex	1200-1800	S	Assign	Charette	SA	16 (1960)	689
$\text{NiC}_{14}\text{H}_{22}\text{N}_2\text{O}_4$	Nickel (II)-1,2-cycloheptane dione-dioxime complex	2-16 μ	S	Spec, H bond	Voter	AC	23 (1951)	1730
$\text{NiC}_{14}\text{H}_{30}\text{O}_2\text{P}_2$	Nickel-carbonmonoxide triethyl phosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{14}\text{H}_{30}\text{O}_2\text{P}_2$	Nickel-carbonmonoxide triethoxyphosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{15}\text{H}_{27}\text{O}_3\text{P}$	Nickel (O)-carbonmonoxide tri-n-butylphosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{16}\text{H}_{28}\text{O}_4$	Nickel-pivaloyl acetone complex	1200-1800	S	Assign	Charette	SA	16 (1960)	689
$\text{NiC}_{16}\text{H}_{36}\text{O}_2\text{P}_2$	Nickel (II)-di-n-butylphosphate	714-5000	S	Interaction studies	Smith	JINC	9 (1959)	150
$\text{NiC}_{18}\text{H}_{11}\text{N}_2\text{O}_2\text{S}_2\text{Na}$	Nickel (II)-8-hydroxy-quinoline-5-sulfonic acid complex (sodium salt)	-	S	Struct	Norita	SK	32B (1959)	83
$\text{NiC}_{18}\text{H}_{12}\text{N}_2\text{O}_2$	Nickel (II)-8-hydroxy-quinolate	-	S	Spec	Charles	AC	25 (1953)	530
		8-15 μ	S	Spec, Assign	Charles	SA	8 (1956)	1

$NiC_xH_yN_zO_wP_rS_2Na$		S	Struct	Norita	SK	32B (1959)	83
$NiC_{18}H_{15}N_2O_{10}S_2Na$	- Nickel (II)-8-hydroxy-quinoline-5-sulfonic acid, water complex (sodium salt)	-					
$NiC_{19}H_4O_4P$	Nickel (0)-carbonmonoxide, triethoxyphosphine complex	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$NiC_{20}H_{12}N_2O_4$	Nickel (II)-8-quinoline-carboxylic acid chelate	-	Struct	Lumme	SK	31B (1958)	294
$NiC_{20}H_{16}N_2O_2$	2-Methyl-8-hydroxy-quinoline nickel (II) chelate	8-15 μ	Assign, Spec	Charles	SA	8 (1956)	1
$NiC_{20}H_{16}N_2O_2$	4-Methyl-8-hydroxy-quinoline nickel (II) chelate	8-15 μ	Assign, Spec	Charles	SA	8 (1956)	1
$NiC_{21}H_{15}O_3P$	Nickel (0)-carbonmonoxide, triphenylphosphine complex	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$NiC_{21}H_{15}O_6P$	Nickel (0)-carbonmonoxide, triphenoxyphosphine complex	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$NiC_{22}H_{20}N_2S_2$	Nickel (II)-pyridine, isothiocyanate complex	-	Freq assign	Mitchell	JCS	- (1960)	1912
$NiC_{26}H_{54}O_8P_2$	Nickel (0)-carbonmonoxide, tri-n-butoxyphosphine complex	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$NiC_{28}H_{24}Cl_2N$	Nickel (II)-mesostilbenediamine complex chloride	-	Struct	Furlani	GCI	88 (1958)	279

$\text{NiC}_{30}\text{H}_{26}\text{N}_4\text{O}_4$	Nickel (II)-mesostilbene-diamine complex formate	-	-	Struct	Furlani	GCI	88 (1958)	279
$\text{NiC}_{32}\text{H}_{16}\text{N}_8$	Nickel phthalocyanine	3-15 μ	S	Spec	Eberts	JACS	74 (1952)	2806
$\text{NiC}_{32}\text{H}_{23}\text{Cl}_2\text{N}_4\text{O}_4$	Nickel (II)-mesostilbene diamine complex chloroacetate	-	-	Struct	Furlani	GCI	88 (1958)	279
$\text{NiC}_{36}\text{H}_{24}\text{Cl}_2\text{N}_4\text{O}_8$	Nickel-1,10-phenanthroline complex perchlorate	600-2000	S	Spec	Schilt	JINC	9 (1959)	211
$\text{NiC}_{37}\text{H}_{81}\text{O}_4\text{F}_3$	Nickel-carbonmonoxide, tri-n-butoxyphosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{38}\text{H}_{30}\text{O}_2\text{P}_2$	Nickel-carbonmonoxide, triphenylphosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{38}\text{H}_{30}\text{O}_8\text{P}_2$	Nickel-carbonmonoxide, triphenoxyphosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{55}\text{H}_{45}\text{OP}_3$	Nickel-carbonmonoxide, triphenylphosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{55}\text{H}_{45}\text{O}_{10}\text{P}_3$	Nickel-carbonmonoxide, triphenoxyphosphine complex	-	-	Struct, Freq, FC	Bigorgne	BSCF	- (1960)	1986
$\text{NiC}_{72}\text{H}_{60}\text{Cl}_2\text{O}_{12}\text{P}_4$	Nickel (II)-triphenylphosphine oxide complex perchlorate	900-1300	S	Freq	Cotton	JCS	- (1960)	2199

NiC ₁₈₀₈ H ₃₀₁₀ O ₄	1200-1800	S	Assign	Charette	SA	16 (1960)	689
Nickel polymethacroyl acetone complex	-	-	FC	Platt	JCP	18 (1950)	932
Nickel hydride	-	-	FC	Sheline	JCP	18 (1950)	927
NiH ₃ O ₃ P ₃ ·H ₂ O	2-15 μ	S	Group freq, I, Assign	Corbridge	JCS	- (1954)	493
Ammonium fluoride nickel fluoride	1400-4000	S	Spec	Crocket	JACS	82 (1960)	4158
Nickel (I)-nitric oxide, thiosulphate complex (potassium salt) dihydrate	1700-2050	S	Struct	Lewis	JINC	7 (1958)	32
Nickel sulfamate	-	-	Freq, Assign	Bicelli	AC	47 (1957)	1380
Nickel hydrazine complex chloride	15-35 μ	-	Freq	Sacconi	N	186 (1960)	549
Nickel ammonium sulfate	0.8-1.25 μ 0.8-1.1 μ	Sol L	Magnetic rotation Beer's law	Ingersoll Chatterjee	JOSA JCP	6 (1922) 20 (1952)	663 344
Hexaquo nickel ion	-	S, Sol	Freq, FC	Schultz	JCP	10 (1942)	194
Nickel (II)-ammonia complex chloride	2-15 μ 650-1650	S S	FC, Freq, Assign Freq	Kobayashi Svatos Wilmshurst	JCP JACS CJC	23 (1955) 79 (1957) 38 (1960)	1354 3313 467
Hexamine nickel ion	-	-	Freq, FC	Schultz	JCP	10 (1942)	194

NiCl_2	Nickel chloride	0-1.4 μ 0.8-1.1 μ 1-15 μ -	Sol L Sol G	Spec Beer's law Spec Freq, FC	Coblentz Chatterjee Lagerquist Randall	BBS JCF AF JPC	7 (1911) 20 (1952) 12 (1957) 63 (1959)	619 344 491 758
$\text{NiCl}_2 \cdot 6\text{H}_2\text{O}$	Nickel (II)-chloride hexahydrate	900-1100	S	H bond	Fujita	JACS	78 (1956)	3963
$\text{NiCl}_2\text{O}_8 \cdot 6\text{H}_2\text{O}$	Nickel (II)-perchlorate hexahydrate	900-1100	S	H bond	Fujita	JACS	78 (1956)	3963
NiF_4	Nickel (IV)-tetra- fluoride	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
NiF_4	Nickel (II)-complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
NiF_6Si	Nickel fluoro silicate	488-735	-	Band study	deLattre	JCF	20 (1952)	1180
NiI_2O_6	Nickel iodate	-	S	Spec, Struct	Dasent	JCS	- (1960)	2429
NiN_2O_6	Nickel (II)-nitrate	0.6-1.5 μ 2-16 μ	Sol S	Spec Spec	Coblentz Meloche	BBS JINC	14 (1918) 6 (1958)	653 104
$\text{NiN}_2\text{O}_6 \cdot 6\text{H}_2\text{O}$	Nickel nitrate hexahydrate	700-1600 300-880	S S	Freq, Assign Spec	Ferraro Miller	JMS SA	4 (1960) 16 (1960)	99 135
$\text{NiN}_6\text{O}_{12}$	Nickel (II)-nitrite complex ion	400-5000	S	Spec, Freq, Assign	Nakamoto	JACS	80 (1958)	4817
NiO	Nickel oxide	1-15 μ 800-2300	S S	Spec Spec	Johnston Morin	PK PK	93 (1954) 93 (1954)	634 1199

NiO_4S	Nickel sulfate	0.8-1.5 μ 8-12 μ	Sol L	Spec Reflection	Coblentz Plyler	BBS PR	14 (1918) 28 (1926)	653 284	
									-
0.8-1.1 μ 7.5-10.0 μ	L S	Beer's law Spec, Anal	Chatterjee Tai	JCP AC	20 (1952) 29 (1957)	344 1430			
							$\text{NiO}_4\text{S}\cdot 6\text{H}_2\text{O}$	Nickel sulfate hexa- hydrate	2.2 μ 0.7-1.9 μ 2-16 μ
$\text{NiO}_4\text{S}\cdot 7\text{H}_2\text{O}$	Nickel sulfate hepta- hydrate	-	-	Quant. Mech. H bond	Vanvleck Fujita	JCP JACS			
							NiO_4Fe_2	Nickel ferrite	-
NiO_4Mn_2	Nickel manganese	280-4000	S	Spec, Assign, FC, I, Thermo.	Waldron	PK			
							NiO_4Mn_2	Nickel manganese	10-500
NiO_4Mn_2	Nickel manganese	350-5800	S	Spec, FC	Dasgupta	JFS			
							$\text{NiO}_{10}\text{P}_3\text{Na}_3\cdot 12\text{H}_2\text{O}$	Nickel trisodium triphosphate dode- cahydrate	2-15 μ
$\text{Ni}_2\text{C}_6\text{N}_6\text{K}_4$	Nickel cyanide complex (potassium salt)	2.5-15 μ 2000-2150	S S	Struct Struct	Sayed Griffith	JACS JINC			

$\text{Ni}_2\text{C}_8\text{N}_4\text{O}_2\text{K}_4$	Nickel carbonmonoxide cyanide complex (potassium salt)	1800-2200	S	Spec, Struct	Griffith	JINC	10 (1959)	23
$\text{Ni}_2\text{H}_4\text{N}_4\text{O}_4\text{P}_4 \cdot 2.5\text{H}_2\text{O}$	Dinickel tetraphosphonitriilate 2.5 hydrate	80.2-3140	S	I, Group freq	Corbridge	JCS	- (1954)	4555
$\text{Ni}_3\text{CH}_3\text{O}_4\text{H}_7$	Basic nickel carbonate tetrahydrate	2-16 μ	S	Comparison	Meloche	JINC	6 (1958)	104
$\text{Ni}_3\text{C}_{15}\text{H}_3\text{F}_{18}\text{O}_{16}$	Nickel (II)-sym-hexafluoroacetyl-acetone complex (trimer)	280-1700	-	Band study	Nakamoto	N	183 (1959)	459
$\text{Ni}_3\text{C}_{15}\text{H}_{12}\text{F}_9\text{O}_6$	Nickel (II)-1,1,1-trifluoroacetyl-acetone complex (trimer)	280-1700	-	Band study	Nakamoto	N	183 (1959)	459
$\text{Ni}_3\text{C}_{15}\text{H}_3\text{O}_6$	Nickel (II)-acetyl-acetone complex (trimer)	280-1700	-	Band study	Nakamoto	N	183 (1959)	459
$\text{Ni}_3\text{C}_{30}\text{H}_2\text{O}_6$	Nickel (II)-benzoyl-acetone complex (trimer)	280-1700	-	Band study	Nakamoto	N	183 (1959)	459
$\text{Ni}_3\text{C}_{45}\text{H}_3\text{O}_6$	Nickel (II)- ω -benzoyl acetophenone complex (trimer)	280-1700	-	Band study	Nakamoto	N	183 (1959)	459

$\text{Ni}_3\text{O}_6\text{P}_2\text{S}_2$	Trinickel bisphosphoromonothioate	885-3360	S	I, Freq	Corbridge	JCS	- (1954)	4555
$\text{Ni}_3\text{O}_8\text{P}_2$	Nickel orthophosphate	290-650	S	Assign	Duval	CPh	239 (1954)	259
$\text{Ni}_3\text{O}_8\text{P}_2 \cdot 7\text{H}_2\text{O}$	Nickel (II)-phosphate heptahydrate	2-16 μ 2-16 μ 300-880	S S S	Spec Spec Spec	Miller Meloche Miller	AC JLNC SA	24 (1952) 6 (1958) 16 (1960)	1253 104 135
<u>Np COMPOUNDS</u>								
$\text{NpC}_6\text{H}_9\text{O}_8\text{Na}$	Sodium neptunyl acetate	400-3000	S	Freq, Assign, FC	Jones	JCP	23 (1955)	2105
$\text{NpCl}_2\text{O}_{10}$	Neptunyl perchlorate	800-1060	Sol	FC, Spec	Jones	JCP	21 (1953)	542
NpF_6	Neptunium hexafluoride	2-38 μ - -	S - -	Spec, Assign FC John-Teller effect	Malm Califano Weinstock	JCP AAN JCP	23 (1955) 25 (1958) 31 (1959)	2192 284 262
$\text{NpN}_3\text{O}_{11}\text{Rb}$	Rubidium neptunyl nitrate	.6-1.3 μ	L	Temp effect	Waggener	JACS	80 (1958)	3167
NpO_2	Neptunium dioxide ion	-	-	Spec	Gruen	JCP	20 (1952)	1818

Os COMPOUNDS

$OsCl_6$	$H_4BrCl_3N_2$	p-Bromobenzene-diazonium chloride, osmium chloride double salt	-	-	Struct	Kazitsyana	IANS	- (1960)	1523
$OsCl_6$	N_6K_4	Osmium (II)-cyanide complex (potassium salt)	2-5 μ 250-2200	S	Spec Assign	Bonino Hidalgo	AAN CPR	25 (1958) 249 (1959)	401 233
OsH		Osmium hydride	-	-	FC	Platt	JCP	18 (1950)	532
$OsHN_5$	O_4K_2	Osmium (III)-hydroxide, nitric oxide, nitrite complex	1700-2050	S	Freq	Lewis	JINC	7 (1958)	32
$OsCl_5$	NK_2	Potassium nitrido-pentachloroosmate	0-1.3 μ	S	Spec, Freq	Lewis	JINC	6 (1958)	12
OsF_4		Osmium tetrafluoride	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
OsF_6		Osmium hexafluoride	2500-4000	G	Assign	Moffitt	MP	2 (1959)	109
			-	-	Jahn-Teller effect	Weinstock	JCP	31 (1959)	262
			6-50 μ	G	Spec, Thermo.	Weinstock	JCP	32 (1960)	181
OsF_8		Osmium octafluoride	-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
$OsNO_3$	K	Potassium osmiate	0-1.3 μ	S	Spec, Freq	Lewis	JINC	6 (1958)	12
OsO_4		Osmium tetraoxide	324-971	S, L	Freq assign, Struct	Woodward	IFS	52 (1956)	615

PbC	Lead carbide	-	-	-	Freq	Clark	TFS	33 (1937)	1390
$Pb_3O_4P_3$	Lead methylphosphonate	758-1420	S		Freq, I	Corbridge	JCS	- (1954)	4555
$PbCO_3$	Lead carbonate	-	-		Freq, Assign	Schaefer	TFS	25 (1929)	841
		2-16 μ	S		Spec	Miller	AC	24 (1952)	1253
		2-16 μ	S		Spec	Meloche	JIMC	6 (1958)	104
		2-15 μ	S		Spec	Harkins	AC	31 (1959)	541
		300-880	S		Spec	Miller	SA	16 (1960)	135
$Pb_2N_2S_2$	Lead thiocyanate	2-16 μ	S		Spec	Miller	AC	24 (1952)	1253
		-	S		Usage	Resnik	AC	29 (1957)	1874
		2-15 μ	S		Spec	Wiberly	AC	29 (1957)	210
		300-880	S		Spec	Miller	SA	16 (1960)	135
Pb_4H_{12}	Tetramethyl lead	1-16 μ	G		Spec	Kattering	P	4 (1933)	39
		-	-		Assign	Anderson	JCP	4 (1936)	161
		-	-		CH Potential barrier	French	JCP	14 (1946)	389
		-	-		Freq, Assign	Young	JACS	69 (1947)	1410
		2-23 μ	L,G		Spec, Assign	Sheline	JCP	18 (1950)	595
		-	-		FC	Sheline	JCP	18 (1950)	602
		470-3000	L,G		I, Assign	Lippincott	JACS	75 (1953)	4141
		600-1700	S		Spec, Freq, Struct	Zingaro	JACS	76 (1954)	816
		-	-		Group freq	Leonard	JACS	77 (1955)	2029
		1158	-		Freq	Sheppard	TFS	51 (1955)	1465
$Pb_6HN_3O_8 \cdot H_2O$	Lead styphnate hydrate (normal)	600-1700	S		Spec, Struct	Zingaro	JACS	76 (1954)	816

$PbC_6H_5O_4P$	Lead phenyl phosphate	670-3500	-	Spec, Assign	Bellamy	JCS - (1953)	728
$PbC_6H_{10}O_2S_4$	Ethyl lead dixanthate	2.8-15 μ	S	Spec	Pearson	APS 12 (1958)	116
$PbC_8H_{18}O_4P$	Lead diisobutyl phosphate	670-3500	-	Spec, Assign	Bellamy	JCS - (1953)	728
PbC_8H_{20}	Tetraethyl lead	1-16 μ	L	Spec	Kattering	P 4 (1933)	39
		-	-	Spec, Freq	Pai	PKS 149 (1935)	29
		-	-	Assign	Anderson	JCP 4 (1936)	161
$PbC_{10}H_{10}$	Cyclopentadienyl lead	400-4000	Sol	Spec, Struct	Dave	JCS - (1959)	3684
$PbC_{10}H_9Cl_6N_2$	Pyridinium hexachloro-plumbate	-	S	H bond, Freq	Nuttall	JCS - (1960)	4965
$PbC_{10}H_{12}N_2O_9Na_2 \cdot H_2O$	Lead (II)-ethylene-diamine tetraacetic acid complex (sodium salt) monohydrate	800-1800	S	Freq, Assign	Sawyer	JACS 81 (1959)	816
$PbC_{10}H_{22}O_4P$	Lead diisoamyl phosphate	670-3500	-	Spec, Assign	Bellamy	JCS - (1953)	728
$PbC_{12}H_8N_2O_4$	Lead (II)-2-pyridine carboxylic acid chelate	-	-	Struct	Lumme	SK 31 (1958)	294
$PbC_{12}H_8N_2O_8P$	Lead di-p-nitrophenyl phosphate	670-3500	-	Assign, Spec	Bellamy	JCS - (1953)	728

PbC	700-1600	Spec	Author	JOC	Year	Page
$PbC_{12}Cl_2O_8$		-	Duval	JOC	69 (1950)	391
$PbC_{14}H_{10}C_2S_2$	-	S	Bryant	JOC	19 (1954)	1889
$PbC_{14}H_{10}O$	-	S, Sol	Bryant	JOC	19 (1954)	1889
$PbC_{14}H_{14}O_4P$	670-3500	-	Bellamy	JCS	- (1953)	728
$PbC_{14}H_{21}O_4P$	670-3500	-	Bellamy	JCS	- (1953)	728
$PbC_{16}H_{36}O_8P_2$	714-5000	S	Smith	JLNC	9 (1959)	150
$PbC_{18}H_{12}N_2O_2$	-	S	Charles	AC	25 (1953)	530
$PbC_{18}H_{16}O$	8-15 μ	S	Charles	SA	8 (1956)	1
$PbC_{20}H_{12}N_2O_4$	-	Sol	West	JACS	82 (1960)	6269
$PbC_{20}H_{22}O_4$	-	-	Lumme	SA	31 (1958)	294
$PbC_{20}H_{22}O_4$	-	S	Bryant	JOC	19 (1954)	1889

$PbC_{24}H_{16}Cl_2N_4O_8$	Lead (II)-1:10-phenanthroline complex perchlorate	600-250 μ	S	Spec	Schilt	JINC	- (1959)	211
$PbC_{24}H_{20}$	Tetraphenyl lead	625-900 8-11 μ	S S	Vibrations Band study	Margoshes Noltes	SA CIL	7 (1955) - (1959)	114 298
$PbC_{36}H_{70}O_4$	Lead stearate	6-8 μ	S	Spec	Ellis	N	181 (1958)	181
$PbC_{48}H_{32}Cl_2N_8O_8$	Lead (II)-1:10-phenanthroline complex perchlorate	600-2000	S	Spec	Schilt	JINC	9 (1959)	211
PbH	Lead monohydride	-	-	Spec	Watson	PR	57 (1940)	708
		-	-	FC	Sheline	JCP	18 (1950)	927
PbH_3P	Lead orthophosphite	2-15 μ	S	Spec, Freq, I, Assign	Corbridge	JCS	- (1954)	493
PbH_4As	Lead orthoarsenate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$PbH_4N_2O_6S_2$	Lead sulfamate	-	S	Freq assign	Bicelli	AC	47 (1957)	1380
$PbH_4O_4P_2$	Lead phosphinate	2-15 μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	493
PbH_8Cl_6N	Diammonium lead hexachloride	-	S	Freq	Cox	JCS	- (1954)	1798
PbCl	Lead monochloride	-	-	Residual rays	Schaefer	TFS	25 (1929)	841

$PbCl_2$	Lead chloride	71-114 μ 0-6.7 μ 90-230 μ	S - S	Residual rays Dispersion Spec	Weniger Korff Sinton	JOSA KMP JOSA	7 (1923) 4 (1932) 44 (1954)	517 417 503
$PbCl_4$	Lead tetrachloride	-	-	FC	Bowers	JCP	21 (1955)	1117
$PbFO_3$	Lead monofluoro- phosphate	783-1110	S	I, Group freq	Corbridge	JCS	- (1954)	4555
PbF_4	Lead tetrafluoride	-	S	Freq, Struct	Peacock	JCS	- (1954)	2762
PbI_2	Lead iodide	0.4-2 μ	S	Photoelectrical properties	Coblentz	BBS	18 (1922)	489
PbI_2O_6	Lead iodate	-	S	Spec, Struct	Dasent	JOS	- (1960)	2429
$PbI_6^{O,K}_{18,2}$	Potassium lead (IV) iodate	-	S	Spec, Struct	Dasent	JOS	- (1960)	2429
PbN_2O_2	Lead hyponitrite	-	S	Freq	LeFevre	AJC	10 (1957)	361
PbN_2O_6	Lead nitrate	- - 700-1500 2-16 μ 2-16 μ 2-15 μ 700-1600 300-880	S - S S S S S	Reflection factors Residual rays Spec Spec, Freq Spec Spec Freq, Assign Spec	Weniger Schaefer Newman Miller Meloche Addison Ferraro Miller	JOSA IFS JCP AC JINC JCS JMS SA	7 (1923) 25 (1929) 18 (1950) 24 (1952) 6 (1958) - (1960) 4 (1960) 16 (1960)	517 841 1291 1253 104 613 99 135
PbN_3	Lead azide	-	-	Assign	Sutherland	PHS	156 (1936)	678

PbO	Lead oxide	1-8/ μ 5-50/ μ - - - 0.8-20/ μ -	S S - - - S -	Emission Absorption FC Mol. Const. FC Reflectance FC	Coblentz Cartwright Badger Pekersi Badger Agnew Baughan	BBS PR JCP PR PR JOSA TFS	5 (1908) 35 (1930) 2 (1934) 45 (1934) 48 (1935) 43 (1953) 53 (1957)	159 415 128 98 284 999 1046
Pb ₃ Mn	Lead titanate	-	-	Spec	Yatsenko	IANS	24 (1960)	1308
Pb ₃ Zr	Lead zirconate	-	-	Spec	Yatsenko	IANS	24 (1960)	1308
Pb ₄ S	Lead sulfate	300-880	S	Spec	Miller	SA	16 (1960)	135
Pb ₄ P ₂	Lead metaborate	680-1420	S	Spec	Duval	JOSA	44 (1954)	261
Pb ₄ P ₂ .H ₂ O	Lead borite monohydrate	2-16/ μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
Pb ₄ Cr	Lead chromate	2-15/ μ	S	Spec	Harkins	AC	31 (1959)	541
Pb ₄ Se	Lead selenate	290-650 220-3500	S S	Assign Spec, Struct	Duval Duval	CPR ZE	239 (1954) 64 (1960)	249 582
PbS	Lead sulfide	0.8-20/ μ - 1-3.2/ μ 90-230/ μ 600-1700 1-5.5/ μ - 20-200/ μ - 2-3.5/ μ	S S S S S S S S S S	Reflectance Photoconductivity Photoresponse Spec Spec, Freq, Struct Spec Mol. Const. Refl. Curves Preparation of film Photoconductivity	Agnew Jones Mitchell Sinton Zingaro Praithwaite Scott Yoshinaga Harada Smith	JOSA JOSA PR JOSA JACS JSI JOSA PR JCP P.S.	43 (1953) 43 (1953) 93 (1954) 44 (1954) 76 (1954) 321 (1955) 45 (1955) 100 (1955) 24 (1956) 235 (1956)	999 1008 1421 503 816 10 176 753 447 1

PbSe	Lead selenide	0.8-20 μ 3-6 μ 20-200 μ 1-8 μ 2-8 μ	S S S S S	Reflectance Spec Reflectance curves Spec Photoconductivity	Agnew Braithwaite Yoshinaga Young Smith	JOSA JSI PR JSI PhS	43 (1953) 32 (1955) 100 (1955) 32 (1955) 235 (1956)	999 10 753 142 1
PbTe	Lead telluride	2-6 μ 0.8-20 μ .5-7 μ 1-6 μ 3-6 μ 1-6 μ 2-6 μ	S S S S S S S	Transmission Diffuse reflectance Transmission Spec Spec Spec Photoconductivity	Clark Agnew Lasser Bode Braithwaite Young Smith	PR JOSA PR Ph JSI JSI PhS	85 (1952) 43 (1953) 96 (1954) 96 (1954) 32 (1955) 32 (1955) 235 (1956)	1043 999 47 259 10 142 1
Pb ₂ C ₆ H ₃ N ₃ O ₁₀	Lead styphnate (basic)	600-1700	S	Spec, Struct	Zingaro	JACS	76 (1954)	816
Pb ₂ H ₄ N ₄ O ₄ P ₄ xH ₂ O	Dilead tetraphospho- nitrate xhydrate	788-3150	S	I, Freq	Corbridge	JCS	- (1954)	4555
Pb ₂ C ₆ P ₆	Dilead hypophosphate	892-1076	S	Freq, I	Corbridge	JCS	- (1954)	4555
Pb ₂ O ₇ P ₂	Dilead pyrophosphate	2-15 μ	S	Group freq, I, Assign	Corbridge	JCS	- (1954)	4555
Pb ₂ O ₁₂ P ₄ ·4H ₂ O	Dilead tetrameta- phosphate tetrahydrate	2-15 μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	4555
Pb ₃ C ₂ H ₂ O ₈	Basic lead carbonate	5-50 μ 1-7 μ 2-16 μ	- - S	Absorption Transmission Spec	Cartwright Pfund Hunt	PR PR AC	35 (1930) 36 (1930) 22 (1950)	415 71 1478
Pb ₃ O ₆ P ₂ S ₂	Trilead bis-phosphoro- monothioate	874-1610	S	I, Freq	Corbridge	JCS	- (1954)	4555
Pb ₃ O ₈ P ₂	Lead orthophosphate	2-16 μ 2-15 μ 2-16 μ 300-880	S S S S	Spec Freq, I, Assign Spec Spec	Miller Corbridge Meloché Miller	AC JCS JLINC SA	24 (1952) - (1954) 6 (1958) 16 (1960)	1253 493 104 135

$Pb_3O_4As_3$	Lead arsenate	290-650	S	Assign	Duval	CPR	239 (1954)	249	
Pb_3S_3Sb	Lead antimony sulfide	0.7-1.0 μ	S	Photoelectric properties	Coblentz	BBS	18 (1922)	594	
<u>Pd COMPOUNDS</u>									
$Pd_2H_6N_2O_4$	Palladium (II)-ammonia, oxalate complex	299-3250 2-15 μ	S S	Assign Assign, Freq	Schmelz Mizushima	SA SA	9 (1957) 13 (1958)	51 31	
$Pd_4H_8N_4O_4$	trans-Palladium (II)-glycine complex	2-15 μ	S	Config, Assign	Saraceno	JACS	80 (1958)	5018	
$Pd_4H_{12}Cl_2O_2S_2$	Palladium (II)-dimethyl sulfoxide complex chloride	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)	1534	
$Pd_4H_{16}Cl_2N_4$	Palladium (II)-ethylene-diamine complex chloride	400-1750	S	Spec, Freq, Config	Powell	JCS	- (1959)	791	
$Pd_4H_{16}Cl_2N_8S_4$	Palladium (IV)-thiourea complex chloride	2-15 μ	S	Spec, Freq	Yamaguchi	JACS	80 (1958)	527	
Pd_4N_4	Palladium (II)-tetracyanide complex ion	250-2200	S	Spec, Assign	Hidalgo	ARS	56 (1960)	9	
$Pd_4N_4K_4$	Palladium (II)-cyanide complex (potassium salt)	- 250-2200	S -	Spec, Assign Assign	Bonino Hidalgo	AAN CPR	26 (1959) 249 (1959)	137 233	

$\text{PdC}_4\text{N}_4\text{Na}_2$	-	S	Spec, Assign	Bonino	AAN	26 (1959)	137
Palladium (II)-cyanide complex (sodium salt)							
$\text{PdC}_4\text{O}_8\text{K}_2 \cdot 2\text{H}_2\text{O}$	357-3460	S	Assign	Schmelz	SA	9 (1957)	51
Palladium (II)-oxalate complex (potassium salt) dihydrate							
$\text{PdC}_6\text{H}_6\text{O}_8\text{K}_2 \cdot \text{H}_2\text{O}$	2-15/ μ	S	Freq, Assign	Schmelz	JACS	81 (1959)	287
Palladium (II)-malonic acid complex (potassium salt) monohydrate							
$\text{PdC}_6\text{H}_4\text{Br}_2\text{N}_2$	2800-3000	L,S	Assign	Braunholtz	JCS	- (1958)	2780
Palladium (II)-bromide, 1,4-dimethyl-piperazine complex							
$\text{PdC}_6\text{H}_4\text{Cl}_2\text{N}_2$	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
Palladium (II)-dimethyl piperazine, chloride complex							
$\text{PdC}_8\text{H}_{14}\text{N}_4\text{O}_4$	-	-	H bond, Freq	Rundle	JCP	20 (1952)	1487
Palladium (II)-dimethyl glyoxime complex	-	S	Spec	Rundle	JACS	76 (1954)	3101
	-	-	H bond	Pimental	JCP	24 (1956)	639
	1800-3200	S	Spec, Assign, H bond	Blinic	JCS	- (1956)	4536
$\text{PdC}_8\text{H}_{20}\text{ClN}_4$	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
Palladium - chloride, piperazine complex							

Chemical Formula	Compound Name	Spec	Morris	DA	Year	Page
$\text{PdC}_{10}\text{H}_{12}\text{Cl}_2\text{N}_2\text{O}_8\text{Na}_4$	Palladium (V)- ethylenediamine tetraacetic acid complex chloride (sodium salt)	-	-	-	19 (1958)	223
$\text{PdC}_{10}\text{H}_{14}\text{O}_4$	Palladium acetyl acetate	625-5000 280-1700	West Nakamoto	JINC N	5 (1958) 183 (1959)	295 459
$\text{PdC}_{10}\text{H}_{18}\text{Cl}_2\text{NO}_3$	trans-Palladium (II)-chloride, trimethoxy- phosphine, p-toluidine complex	-	Chatt	JCS	- (1958)	3203
$\text{PdC}_{10}\text{H}_{22}\text{Cl}_2\text{N}_2$	trans-Palladium (II)-chloride, piperidine complex	-	Chatt	JCS	- (1958)	3203
$\text{PdC}_{11}\text{H}_{26}\text{Cl}_2\text{NP}$	trans-Palladium (II)-chloride, piperidine, triethylphosphine complex	-	Chatt	JCS	- (1958)	3203
$\text{PdC}_{11}\text{H}_{26}\text{Cl}_2\text{NAs}$	trans-Palladium (II)-chloride, piperidine, triethylarsine complex	-	Chatt	JCS	- (1958)	3203
$\text{PdC}_{11}\text{H}_{28}\text{Cl}_2\text{NO}_3$	trans-Palladium (II)- chloride, n-octyl- amine trimethoxy- phosphine complex	-	Chatt	JCS	- (1958)	3203

$\text{PdC}_{12} \text{H}_{18} \text{N}_4 \text{S}_2$	Palladium (II)- 2,2-dipyridine thiocyanate complex	-	S	Freq, Assign	Mitchell	JCS - (1960)	1912
$\text{PdC}_{12} \text{H}_{18} \text{N}_4 \text{O}_4$	Palladium (II)- cyclohexane- 1:2-dione dioxime complex	800-3200	S	Spec, Assign, H bond	Bline	JCS - (1958)	4536
$\text{PdC}_{12} \text{H}_{28} \text{N}_2 \text{O}_4 \text{Se}_2$	Palladium (II)- di-n-propyl- selenide, nitrite complex	1300-1500 800-1500	Sol Sol	Bonding Freq, Struct	Gatehouse Chalt	JINC 8 (1958) JCS - (1959)	79 4073
$\text{PdC}_{12} \text{H}_{28} \text{N}_2 \text{O}_4 \text{Te}_2$	Palladium (II)- di-n-propyl telluride, nitrite complex	1300-1500 800-1500	Sol Sol	Freq, Bonding Freq, Struct	Gatehouse Chalt	JINC 8 (1958) JCS - (1959)	79 4073
$\text{PdC}_{13} \text{H}_{23} \text{Cl}_2 \text{NS}$	trans-Palladium (II)-chloride, di-n-propyl- sulfide, p- toluidine complex	-	Sol	Freq, Struct	Chatt	JCS - (1958)	3203
$\text{PdC}_{13} \text{H}_{23} \text{Cl}_2 \text{NSe}$	trans-Palladium (II)-chloride, di-n-propyl- selenide p- toluidine complex	-	Sol	Freq, Struct	Chatt	JCS - (1959)	3203
$\text{PdC}_{13} \text{H}_{23} \text{Cl}_2 \text{NTe}$	trans-Palladium (II)- chloride, di-n- propyltelluride, p-toluidine complex	-	Sol	Freq, I	Chatt	JCS - (1958)	3203

RC	H ₁₀ O ₄	Palladium tropolonate	S	Band freq	Bryant	JOC	19 (1954)	1889
PdC ₁₄	H ₃₂ Cl ₂ NP	trans-Palladium (II)-chloride, piperidine, tri-n-propyl- phosphine complex	Sol	Freq, I	Chatt	JCS	- (1958)	3203
PdC ₁₄	H ₃₃ Cl ₂ NS	trans-Palladium (II)-chloride, di-n-propyl- sulfide n-octyl- amine complex	Sol	Freq, I	Chatt	JCS	- (1958)	3203
PdC ₁₄	H ₃₃ Cl ₂ NSe	trans-Palladium (II)-chloride, di-n-propyl- selenide, n-octyl- amine complex	Sol	Freq, I	Chatt	JCS	- (1958)	3203
PdC ₁₄	H ₃₃ Cl ₂ NTe	trans-Palladium (II)-chloride, di-n-propyl- telluride n- octylamine complex	Sol	Freq, I	Chatt	JCS	- (1958)	3203
PdC ₁₅	H ₂₈ Cl ₂ N ₂	trans-Palladium (II)-chloride, n-octylamine, p-toluidine complex	Sol	Freq, I	Chatt	JCS	- (1958)	3203
PdC ₁₆	H ₃₀ Cl ₂ NP	trans-Palladium (II)- chloride, tri-n- propylphosphine p- toluidine complex	Sol Sol Sol	Freq, Mol. Const. H bond Freq, I	Chatt Chatt Chatt	JCS JCS JCS	- (1955) - (1956) - (1958)	4461 2712 3203

$\text{PdC}_{16}\text{H}_{36}\text{Cl}_2\text{N}_4\text{S}_2$	trans-Palladium (II)-chloride, tri-n-propyl arsine, p- toluidine complex	-	Sol	Freq, I	Chatt	JCS	- (1958)	3203
$\text{PdC}_{16}\text{H}_{36}\text{N}_4\text{O}_2\text{S}_2$	Palladium-di- n-butyl- sulfide, nitrite complex	800-1500 1300-1500	Sol Sol	Freq, Struct Bonding	Chatt Gatehouse	JCS JINC	- (1959) 8 (1958)	4073 79
$\text{PdC}_{16}\text{H}_{38}\text{Cl}_2\text{N}_2$	trans-Palladium (II)-chloride, n-octylamine complex	-	Sol	Freq, I	Chatt	JCS	- (1958)	3203
$\text{PdC}_{18}\text{H}_{40}\text{Cl}_2\text{NP}$	trans-Palladium (II)-chloride, n-octylamine, tri-n-propyl- phosphine complex	-	Sol	Freq, I	Chatt	JCS	- (1958)	3203
$\text{PdC}_{18}\text{H}_{40}\text{Cl}_2\text{N}_4\text{S}$	trans-Palladium (II)-chloride, n-octylamine tri-n-propyl- arsine complex	-	Sol	Freq, I	Chatt	JCS	- (1958)	3203
$\text{PdC}_{20}\text{H}_{36}\text{O}$	Palladium (II)- benzoyl acetone complex	280-1700	-	Bonding	Nakamoto	N	181 (1959)	459
$\text{PdC}_{20}\text{H}_{30}\text{N}_4\text{O}$	trans-Palladium (II)-nitrite, 4-n-pentyl- pyridine complex	1300-1500	Sol	Bonding	Gatehouse	JINC	8 (1958)	79

$\text{PdC}_{23}\text{H}_{26}\text{Cl}_2$ NO_3P_3	-	trans-Palladium (II)-chloride, triphenoxy- phosphine complex	-	Sol	Freq, I	Chatt	JCS	- (1958)	3203
$\text{PdC}_{23}\text{H}_{26}\text{Cl}_2\text{NP}$	-	trans-Palladium (II)-chloride, piperidine, triphenyl- phosphine complex	-	Sol	Freq, I	Chatt	JCS	- (1958)	3203
$\text{PdC}_{24}\text{H}_{54}\text{N}_4\text{O}_4\text{P}_2$	800-1500 800-1500	Palladium (II)- nitrite tri- n-butylphosphine complex		Sol Sol	Bonding Freq, Struct	Gatehouse Chatt	JINC JCS	8 (1958) - (1959)	79 4073
$\text{PdC}_{24}\text{H}_{54}\text{N}_4\text{O}_4\text{As}_2$	1300-1500 800-1500	Palladium (II)- nitrite, tri- n-butylarsine complex		Sol Sol	Bonding Freq, Struct	Gatehouse Chatt	JINC JCS	8 (1958) - (1959)	79 4073
$\text{PdC}_{25}\text{H}_{24}\text{Cl}_2\text{NP}$	-	trans-Palladium (II)-chloride, triphenyl- phosphine, p- toluidine complex	-	Sol	Freq, I	Chatt	JCS	- (1958)	3203
$\text{PdC}_{25}\text{H}_{24}\text{Cl}_2$ NO_3P_3	-	trans-Palladium (II)-chloride, triphenoxy- phosphine p- toluidine complex	-	Sol	Freq, I	Chatt	JCS	- (1958)	3203

$\text{PdC}_{26}\text{H}_{34}\text{Cl}_2\text{NO}_3$	trans-Palladium (II)-chloride, n-octylamine triphenoxy- phosphine complex	-	Sol	Freq, I	Chatt	JCS - (1958)	3203
$\text{PdC}_{26}\text{H}_{34}\text{Cl}_2\text{NP}$	trans-Palladium (II)-chloride, n-octylamine, biphenylphosphine complex	-	Sol	Freq, I	Chatt	JCS - (1958)	3203
$\text{PdH}_4\text{N}_2\text{O}$	Palladium (II)- nitrate, water complex	700-4000 700-4000	S S	Assign Assign	Gatehouse Gatehouse	JCS - (1957) JINC 8 (1958)	4222 75
$\text{PdH}_6\text{Cl}_2\text{N}_2$	cis-Palladium (II)-ammonia, chloride complex	2-15 μ	S	Assign, Spec, Freq	Mizushima	SA 13 (1958)	31
$\text{PdH}_6\text{Cl}_2\text{N}_2$	trans-Palladium (II)- ammonia, chloride complex	450-3350 650-1650 2-15 μ	S S S	Assign, Freq Freq Assign Freq	Powell Svatos Mizushima Wilmshurst	JCS - (1956) JACS 79 (1957) SA 13 (1958) CJC 38 (1960)	3108 3313 31 467
$\text{PdH}_{12}\text{Cl}_2\text{N}_4$	Palladium (II)-ammonia complex chloride	650-1650 2-15 μ	S S	Freq Assign, Freq	Svatos Mizushima Wilmshurst	JACS 79 (1957) SA 13 (1958) CJC 38 (1960)	3313 31 467
$\text{PdH}_{12}\text{Cl}_2\text{N}_4 \cdot \text{H}_2\text{O}$	Palladium (II)- ammonia complex chloride mono- hydrate	450-3550	S	Assign, Freq	Powell	JCS - (1956)	3108

PdCl_2N_2	450-2000	S	Assign	Powell	JCS	- (1956)	3108
trans-Palladium (II)- ammonia, chloride complex- d_6							
PdCl_4	-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
PdF_4	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
$\text{Pd}_2\text{C}_4\text{H}_8\text{Cl}_4$	400	S	Assign	Powell	SA	13 (1958)	69
$\text{Pd}_2\text{C}_4\text{H}_5\text{Cl}_2\text{N}$	800-1450	S	Bonding	Gatehouse	JINC	8 (1958)	79
$\text{Pd}_2\text{C}_4\text{H}_5\text{N}_2\text{O}_2\text{P}$	800-1500	S	Freq, Struct	Chatt	JCS	- (1959)	4073
$\text{Pd}_2\text{C}_4\text{H}_5\text{N}_2\text{O}_2\text{P}$	800-1450	S	Bonding	Gatehouse	JINC	8 (1958)	79
$\text{Pd}_2\text{C}_6\text{H}_8\text{N}_2\text{O}_2\text{P}$	800-1500	S	Bonding Freq, Struct	Gatehouse Chatt	JINC JCS	8 (1958) - (1959)	79 4073
$\text{Pd}_2\text{H}_{12}\text{Cl}_4\text{N}_4$	785-1632	-	Freq	Mizushima	JCP	23 (1955)	1367
Polonium monohydride	-	-	FC	Sheline	JCP	18 (1950)	927

Po COMPOUNDS

PtC ₂ H ₄ Cl ₂ K ₃	Platinum (II)-chloride, ethylene complex (potassium salt)	400-2100	S	Assign	Powell	SA	13 (1958)	69
PtC ₂ H ₄ Cl ₂ K ₃ H ₂ O	Platinum (II)-chloride, ethylene complex (potassium salt)monohydrate	500-3500 - 400-3100	S - S	Freq Struct Assign	Powell Babushkin Powell	JCS DANS SA	- 123 13 (1958)	4495 461 69
PtC ₂ H ₆ N ₂ O ₄	Platinum (II)-ammonia, oxalate complex	2-15/μ	S	Assign, Freq	Mizushima	SA	13 (1958)	31
PtC ₂ H ₇ Cl ₂ N	Platinum (II)-ammonia chloride, ethylene complex	400-2000	S	Spec, Assign	Powell	JCS	- (1959)	3089
PtC ₂ H ₇ Cl ₂ N	trans-Platinum (II)-ammonia, ethylene, chloride complex	450-3300 - 400-2100	S Sol S	Freq Freq, Struct, Config Assign, Freq	Powell Irving Powell	JCS JCS SA	- - 13 (1958)	4495 2283 69
PtC ₂ H ₈ Cl ₂ N ₂ S ₂	Platinum (II)-thiourea complex chloride	2-15/μ	S	Spec, Freq	Yamaguchi	JACS	80 (1958)	527
PtC ₃ H ₆ Cl ₂	Cyclopropane platinous chloride	2.5-14/μ	S	Freq	Tipper	JCS	- (1955)	2045
PtC ₃ H ₉ Cl ₂ N	trans-Platinum (II)-chloride, ethylene, methylamine complex	-	Sol	Freq, H bond	Chatt	JCS	- (1955)	4461
PtC ₄ H ₄ Cl ₂ N ₂ S ₂	Platinum (II)-chloride 1,2-dithiocyanatoethane, complex	660-3140	S, Sol	Assign	Mizushima	JPC	59 (1955)	293

$\text{PtCl}_4\text{H}_8\text{Cl}_2\text{S}_2$	Platinum (II)- dithiane complex chloride	500-1500	S	Spec, Struct	Hendra	JCS - (1960)	5105
$\text{PtCl}_4\text{H}_8\text{N}_2\text{O}_4$	cis-Platinum (II)- glycine complex	2-7 μ 2-15 μ	S S	Chelation effect Spec, Assign	Rosenberg Saraceno	ACS 10 (1956) JACS 80 (1958)	840 5018
$\text{PtCl}_4\text{H}_8\text{N}_2\text{O}_4$	trans-Platinum (II)- glycine complex	2-7 μ 2-15 μ	S S	Chelation effect Assign, Spec	Rosenberg Saraceno	ACS 10 (1956) JACS 80 (1958)	840 5018
$\text{PtCl}_4\text{H}_{11}\text{Cl}_2\text{N}$	trans-Platinum (II)- chloride, dimethyl- amine, ethylene complex	-	Sol	Freq	Chatt	JCS - (1955)	4461
$\text{PtCl}_4\text{H}_{11}\text{Cl}_2\text{N}$	trans-Platinum (II)- chloride, ethyl- amine, ethylene complex	- 3100-3400	Sol Sol	Freq Freq, H bond	Chatt Duncanson	JCS - (1955) JCS - (1960)	4461 3841
$\text{PtCl}_4\text{H}_{12}\text{Cl}_2\text{O}_2\text{S}_2$	Platinum (II)- dimethyl sulfoxide complex chloride	650-4000	S	Assign, Spec	Cotton	JPC 64 (1960)	1534
$\text{PtCl}_4\text{H}_{13}\text{Cl}_2\text{NS}$	trans-Platinum (II)- ammonia, chloride, ethylsulfide, complex	450-3300 -	S Sol	Freq Freq, Struct, Config.	Powell Irving	JCS - (1956) JCS - (1958)	4495 2283
$\text{PtCl}_4\text{H}_{16}\text{Cl}_2\text{N}_4$	Platinum (II)- ethylenediamine complex chloride	450-1750	S	Spec, Config.	Powell	JCS - (1959)	791
$\text{PtCl}_4\text{H}_{16}\text{Cl}_2\text{N}_4\text{S}$	Platinum (IV)- thiourea complex chloride	2-5 μ	S	Spec, Freq	Yamaguchi	JACS 80 (1958)	527

PtC ₄ N ₄	Platinum (II)-tetra-cyanide complex ion	250-2200	S	Spec, Assign	Hidalgo	AHS	56 (1960)	9
PtC ₄ N ₄ K ₄	Platinum (II)-cyanide complex (potassium salt)	2-40 μ 250-2200	S	Assign, Vibrations Assign	Sweeny Hidalgo	JACS CPR	78 (1956) 249 (1959)	889 239
PtC ₄ N ₄ S ₄ K ₄	Platinum (II)-isothiocyanate complex (potassium salt)	-	S	Freq, Assign	Mitchell	JCS	- (1960)	1912
PtC ₅ H ₁₃ Cl ₂ N	trans-Platinum (II)-chloride, ethylene, propylamine complex	3100-3400	Sol	Freq, H bond	Duncanson	JCS	- (1960)	3841
PtC ₆ H ₁₅ Cl ₁₅ N	trans-Platinum (II)-t-butylamine, chloride, ethylene complex	3100-3400	Sol	Freq, H bond, Iso.	Duncanson	JCS	- (1960)	3841
PtC ₆ H ₁₈ Cl ₁₈ P ₂	cis-Platinum (II)-chloride trimethyl-phosphine complex	400-4000	S, Sol	Band freq	Adams	JCS	- (1960)	2047
PtC ₆ H ₁₉ Cl ₁₉	Platinum (II)-chloride, ethylene, hydride trimethyl-phosphine complex	2000-2200	Sol	Freq	Chatt	CIL	- (1958)	859
PtC ₆ N ₆ S ₆ K ₆	Platinum (IV)-thiocyanate complex (potassium salt)	-	S	Freq, Assign	Mitchell	JCS	- (1960)	1912
PtC ₇ H ₁₅ Cl ₁₅ N	trans-Platinum (II)-chloride, ethylene, piperidine complex	3000-3500 3000-3500	Sol Sol	H bond H bond	Chatt Chatt	JCS JCS	- (1955) - (1956)	4461 2712

$\text{PtC}_7\text{H}_{20}\text{Cl}_2\text{NP}$	trans-Platinum (II)-chloride, methyl-amine triethylphosphine complex	3100-3400	Sol	Freq, H bond, Iso.	Duncanson	JCS - (1960)	3841
$\text{PtC}_7\text{H}_{21}\text{Br}_2\text{P}_2$	trans-Platinum-bromide, methyl, trimethylphosphine complex	400-4000	Sol, S	Band freq	Adams	JCS - (1960)	2047
$\text{PtC}_7\text{H}_{21}\text{ClP}_2$	cis-Platinum (I)-chloride methyl, trimethylphosphine complex	400-4000	Sol, S	Band freq	Adams	JCS - (1960)	2047
$\text{PtC}_7\text{H}_{21}\text{ClP}_2$	trans-Platinum (I)-chloride, methyl, trimethylphosphine complex	400-4000	S, Sol	Band freq	Adams	JCS - (1960)	2047
$\text{PtC}_7\text{H}_{21}\text{IP}_2$	Platinum-iodide, methyl, trimethylphosphine complex	400-4000	S, Sol	Band freq	Adams	JCS - (1960)	2047
$\text{PtC}_7\text{H}_{21}\text{NO}_2\text{P}_2$	Platinum-methyl, nitrite, trimethylphosphine complex	400-4000	S, Sol	Band freq	Adams	JCS - (1960)	2047
$\text{PtC}_7\text{H}_{21}\text{NO}_3\text{P}_2$	Platinum-methyl, nitrate trimethylphosphine complex	400-4000	S, Sol	Band freq	Adams	JCS - (1960)	2047
$\text{PtC}_8\text{H}_9\text{Br}_2\text{NO}$	trans-Platinum (II)-bromide carbonmonoxide, p-toluidine complex	-	Sol	Freq, Struct, Config.	Irving	JCS - (1958)	2283

$\text{PtC}_8\text{H}_9\text{Cl}_2\text{NO}$	trans-Platinum (II)-chloride, carbonmonoxide, p-toluidine complex	-	Sol	Freq, Struct, Config.	Irving	JCS - (1958)	2283
$\text{PtC}_8\text{H}_9\text{I}_2\text{NO}$	trans-Platinum (II)-iodide, carbonmonoxide, p-toluidine complex	-	Sol	Freq, Struct, Config.	Irving	JCS - (1958)	2283
$\text{PtC}_8\text{H}_{14}\text{Cl}_3\text{O}_2\text{K}$	Platinum (II)-chloride, 2,5-dihydroxy-2,5-dimethylhexyne-3-complex (potassium salt)	2000-4000	S, Sol	Struct, Assign	Chatt	N 184 (1959)	526
$\text{PtC}_8\text{H}_{16}\text{Cl}_2\text{O}_2\text{S}_2$	Platinum (II)-thioxane complex chloride	500-1500	S	Spec, Struct	Hendra	JCS - (1950)	5105
$\text{PtC}_8\text{H}_{20}\text{Cl}_2\text{NO}_3\text{P}$	trans-Platinum (II)-chloride trimethoxyphosphine piperidine complex	3000-3500	Sol Sol	H bond Freq	Chatt Chatt	JCS - (1955) JCS - (1956)	4461 2712
$\text{PtC}_8\text{H}_{20}\text{Cl}_2\text{S}_2$	cis-Platinum (II)-chloride diethyl sulfide complex	600-750	S	Freq	Powell	JCS - (1956)	4495
$\text{PtC}_8\text{H}_{20}\text{Cl}_2\text{S}_2$	trans-Platinum (II)-chloride, diethylsulfide complex	600-750	S	Freq	Powell	JCS - (1956)	4495
$\text{PtC}_8\text{H}_{20}\text{S}$	Platinum (0)-1,2-diethyl thioethane, methyl complex	400-4000	S, Sol	Band freq	Adams	JCS - (1960)	2047

$\text{PtC}_8\text{H}_{21}\text{NP}_2$	cis-Platinum (I)- cyanide, methyl, trimethylphosphine complex	400-4000	S, Sol	Band freq	Adams	JCS -	(1960)	2047
$\text{PtC}_8\text{H}_{21}\text{NP}_2$	trans-Platinum (I)- methyl, thiocyanate, trimethylphosphine complex	400-4000	S, Sol	Band freq	Adams	JCS -	(1960)	2017
$\text{PtC}_8\text{H}_{22}\text{Cl}_2\text{NP}$	trans-Platinum (II)- chloride, ethylamine, triethylphosphine complex	-	Sol	Freq	Chatt	JCS -	(1955)	4461
		3000-3500	Sol	H bond	Chatt	JCS -	(1956)	2712
		3100-3400	Sol	Freq, H bond, Iso.	Duncanson	JCS -	(1960)	3841
$\text{PtC}_8\text{H}_{23}\text{ClP}_2$	trans-Platinum- chloride, ethyl, trimethylphosphine complex	400-4000	S, Sol	Band freq	Adams	JCS -	(1960)	2047
$\text{PtC}_8\text{H}_{25}\text{IP}_2$	trans-Platinum- iodide, ethyl, trimethylphosphine complex	400-4000	S, Sol	Band freq	Adams	JCS -	(1960)	2047
	$\text{PtC}_8\text{H}_{24}\text{Cl}_2\text{N}_2\text{S}$	Platinum (II)- methyl thiourea complex chloride	S	Spec	Lane	JACS 81	(1959)	3824
$\text{PtC}_8\text{H}_{24}\text{P}_2$	cis-Platinum- methyl, trimethyl- phosphine complex	400-4000	S, Sol	Band freq	Adams	JCS -	(1960)	2047
	$\text{PtC}_9\text{H}_{13}\text{Cl}_2\text{N}$	trans-Platinum (II)- chloride, ethylene, p-toluidine complex	Sol Sol	Freq, H bond H bond	Chatt Chatt	JCS - JCS -	(1955) (1956)	4461 2712

PtC ₉ H ₁₆ Cl ₃ OK	2000-4000	S,Sol	Struct., Assign	Chatt	N	184 (1959)	526
Platinum (II)-chloride 2,5,5-trimethyl-2-hydroxyhexyne-3-complex (potassium salt)							
PtC ₉ H ₁₆ Cl ₃ O ₂ K	2000-4000	S,Sol	Struct., Assign	Chatt	N	184 (1959)	526
Platinum (II)-chloride, 2,5-dimethyl-2-methoxy-5-hydroxyhexyne-3-complex (potassium salt)							
PtC ₉ H ₂₁ Cl ₂ NS	3000-3500	Sol	Freq	Chatt	JCS	(1955)	4461
Platinum (II)-chloride, diethylsulfide, piperidine complex	3000-3500	Sol	H bond	Chatt	JCS	(1956)	2712
PtC ₉ H ₂₁ Cl ₂ NSe	-	Sol	Freq	Chatt	JCS	(1955)	4461
trans-Platinum (II)-chloride, diethylselenide piperidine complex	3000-3500	Sol	H bond	Chatt	JCS	(1956)	2712
PtC ₉ H ₂₁ Cl ₂ NTe	-	Sol	Freq	Chatt	JCS	(1955)	4461
trans-Platinum (II)-chloride, diethyltelluride piperidine complex	3000-3500	Sol	H bond	Chatt	JCS	(1956)	2712
PtC ₉ H ₂₄ Cl ₂ NP	3000-3500	S,Sol	H bond, Spec	Chatt	JCS	(1956)	2712
trans-Platinum (II)-ammonia, chloride, tri-n-propylphosphine complex							
PtC ₉ H ₂₄ I ₂ NP	3000-3500	S,Sol	H bond, Freq, Spec	Chatt	JCS	(1956)	2712
trans-Platinum (II)-ammonia, iodide, tri-n-propylphosphine complex							

$\text{PtC}_9\text{H}_{25}\text{Cl}_2\text{P}_2$	trans-Platinum-chloride, n-propyl, trimethylphosphine complex	400-4000	Sol, S	Band freq	Adams	JCS - (1960)	2047
$\text{PtC}_{10}\text{H}_{12}\text{Cl}_2\text{N}_2\text{O}_8\text{Na}_4$	Platinum (II)-ethylenediamine tetraacetic acid (tetrasodium salt bidentate) chloride complex	-	-	Spec, Struct	Morris	DA 19 (1958)	223
$\text{PtC}_{10}\text{H}_{12}\text{N}_2\text{O}_8\text{Na}_2$	Platinum (II)-ethylenediamine tetraacetic acid (disodium salt tetradentate) complex	-	-	Spec, Struct	Morris	DA 19 (1958)	223
$\text{PtC}_{10}\text{H}_{12}\text{N}_6\text{O}_4$	cis-Platinum (II)-aminopyridine, nitrite complex	800-1450	Sol	Bonding	Gatehouse	JINC 8 (1958)	79
$\text{PtC}_{10}\text{H}_{12}\text{N}_6\text{O}_4$	trans-Platinum (II)-aminopyridine, nitrite complex	800-1450	Sol	Bonding	Gatehouse	JINC 8 (1958)	79
$\text{PtC}_{10}\text{H}_{15}\text{Cl}_2\text{N}$	trans-Platinum (II)-chloride, 2,6-dimethyl aniline, ethylere complex	-	Sol	Freq, H bond	Chatt	JCS - (1955)	4461
$\text{PtC}_{10}\text{H}_{16}\text{Cl}_2\text{NP}$	trans-Platinum (II)-chloride, t-butylamine, triethylphosphine complex	3100-3400	Sol	Freq, Iso., H bond	Duncanson	JCS - (1960)	3841

PtC ₁₀ H ₁₈ Cl ₂ O ₂ K ₂	2000-4000	S, Sol	Struct, Assign	Chatt	N	184 (1959)	526
Platinum (II)-chloride, 2,5-dimethoxy-2,5-dimethylhexyne-3 complex (potassium salt)	-	Sol	Freq H bond	Chatt Chatt	JCS JCS	- -	4461 2712
PtC ₁₀ H ₂₂ Cl ₂ N ₂	3000-3500	Sol					
trans-Platinum (II)-chloride, piperidine complex	-	Sol	Freq, H bond	Chatt	JCS	-	4461
trans-Platinum (II)-chloride, methylamine, tri-n-propylphosphine complex	3000-3500	Sol, S	Freq, H bond	Chatt Chatt	JCS JCS	- -	4461 2712
PtC ₁₀ H ₂₆ Cl ₂ NP							
cis-Platinum-ethyl, trimethylphosphine complex	400-4000	S, Sol	Band freq	Adams	JCS	-	2047
PtC ₁₁ H ₂₆ Cl ₂ NSb							
trans-Platinum (II)-chloride, triethylstibine, piperidine complex	-	Sol	Freq, I H bond	Chatt Chatt	JCS JCS	- -	4461 2712
PtC ₁₂ H ₁₈ N ₂ O ₄	800-3200	S	Spec, Assign, H bond	Blinc	JCS	-	4536
Platinum (II)-cyclohexane 1:2-dione dioxime complex							
PtC ₁₂ H ₂₈ N ₂ O ₄ S ₂	800-1500	Sol	Freq, Struct	Chatt	JCS	-	4073
Platinum (II)-di-n-propylsulfide, nitrite complex							
PtC ₁₂ H ₂₈ N ₂ O ₄ S ₂	800-1500	Sol	Freq, Struct, Bonding	Gatehouse	JINC	8 (1958)	79
cis-Platinum (II)-di-n-propylsulfide, nitrite complex							

$\text{PtC}_{12}\text{H}_{28}\text{N}_2\text{O}_4\text{S}_2$	trans-Platinum (II)- di-n-propylsulfide, nitrite complex	800-1450 800-1500	Sol Sol	Bonding Freq, Struct	Gatehouse Chatt	JINC JCS	8 (1958) - (1959)	79 4073
$\text{PtC}_{12}\text{H}_{28}\text{N}_2\text{O}_4\text{Se}_2$	Platinum (II)-di-n- propylselenide, nitrite complex	800-1500	Sol	Struct, Freq	Chatt	JCS	- (1959)	4073
$\text{PtC}_{12}\text{H}_{28}\text{N}_2\text{O}_4\text{Se}_2$	Platinum (II)-di-n- propylselenide, nitrite complex	1300-1500 800-1500	Sol Sol	Bonding Freq	Gatehouse Chatt	JINC JCS	8 (1958) - (1959)	79 4073
$\text{PtC}_{12}\text{H}_{28}\text{N}_2\text{O}_4\text{Te}_2$	trans-Platinum (II)- di-n-propyl telluride, nitrite complex	1300-1500 800-1500	Sol Sol	Bonding Freq, Struct	Gatehouse Chatt	JINC JCS	8 (1958) - (1959)	79 4073
$\text{PtC}_{12}\text{H}_{30}\text{Cl}_2\text{P}_2$	cis-Platinum (II)- chloride triethyl- phosphine complex	400-4000	S,Sol	Band freq	Adams	JCS	- (1960)	2047
$\text{PtC}_{12}\text{H}_{30}\text{Cl}_2\text{P}_2$	trans-Platinum (II)- chloride, triethyl- phosphine complex	400-4000	S,Sol	Band freq	Adams	JCS	- (1960)	2047
$\text{PtC}_{12}\text{H}_{30}\text{P}_2$	Platinum-1,2-bis- (diethylphosphino) ethane methyl complex	400-4000	Sol,S	Band freq	Adams	JCS	- (1960)	2047
$\text{PtC}_{12}\text{H}_{31}\text{BrP}_2$	Platinum (II)- bromide, hydride, triethylphosphine complex	2000-2050	Sol	Freq	Chatt	CIL	- (1958)	859
$\text{PtC}_{12}\text{H}_{31}\text{BrAs}$	Platinum (II)- bromide, hydride, triethylarsine complex	2100-2200	Sol	Freq	Chatt	CIL	- (1958)	859

PtC ₁₂ H ₃₁ ClP ₂	Platinum (II)-chloride, hydride, triethylphosphine complex	2000-2250	Sol	Freq	Chatt	CIL	- (1958)	859
PtC ₁₂ H ₃₁ ClAs	Platinum (II)-chloride hydride triethylarsine complex	2100-2200	Sol	Freq	Chatt	CIL	- (1958)	859
PtC ₁₂ H ₃₁ IP ₂	Platinum (II)-iodide, hydride, triethylphosphine complex	2000-2250	Sol	Freq	Chatt	CIL	- (1958)	859
PtC ₁₂ H ₃₁ IAs	Platinum (II)-iodide hydride, triethylarsine complex	2100-2200	Sol	Freq	Chatt	CIL	- (1958)	859
PtC ₁₂ H ₃₁ NO ₂ P ₂	Platinum (II)-hydride, nitrite, triethylphosphine complex	2000-2250	Sol	Freq	Chatt	CIL	- (1958)	859
PtC ₁₂ H ₃₁ NO ₂ P ₂	Platinum (II)-hydride, nitrate, triethylphosphine	2000-2250	Sol	Freq	Chatt	CIL	- (1958)	859
PtC ₁₂ H ₃₂ P ₂	cis-Platinum-n-propyl, trimethylphosphine complex	400-4000	S, Sol	Freq	Adams	JCS	- (1960)	2047
PtC ₁₅ H ₁₆ Cl ₃ O ₂ K	Platinum (II)-chloride, 2-phenyl-5-methyl-2,5-dihydroxyhexyne-3 complex (potassium salt)	2000-4000	S, Sol	Struct, Assign	Chatt	N	184 (1959)	526

PtC ₁₃ H ₂₃ Cl ₂ NS	trans-Platinum (II)-chloride, di-n-propyl sulfide, p-toluidine complex	-	3000-3500 3000-3400	Sol S,Sol Sol	Freq, H bond	Chatt	JCS	(1955)	4461	
					H bond, Spec		Chatt	JCS	(1956)	2712
					H bond		Chatt	JINC	8 (1958)	67
PtC ₁₃ H ₂₃ Cl ₂ NSe	trans-Platinum (II)-chloride, di-n-propylselenide, p-toluidine complex	-	3000-3500	Sol Sol	H bond, Freq	Chatt	JCS	(1955)	4461	
					H bond		Chatt	JCS	(1956)	2712
PtC ₁₃ H ₂₃ Cl ₂ N ^{VI} e	trans-Platinum (II)-chloride, di-n-propyl telluride p-toluidine complex	-		Sol	Freq, H bond	Chatt	JCS	(1955)	4461	
PtC ₁₃ H ₂₄ Cl ₂ NO ₃ P	trans-Platinum (II)-chloride, triethoxyphosphine, p-toluidine complex	-		Sol	Freq, H bond	Chatt	JCS	(1955)	4461	
PtC ₁₃ H ₂₄ Cl ₂ NP	trans-Platinum (II)-chloride, triethylphosphine, p-toluidine complex	-	3000-3500	Sol Sol	Freq, H bond	Chatt	JCS	(1955)	4461	
					H bond, Config.		Chatt	JCS	(1956)	2712
PtC ₁₃ H ₂₅ Cl ₂ NO ₂	trans-Platinum (II)-chloride, 2,4-dimethyl-2,4-dihydroxy-hexyne-3, piperidine complex	2000-4000		S,Sol	Assign, Struct	Chatt	N	184 (1959)	526	
PtC ₁₃ H ₃₁ NP ₂	Platinum (II)-cyanide, hydride, triethylphosphine complex	2000-2250		Sol	Freq	Chatt	CIL	(1958)	859	

PtC ₁₃ H ₃₁ NP ₂ S	Platinum (II)- hydride thio- cyanate, triethyl- phosphine complex	2000-2250	Sol	Freq	Chatt	CIL - (1958)	859
PtC ₁₃ H ₃₁ NSAs ₂	Platinum (II)- hydride triethyl- arsine, thiocyanate complex	2100-2200	Sol	Freq	Chatt	CIL - (1958)	859
PtC ₁₃ H ₃₂ Cl ₂ NP	trans-Platinum (II)- chloride, diethyl- amine, tri-n- propylphosphine complex	- 3000-3500 3100-3300	Sol Sol Sol	Freq H bond, Spec H bond	Chatt Chatt Chatt	JCS - (1955) JCS - (1956) JINC 8 (1958)	4461 2712 67
PtC ₁₃ H ₃₃ BrP ₂	trans-Platinum- bromide, methyl, triethylphosphine complex	400-4000	S,Sol	Band freq	Adams	JCS - (1960)	2047
PtC ₁₃ H ₃₃ ClP ₂	cis-Platinum- chloride, methyl, triethylphosphine complex	400-4000	S,Sol	Band freq	Adams	JCS - (1960)	2047
PtC ₁₃ H ₃₃ ClP ₂	trans-Platinum- chloride, methyl, triethylphosphine complex	400-4000	S,Sol	Band freq	Adams	JCS - (1960)	2047
PtC ₁₃ H ₃₃ IP ₂	trans-Platinum- iodide methyl, triethylphosphine complex	400-4000	S,Sol	Band freq	Adams	JCS - (1960)	2047

PtC ₁₄ H ₃₅ NP ₂	trans-Platinum cyanide, methyl triethylphosphine complex	400-4000	S,Sol	Freq	Adams	JCS - (1960)	2047
PtC ₁₄ H ₃₃ NP ₂ S	trans-Platinum (I)-methyl thiocyanate, triethylphosphine complex	400-4000	S,Sol	Band freq	Adams	JCS - (1960)	2047
PtC ₁₄ H ₃₅ ClP ₂	trans-Platinum-chloride, ethyl, triethylphosphine complex	400-4000	S,Sol	Band freq	Adams	JCS - (1960)	2047
PtC ₁₄ H ₃₅ IP ₂	trans-Platinum-iodide, ethyl, triethylphosphine complex	400-4000	S,Sol	Band freq	Adams	JCS - (1960)	2047
PtC ₁₄ H ₃₆ P ₂	cis-Platinum (0)-methyl, triethylphosphine complex	400-4000	S,Sol	Band freq	Adams	JCS - (1960)	2047
PtC ₁₅ H ₂₆ Cl ₂ N ₂	trans-Platinum (II)-chloride, 4-n-pentylpyridine, piperidine complex	- 3000-3500	Sol Sol	Freq, I H bond	Chatt Chatt	JCS - (1955) JCS - (1956)	4461 2712
PtC ₁₅ H ₂₇ Br ₂ NS	trans-Platinum (II)-bromide, di-n-butyl hydrogen sulfide, p-methylaniline complex	3000-3500	Sol	Association Const.	Chatt	JCS - (1956)	2712

$\text{PtCl}_2\text{H}_2\text{Cl}_2\text{NS}$ 15 27	trans-Platinum (II)-chloride, di-n-butyl hydrogen sulfide, p-methylaniline complex	3000-3500	Sol	H bond	Chatt	JCS - (1956)	2712
$\text{PtCl}_2\text{H}_2\text{Cl}_2\text{NS}$	trans-Platinum (II)-chloride, di-n-butyl sulfide, p-toluicaine complex	-	Sol	Freq, H bond	Chatt	JCS - (1955)	4461
$\text{PtCl}_2\text{H}_2\text{Cl}_2\text{N}_2\text{O}_2\text{P}$	trans-Platinum (II)-chloride, p-nitroaniline, tri-n-propyl- phosphine complex	3000-3500	Sol	Freq, H bond H bond	Chatt Chatt	JCS - (1955) JCS - (1956)	4461 2712
$\text{PtCl}_3\text{H}_2\text{Cl}_2\text{NP}$ 15 27	trans-Platinum (II)- chloride, p-chloro- aniline tri-n- propylphosphine complex	3000-3500	Sol	Freq, H bond H bond	Chatt Chatt	JCS - (1955) JCS - (1956)	4461 2712
$\text{PtCl}_2\text{H}_2\text{Cl}_2\text{NP}$ 15 28	trans-Platinum (II)- chloride, aniline, tri-n-propyl- phosphine complex	-	Sol	Freq, H bond	Chatt	JCS - (1955)	4461
$\text{PtCl}_2\text{H}_2\text{Cl}_2\text{NO}_2$ 15 29	Platinum (II)- chloride, piperi- dine, 2,5-dimethoxy- 2,5-dimethylhexyne- 3 complex	2000-4000	Sol, S	Struct, Assign	Chatt	N 184 (1959)	526
$\text{PtCl}_2\text{H}_2\text{Cl}_2\text{P}_2$ 15 37	Platinum-chloride, n-propyl, triethyl- phosphine complex	400-4000	Sol, S	Band freq	Adams	JCS - (1960)	2047

$\text{PtCl}_{16}\text{H}_{29}\text{Cl}_2\text{NS}$	trans-Platinum (II)-chloride, 2,6-dimethyl- aniline, di- <i>n</i> - butyl sulfide complex	-	Sol	Freq, H bond	Chatt	JCS - (1955)	4461
$\text{PtCl}_{16}\text{H}_3\text{Br}_2\text{NP}$	trans-Platinum (II)-bromide, p-methylaniline tri- <i>n</i> -propyl- phosphine complex	3000-3500	Sol	H bond	Chatt	JCS - (1956)	2712
$\text{PtCl}_{16}\text{H}_3\text{Cl}_2\text{NOP}$	trans-Platinum (II)-chloride, p-anisidine, tripropylphosphine complex	-	Sol	Freq, H bond	Chatt	JCS - (1955)	4461
$\text{PtCl}_{16}\text{H}_3\text{Cl}_2\text{NP}$	trans-Platinum (II)-chloride, benzylamine, tri- <i>n</i> -propylphosphine complex	3000-3500	Sol Sol	Freq, H bond H bond	Chatt Chatt	JCS - (1955) JCS - (1956)	4461 2712
$\text{PtCl}_{16}\text{H}_3\text{Cl}_2\text{NP}$	trans-Platinum (II)-chloride, N-methylaniline tri- <i>n</i> -propyl- phosphine complex	- 3000-3500 3100-3300	Sol Sol Sol	Freq H bond H bond	Chatt Chatt Chatt	JCS - (1955) JCS - (1956) JINC 8 (1958)	4461 2712 67
$\text{PtCl}_{16}\text{H}_3\text{Cl}_2\text{NP}$	trans-Platinum (II)-chloride, tri- <i>n</i> -propyl- phosphine, p-toluidine complex	- 3000-3500	Sol S	Freq, H bond H bond, Spec	Chatt Chatt	JCS - (1955) JCS - (1956)	4461 2712

PtC ₁₈ H ₂₇ Cl ₂ NO ₂	2000-4000	S, Sol	Struct, Assign	Chart	N	184 (1959)	526
Platinum (II)-chloride, 2,5-dihydroxy-2-phenyl-5-methyl-hexyne-3, piperidine complex	3100-3400	Sol	Freq, Iso., H bond	Duncanson	JCS	- (1960)	3841
PtC ₁₈ H ₃₃ Cl ₂ INP							
trans-Platinum (II)-chloride, o-iodo-aniline n-tributylphosphine complex	1300-1500	Sol	Bonding	Gatehouse	JINC	8 (1958)	79
PtC ₁₈ H ₄₂ N ₂ O ₄ As ₂							
cis-Platinum (II)-nitrite tri-n-propylarsine complex	2183	Sol	Freq	Chatt	CIL	- (1958)	859
PtC ₁₈ H ₄₃ ClP ₂							
Platinum-chloride, hydride tri-n-propylphosphine complex	2000-4000	S, Sol	Assign, Struct	Chatt	N	184 (1959)	526
PtC ₁₉ H ₂₉ Cl ₂ NO							
trans-Platinum (II)-chloride, 2,2-dimethyl-5-hydroxy-5-phenyl hexyne-3, piperidine complex	3000-3500	Sol	H bond	Chatt	JCS	- (1956)	2712
PtC ₁₉ H ₃₆ Cl ₂ NP							
trans-Platinum (II)-chloride, tri-n-butylphosphine, p-toluidine complex	3100-3500	Sol	H bond	Chatt	JINC	8 (1958)	67
PtC ₁₉ H ₃₆ Cl ₂ NP							
trans-Platinum (II)-chloride, di-n-butylphosphine, o-toluidine complex							

$\text{PtCl}_{19}\text{H}_3\text{Cl}_2\text{NP}$	trans-Platinum (II)-chloride, tri-t-butylphosphine o-toluidine complex	3100-3400	Sol	Freq, H bond, Iso.	Duncanson	JCS - (1960)	3841
$\text{PtCl}_{19}\text{H}_3\text{Cl}_2\text{NP}$	trans-Platinum (II)-chloride, tri-n-butylphosphine, p-toluidine complex	- 3000-3500	Sol Sol	Freq, H bond H bond	Chatt Chatt	JCS - (1955) JCS - (1956)	4461 2712
$\text{PtCl}_{20}\text{H}_3\text{Cl}_2\text{N}$	trans-Platinum (II)-chloride, 4-n-phenylpyridine complex	3000-3500	Sol	H bond	Chatt	JCS - (1956)	2712
$\text{PtCl}_{20}\text{H}_3\text{N}_2\text{O}_4$	cis-Platinum (II)-nitrite-4-n-phenylpyridine complex	1300-1500 800-1500	Sol Sol	Bonding Freq, Struct	Gatehouse Chatt	JINC 8 (1958) JCS - (1959)	79 4073
$\text{PtCl}_{20}\text{H}_3\text{N}_2\text{O}_4$	trans-Platinum (II)-nitrite, 4-n-phenylpyridine complex	1300-1500 800-1500	Sol Sol	Bonding Freq, Struct	Gatehouse Chatt	JINC 8 (1958) JCS - (1959)	79 4073
$\text{PtCl}_{20}\text{H}_3\text{ClP}_2$	Platinum (II)-diethylphenylphosphine, hydride complex chloride	2100-2200	Sol	Assign	Chatt	CIL - (1958)	859
$\text{PtCl}_{20}\text{H}_3\text{IP}_2$	Platinum (II)-diethylphenylphosphine, hydride complex iodide	2100-2200	Sol	Assign	Chatt	CIL - (1958)	859
$\text{PtCl}_{21}\text{H}_3\text{Cl}_2\text{NP}$	trans-Platinum (II)-chloride, p-phenylaniline tri-n-propylphosphine complex	- 3000-3500	Sol Sol	Freq, H bond H bond	Chatt Chatt	JCS - (1955) JCS - (1956)	4461 2712

PtCl_2N_2	trans-Platinum (II)-chloride, 2,6-dimethylaniline, 4-n-nonylpyridine complex	-	Sol	Preq, H bond	Chatt	JCS - (1955)	4461
$\text{PtCl}_2\text{N}_2\text{P}_2$	cis-Platinum (II)-nitrite, tri-n-butylphosphine complex	1300-1500 800-1500	Sol Sol	Bonding Preq, Struct	Gatehouse Chatt	JINC 8 (1958) JCS - (1959)	79 4073
$\text{PtCl}_2\text{N}_2\text{O}_2\text{P}_2$	trans-Platinum (II)-nitrite, tri-n-butylphosphine complex	1300-1500 800-1500	Sol Sol	Bonding Preq, Struct	Gatehouse Chatt	JINC 8 (1958) JCS - (1959)	79 4073
$\text{PtCl}_2\text{N}_2\text{O}_2\text{As}_2$	cis-Platinum (II)-nitrite, tri-n-butylarsine complex	800-1500	Sol	Preq	Chatt	JCS - (1959)	4073
$\text{PtCl}_2\text{N}_2\text{O}_2\text{As}_2$	trans-Platinum (II)-nitrite, tri-n-butylarsine complex	1300-1500 800-1500	Sol Sol	Bonding Preq, Struct	Gatehouse Chatt	JINC 8 (1958) JCS - (1959)	79 4073
$\text{PtHClN}_3\text{O}_2$	cis-Platinum (II)-ammonia, chloride, nitrite complex	500-550	S	Preq	Powell	JCS - (1956)	4495
$\text{PtH}_6\text{Cl}_2\text{N}_2$	cis-Platinum (II)-ammonia, chloride complex	- 3000-3500 500-3300 2-15 μ	S S S S	Freq, Struct H bond Preq Preq	Curran Chatt Powell Mizushima	AC 26 (1954) JCS - (1956) JCS - (1956) SA 13 (1958)	429A 2712 4495 31
$\text{PtH}_6\text{Cl}_2\text{N}_2$	trans-Platinum (II)-ammonia, chloride complex	- 300-4000 3000-3500	S S S	Freq, Struct Spec, Assign H bond	Curran Barrow Chatt	AC 26 (1954) JINC 2 (1956) JCS - (1956)	429A 340 2712

$\text{PtH}_6\text{Cl}_3\text{N}_2\text{S}$	500-3300	S	Assign, Freq	Powell	JCS	-	(1956)	3108
	500-3300	S	Freq	Powell	JCS	-	(1956)	4495
	650-1650	S	Freq	Svatos	JACS	79	(1957)	3313
	-	Sol	Freq, Struct, Config.	Irving	JCS	-	(1958)	2283
$\text{PtH}_6\text{Cl}_4\text{N}$	2-15 μ	S	Assign, Freq	Mizushima	SA	13	(1958)	31
	-	-	Electronegativity	Wilmshurst	CJC	38	(1960)	467
$\text{PtH}_6\text{Cl}_4\text{N}_2\text{S}$	300-4000	S	Spec, Assign	Barrow	JINC	2	(1956)	340
	-	S	Freq	Powell	JCS	-	(1956)	4495
$\text{PtH}_6\text{N}_6\text{O}_6$	700-4000	S	Assign	Gatehouse	JCS	-	(1957)	4222
	700-4000	S	Assign	Gatehouse	JINC	8	(1958)	75
$\text{PtH}_6\text{N}_6\text{O}_6$	700-4000	S	Assign	Gatehouse	JCS	-	(1957)	4222
	700-4000	S	Assign	Gatehouse	JINC	8	(1958)	75
$\text{PtH}_8\text{Pr}_6\text{N}_2$	-	S	Freq	Cox	JCS	-	(1954)	1798
	-	-	Freq	Cox	JCS	-	(1954)	1798
$\text{PtH}_{12}\text{Cl}_2\text{N}_4$	500-3550	S	Freq	Curran	AC	26	(1954)	429
	650-1650	S	Assign	Powell	JCS	-	(1956)	3108
	2-15 μ	S	Freq	Svatos	JACS	79	(1957)	3313
	-	S	Assign	Mizushima	SA	13	(1958)	31
$\text{PtH}_{15}\text{Cl}_4\text{N}_5$	-	-	Freq	Wilmshurst	CJC	38	(1960)	467
	-	-	Freq	Wilmshurst	CJC	38	(1960)	467

PtH ₁₅ Cl ₄ N ₅	Platinum (IV)- ammonia, chloride complex chloride	650-1650	S	Freq	Svatos	JACS	79 (1957)	3313
PtH ₁₅ Cl ₄ N ₆ O ₃ Co	Nitratopentammino cobalt (III) tetrachloro platinate (II)	700-4000	S	Assign	Gatehouse	JCS	- (1957)	4222
PtD ₆ Cl ₂ N ₂	trans-Platinum- ammonia chloride, complex-d ₆	300-4000	S	Spec, Assign	Barrow	JINC	2 (1956)	340
PtD ₆ Cl ₃ N ₅ S	Platinum(II)-ammonia, chloride complex chlorine monosulphide-d ₆	300-400	S	Spec, Assign	Barrow	JINC	2 (1956)	340
PtCl ₄	Platinous tetra- chloride ion	-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432
PtCl ₅ NOK ₂	Platinum (III)- chloride, nitric oxide complex (potassium salt)	1700-2050	S	Freq	Lewis	JINC	7 (1958)	32
PtF ₄	Platinum tetra- fluoride	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
PtF ₆	Platinum hexa- fluoride	2500-40000	G	Assign	Moffitt	MP	2 (1959)	109
		-	-	Jahn-Teller effect	Weinstock	JCP	31 (1959)	262
		6-50 μ	S	Spec, Thermo.	Weinstock	JCP	32 (1960)	181
PtN ₆ O ₈	Platinum (II)- nitrite complex anion	400-5000	S	NCA, Spec, Freq, Assign, Struct	Kakamoto	JACS	80 (1958)	4817
PtN ₆ O ₁₂ K ₂	Platinum (II)- nitrite complex (potassium salt)	-	-	Struct	Puget	CPR	250 (1960)	4141

$\text{Pt}_2\text{C}_4\text{H}_8\text{Cl}_4$	Platinum (II)-chloride, ethylene complex	700-3500 700-3100	S S	Freq, I Assign	Chatt Powell	JCS SA	- 13	(1953) (1958)	2939 69
$\text{Pt}_2\text{C}_6\text{H}_{12}\text{Cl}_4$	Platinum (II)-chloride, propylene complex	700-3500	S	Freq, I	Chatt	JCS	-	(1953)	2939
$\text{Pt}_2\text{C}_6\text{H}_{12}\text{Cl}_6\text{K}$ H_2O	Potassium propylene trichloroplatinate monohydrate	700-3500	S	Freq, I	Chatt	JCS	-	(1953)	2939
$\text{Pt}_2\text{C}_8\text{H}_{18}\text{Cl}_4\text{N}_4$	Platinum (II)-chloride, dimethylpiperazine, ethylene complex	500-1500	S	Spec, Struct	Hendra	JCS	-	(1960)	5105
$\text{Pt}_2\text{H}_{12}\text{Cl}_4\text{N}_4$	Tetrammine platinum (II) tetrachloroplatinate (II)	300-4000	S	Spec, Assign	Barrows	JINC	2	(1956)	340
<u>Pu COMPOUNDS</u>									
$\text{Pu}_6\text{C}_9\text{H}_8\text{O}_8\text{Na}$	Sodium plutonyl acetate	3100-3000	S	Freq assign, FC	Jones	JCP	23	(1955)	2105
$\text{PuCl}_2\text{O}_{10}$	Plutonyl perchlorate	800-1060	Sol	Spec, FC	Jones	JCP	21	(1953)	542
PuF_6	Plutonium hexafluoride	2-23 μ 2-38 μ - -	G G G -	Freq, Assign, Thermo. Spec, Assign Spec Jahn-Teller effect	Hawkins Malm Weinstock Weinstock	JCP JCP JINC JCP	23 23 2 31	(1955) (1955) (1956) (1959)	2191 2192 380 262
PuO_2	Plutonyl ion	- - -	- - -	Anal Freq Spec	Betts Kasha Green	JCP JCP JCP	16 17 20	(1948) (1949) (1952)	1089 349 1818

RaH	Radium hydride	-	-	FC	Shelene	JCP	18 (1950)	927
<u>Rb</u>	<u>COMPOUNDS</u>							
RbCNO	Rubidium isocyanate	400-4000	S	Spec	Waddington	JCS	- (1959)	2499
RbH	Rubidium hydride	-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	FC	Platt	JCP	18 (1950)	932
		-	-	FC	Shelene	JCP	18 (1950)	927
		-	-	FC	Baughan	TFS	53 (1957)	1046
RbHO	Rubidium hydroxide	6-33 μ	G	Absorption	Spinar	SA	12 (1958)	244
RbBr	Rubidium bromide	-	-	Christianson filter	Barnes	PR	49 (1936)	732
		-	-	Freq	Huggins	JCP	5 (1937)	143
		-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	Polarizability	Szigeti	TFS	45 (1949)	155
		-	-	Freq	Roberts	PR	77 (1950)	258
		-	-	Freq	Szigeti	PRS	204 (1950)	51
		-	-	Freq	Rittner	JCP	19 (1951)	1030
		-	-	FC	Baughan	TFS	53 (1957)	1046
		-	-	Freq	Rice	JCP	27 (1957)	573
RbCl	Rubidium chloride	-	-	Christianson filter	Barnes	PR	49 (1936)	732
		-	-	Freq	Huggins	JCP	5 (1937)	143
		-	-	FC	Gordy	JCP	14 (1946)	305
		-	-	Polarizability theory	Szigeti	TFS	45 (1949)	155
		-	S	Freq	Roberts	PR	77 (1950)	258
		-	-	Freq	Szigeti	PRS	204 (1950)	51
		-	-	Freq	Rittner	JCP	19 (1951)	1030
		-	-	Pressed disk	Ford	JSI	31 (1954)	338
		-	G	Freq	Rice	JCP	27 (1957)	573
RbF	Rubidium fluoride	-	-	Freq	Huggins	JCP	5 (1937)	143
		-	S	Freq	Roberts	PR	77 (1950)	258

Rb ₃ Fe ₃ S ₃	-	-	-	Freq	Rittner	JCP	19 (1951)	1030
Rubidium fluoro-sulfate	550-2400	S		Assign, Spec	Sharp	JCS	- (1957)	3761
Rubidium iodide	-	-		Christianson filter	Barnes	FR	49 (1936)	732
-	-	-		Freq	Huggins	JCP	5 (1937)	143
-	-	S		Growing oriented crystal section	West	JOSA	35 (1945)	26
-	-	-		FC	Gordy	JCP	14 (1946)	305
-	-	-		Polarizability theory	Szigeti	TFS	45 (1949)	155
-	-	S		Freq	Roberts	PR	77 (1950)	258
-	-	-		Freq	Szigeti	PKS	204 (1950)	51
-	-	-		Freq	Rittner	JCP	19 (1951)	1030
-	-	S		Crystal study	Smakula	JOSA	43 (1953)	822
-	-	-		FC	Baughan	TFS	53 (1957)	1046
-	-	-		Freq	Rice	JCP	27 (1957)	573
Rubidium (I)-iodate	-	S		Spec, Struct	Dasent	JCS	- (1960)	2429
Rubidium periodate	-	-		Freq, Struct	Siebert	ZAUA	303 (1960)	162
Rubidium nitrate	2-15 μ	S		Assign	Greenberg	JCP	33 (1960)	900
Rubidium azide	635-3100	S		Freq, FC	Gray	TFS	53 (1957)	901
Rubidium chrome alum	22-310 μ	S		Reflection and transmission	Weniger	JOSA	7 (1923)	517
Rubidium potassium	-	S		Freq, Assign, Spec	Kraus	JCP	9 (1941)	133
Rubidium	0.86-1.03 μ	S		Freq	Clark	TFS	33 (1937)	1390
Rubidium	-	-		Spec	Meggers	JRNB	10 (1933)	669
-	-	-		Freq	Rosen	PR	43 (1933)	5
-	-	-		Freq	Clark	TFS	33 (1937)	1394
-	-	-		Freq	Clark	TFS	33 (1937)	1398
-	-	-		FC	Gordy	JCP	14 (1946)	305
-	-	-		FC	Baughan	TFS	53 (1957)	1046

$\text{Re}_2\text{H}_2\text{O}_6\text{P}_2 \cdot x\text{H}_2\text{O}$	845-3460	S	I. Group freq	Corbridge	JCS - (1954)	4555
Dirubidium dihydrogen hypophosphate polyhydrate						
$\text{Re}_2\text{H}_6\text{N}_4\text{C}_4\text{P}_4$	790-3000	S	I. Group freq	Corbridge	JCS - (1954)	4555
Dirubidium tetraphosphonitrate						
ReC_5IO_5	2-15 μ	S	Spec	Brimm	JACS 76 (1954)	3831
Rhenium carbonyl-iodide						
$\text{ReC}_8\text{N}_8\text{K}_3$	-	S	Spec	Cotton	N 182 (1958)	393
Rhenium (V)-cyanide complex (potassium salt)						
$\text{ReC}_{10}\text{H}_{11}$	-	S	Spec, Struct	Fritz	ZN 15 (1960)	419
Cyclopentadienyl rhenium hydride						
$\text{ReC}_{13}\text{H}_8\text{IN}_2\text{O}_3$	1700-2200	-	Struct	Abel	JCS - (1959)	1501
Rhenium carbon-monoxide 2,2'-dipyridine, iodide complex						
$\text{ReC}_{13}\text{H}_{10}\text{ClIN}_2\text{O}_3$	1700-2200	-	Struct	Abel	JCS - (1959)	1501
Rhenium carbon-monoxide chloride, pyridine complex						
$\text{ReC}_{13}\text{H}_{10}\text{IN}_2\text{O}_3$	1700-2200	-	Struct	Abel	JCS - (1959)	1501
Rhenium, carbon-monoxide, iodide, pyridine complex						
$\text{ReC}_{39}\text{H}_{30}\text{ClO}_3\text{P}_2$	1700-2200	-	Struct	Abel	JCS - (1959)	1501
Rhenium-carbon-monoxide, chloride, triphenylphosphine complex						

Re. COMPOUNDS

$\text{ReC}_{39}\text{H}_{30}\text{ClO}_4\text{As}_2$	Rhenium-carbon-monoxide, chloride, triphenylarsine complex	1700-2200	-	Struct	Abel	JCS	-	(1959)	1501
$\text{ReC}_{39}\text{H}_{30}\text{IO}_3\text{P}_2$	Rhenium-carbon-monoxide, iodide triphenylphosphine complex	1700-2200	-	Struct	Abel	JCS	-	(1959)	1501
$\text{ReC}_{39}\text{H}_{30}\text{IO}_3\text{As}_2$	Rhenium-carbon-monoxide, iodide, triphenylarsine complex	1700-2200	-	Struct	Abel	JCS	-	(1959)	1501
ReHO_4	Perrhenic acid	700-1400	Sol	Freq, Assign, Struct	Claasen	JCP	22	(1954)	707
ReBrO_3	Rhenium trioxy-bromide	150-3000	Sol,L	Assign	Miller	SA	16	(1960)	1148
ReClO_3	Rhenium trioxy-chloride	150-3000	Sol,L	Assign, Thermo.	Miller	SA	16	(1960)	1148
ReFO_3	Perrhenyl fluoride	21400-28500Mc 21400-28500Mc	G G	Spec Spec, Mol. Const., Struct	Lotspeich Lotspiech	DA JCP	19 31	(1958) (1959)	340 633
ReF_4	Rhenium tetrafluoride	-	S	Freq, Struct	Peacock	JCS	-	(1959)	2762
ReF_6	Rhenium hexafluoride	400-5000	G	Spec, Assign, Thermo. FC	Gaunt	TFS	50	(1954)	209
		-	-	Freq	Gaunt	TFS	50	(1954)	546
		-	-	Freq cal.	Matraw	JCP	23	(1955)	985
		2500-40000	G	Assign	Califano	AAN	25	(1958)	284
		-	-	Jahn-Teller effect	Moffitt	MP	2	(1959)	109
		-	-		Weinstock	JCP	31	(1959)	1959
ReF_7	Rhenium (VI)-complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	-	(1959)	2762

ReO ₄	Perrhenate ion	-	Struct, Freq	Woodward	TFS	52 (1956)	615
ReO ₄ K	Potassium perrhenate	290-650 1000	S Assign Freq	Duval Barracrough	CPR JCS	239 (1954) - (1959)	249 3552
ReO ₄ Na	Sodium perrhenate	700-1400	Sol Freq, Assign, Struct	Claasen	JCP	22 (1954)	707
Re ₂ O ₁₀	Rhenium carbon-monoxide complex	450-3000	S, Sol, G Spec, Struct	Cotton	JINC	2 (1956)	141
<u>Rh COMPOUNDS</u>							
Rh ₄ Cl ₂ O ₈ K ₃ · H ₂ O	cis-Rhodium (III)-chloride, oxalate complex (potassium salt) monohydrate	-	Iso.	Collman	JACS	80 (1958)	2054
Rh ₆ H ₆ Cl ₃ N ₆	Rhodium (III)-ethylenediamine complex chloride	450-1750	S Spec, Config.	Powell	JCS	- (1959)	791
Rh ₆ N ₆	Rhodium (III)-hexacyanide complex ion	250-2200	S Spec, Assign	Hidalgo	ARS	56 (1960)	9
Rh ₆ N ₆ K ₃	Rhodium (III)-cyanide, complex (potassium salt)	250-2200	- Assign	Hidalgo	CPR	249 (1959)	233
Rh ₆ N ₆ S ₆ K ₃	Rhodium (III)-thiocyanate complex (potassium salt)	-	S Freq assign	Mitchell	JCS	- (1960)	1912
Rh ₈ H ₁₅ Cl ₂ N ₄ O ₄	Rhodium (III)-chloride, dimethylglyoxime complex (hydrogen salt)	-	- Freq, Iso.	Collman	JACS	80 (1958)	2054

$\text{RhC}_{15}\text{H}_{15}\text{Cl}_3\text{N}_3$	Rhodium (III)-chloride, pyridine complex	-	-	Iso.	Collman	JACS	80 (1958)	2045	
$\text{RhC}_{25}\text{H}_{25}\text{Cl}_3\text{N}_5$	Rhodium (III)-chloride, pyridine complex chloride	-	-	Iso.	Collman	JACS	80 (1958)	2054	
$\text{RhH}_{12}\text{N}_9\text{O}_2$	Rhodium (III)-Nitrite complex (ammonium salt)	-	-	Struct	Puget	CPR	250 (1960)	4141	
RhF_4	Rhodium (IV)-tetrafluoride	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762	
<u>Ru COMPOUNDS</u>									
$\text{RuC}_5\text{N}_6\text{CK}_2$	Ruthenium (III)-cyanide, nitric oxide complex (potassium salt)	1700-2050	S	Freq	Lewis	JINC	7 (1958)	32	
$\text{RuC}_6\text{N}_6\text{K}_4$	Ruthenium (II)-cyanide, complex (potassium salt)	15-25 μ	S, Sol	Spec	Bonino	AAN	23 (1958)	191	
		2-5 μ	S	Spec	Bonino	AAN	25 (1958)	401	
		250-2200	-	Assign	Hidalgo	CPR	249 (1959)	233	
$\text{RuC}_6\text{N}_6\text{K}_4 \cdot 3\text{H}_2\text{O}$	Ruthenium (II)-cyanide complex (potassium salt) trihydrate	15-25 μ	S, Sol	Spec	Bonino	AAN	23 (1958)	191	
$\text{RuC}_9\text{H}_{18}\text{N}_3\text{S}_6$	Nitrosyl derivative of Ruthenium (II) dimethylidithio carbamate	1700-2050	S	Struct	Lewis	JINC	7 (1958)	32	

$RuCl_3 \cdot 3H_2O$	$RuCl_3 \cdot 2H_2O$	$RuCl_3 \cdot H_2O$	$RuCl_3$	$RuCl_3 \cdot 2H_2O$	$RuCl_3 \cdot H_2O$	$RuCl_3 \cdot 3H_2O$	$RuCl_3 \cdot 2H_2O$	$RuCl_3 \cdot H_2O$	$RuCl_3$	$RuCl_3 \cdot 2H_2O$	$RuCl_3 \cdot H_2O$	$RuCl_3 \cdot 3H_2O$
Ruthenium-cyclopentadiene complex	Ruthenium (III)-nitric oxide, 1:10-phenanthroline complex chloride	Ruthenium hydride	Ruthenium (III)-hydroxide, nitric oxide, nitrite complex (potassium salt)	Ruthenium (III)-hydroxide, nitric oxide complex	Ruthenium (III)-ammonia, bromide, nitric oxide complex	Ruthenium (III)-ammonia, chloride, nitric oxide complex	Ruthenium (III)-ammonia, hydroxide, nitric oxide complex chloride	Ruthenium (III)-chloride, nitric oxide complex trihydrate	Wilkinson Lippincott Lippincott	JACS JCP SA	74 (1952) 21 (1953) 10 (1958)	6146 1307 307
$RuCl_3 \cdot 3H_2O$	$RuCl_3 \cdot 2H_2O$	$RuCl_3 \cdot H_2O$	$RuCl_3$	$RuCl_3 \cdot 2H_2O$	$RuCl_3 \cdot H_2O$	$RuCl_3 \cdot 3H_2O$	$RuCl_3 \cdot 2H_2O$	$RuCl_3 \cdot H_2O$	Lewis	JINC	7 (1958)	32
									Platt	JCP	18 (1950)	932
									Lewis	JINC	7 (1958)	32
									Lewis	JINC	7 (1958)	32
									Lewis	JINC	7 (1958)	32
									Lewis	JINC	7 (1958)	32
									Lewis	JINC	7 (1958)	32
									Lewis	JINC	7 (1958)	32

$\text{RuCl}_5\text{NOCl}_2$	Ruthenium (III)-chloride, nitric oxide complex (potassium salt)	1700-2050	S	Freq	Lewis	JINC	7 (1958)	32	
$\text{RuCl}_5\text{NONa}_2\cdot\text{H}_2\text{O}$	Ruthenium (III)-chloride, nitric oxide complex (sodium salt) monohydrate	1700-2050	S	Freq	Lewis	JINC	7 (1958)	32	
$\text{RuCl}_5\text{NOCs}_2$	Ruthenium (III)-chloride, nitric oxide complex (cesium salt)	1700-2050	S	Freq	Lewis	JINC	7 (1958)	32	
RuF_4	Ruthenium (IV)-tetrafluoride	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762	
RuF_4	Ruthenium (III)-complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762	
RuI_5NOK_2	Ruthenium (III)-iodide, nitric oxide complex (potassium salt)	1700-2050	S	Freq	Lewis	JINC	7 (1958)	32	
<u>Sb COMPOUNDS</u>									
$\text{SbC}_3\text{H}_6\text{I}_2$	Propenyl antimony iodide	800-1700	-	Spec, Config.	Nesmeyanov	TEL	8 (1960)	23	
SbC_3H_9	Trimethyl stibine	-	-	FC	Gordy	JCP	14 (1946)	305	
		-	-	FC	Sheline	JCP	18 (1950)	602	
		-	-	Freq	Weston	JACS	76 (1954)	2645	

	1200	-	Freq	Sheppard	TFS	51 (1955)	1465
$SbC_8H_{16}Cl_5O_{4/3}$ - Antimony trichloride- dioxane	150-5000	S	Thermo., Symmetry	Daasch	SA	15 (1959)	726
$SbC_4H_8Cl_3O_2$ Antimony trichloride dioxane	650-5000	S	Thermo., Symmetry	Daasch	SA	15 (1959)	726
$SbC_6H_6Cl_3$ Antimony trichloride benzene complex	650-10000	Sol	Spec	Daasch	JCP	28 (1958)	1005
$SbC_6H_7O_3$ Phenylstibonic acid	600-4000	S	Assign	Braunholtz	JCS	- (1959)	868
$SbC_6H_{12}Cl_3O_3$ Antimony trichloride dioxane	650-1000	S	Thermo., Symmetry	Daasch	SA	15 (1959)	726
SbC_9H_{15} Tripropenyl antimony	800-1700	-	Spec, Config.	Nesmeyanov	TEL	8 (1960)	23
$SbC_9H_{15}Br_2$ Tripropenyl antimony bromide	800-1700	-	Spec, Config.	Nesmeyanov	TEL	8 (1960)	23
$SbC_9H_{15}Cl_2$ Tripropenyl antimony chloride	800-1700	-	Spec, Config.	Nesmeyanov	TEL	8 (1960)	23
$SbC_{12}H_{20}Br$ Tetrapropenyl antimony bromide	800-1700	-	Spec, Config.	Nesmeyanov	TEL	8 (1960)	23
$SbC_{12}H_{24}Cl_3O_6$ Antimony trichloride- dioxane	650-5000	S	Thermo., Symmetry	Daasch	SA	15 (1959)	726
$SbC_{15}H_{25}$ Pentapropenyl antimony	800-1700	-	Spec, Config.	Nesmeyanov	TEL	8 (1960)	23
$SbC_{18}H_{15}$ Triphenyl stibine	1045 625-9000	Sol Sol	Freq Vibrations	Kross Margoshes	JACS SA	77 (1955) 7 (1955)	5858 14

$\text{SbC}_{18}\text{H}_{16}\text{Br}_4\text{N}_4$	Triphenyl ammonium tetrabromoantimonate	-	S	H bond, Freq	Nuttall	JCS	-	(1960)	4965
$\text{SbC}_{18}\text{H}_{16}\text{Cl}_4\text{N}_4$	Triphenyl ammonium tetrachloroantimonate	-	S	H bond, Freq	Nuttall	JCS	-	(1960)	4965
$\text{SbC}_{21}\text{H}_2\text{F}_6\text{N}_6$	Tri-p-tolyl ammonium hexafluoroantimonate	600-3400	S	Spec	Sharp	JCS	-	(1957)	4804
SbH	Antimony monohydride	-	-	FC	Sheline	JCP	18	(1950)	927
SbH_3	Sibene	5.3 μ	-	FC	Gordy	JCP	14	(1946)	305
		2-15 μ	G	Struct	Nielsen	JOSA	37	(1947)	296
		-	G	Spec	Smith	JCP	19	(1951)	384
		-	-	Struct	Nielsen	JCP	20	(1952)	759
		2-15 μ	-	Mol. Const.	Haynie	JCP	21	(1953)	1839
		-	G	Vibrations, Band study	Huggins	JACS	75	(1953)	4126
		-	G	Vibrations	Gamo	CPR	238	(1954)	2305
		-	-	Molecular interaction	Meal	JCP	24	(1956)	1126
$\text{Sb}^{121}\text{H}_3$	Sibene-(isotopic)	-	-	Microwave	Jache	PR	97	(1955)	680
$\text{Sb}^{123}\text{H}_3$	Sibene-(isotopic)	-	-	Microwave	Jache	PR	97	(1955)	680
SbD_3	Sibere-d ₃	2-15 μ	G	Spec, Mol. Const.	Haynie	JCP	21	(1953)	1839
$\text{Sb}^{121}\text{D}_3$	Sibene-d ₃ (isotopic)	-	-	Microwave	Jache	PR	97	(1955)	680
$\text{Sb}^{123}\text{D}_3$	Sibene-d ₃ (isotopic)	-	-	Microwave	Jache	PR	97	(1955)	680
SbBr_3	Antimony tribromide	550-850	S	Assign, FC	Davies	JMS	2	(1958)	253
SbCl_5NO	Nitrosyl antimony pentafluorochloride	-	-	Freq, Spec	Waddington	ZAUA	304	(1960)	185

SbCl ₃	Antimony trichloride	-	-	Freq FC	Howard Gordy	JCP	2 (1934)	630
		360	-	Freq	Hahn	JCP	14 (1946)	305
		85-550	S	Assign, FC	Davies	JCF	24 (1956)	921
		700-1900	G	Assign, I, Thermo.	Wilmshurst	JMS	2 (1958)	253
						JMS	5 (1960)	343
SbCl ₄ NO	Nitrosyl antimony tetrachloride nitrosyl compound	-	-	Freq, Spec	Waddington	ZAUA	304 (1960)	185
SbCl ₅	Antimony pentachloride	1.5-16/ μ	L	Spec, Dispersion	Marvin	PR	34 (1912)	161
		190-420	G	Assign, Thermo., I	Wilmshurst	JMS	5 (1960)	343
SbF ₅	Antimony pentafluoride	2-25/ μ	G	Spec	Akers	PR	95 (1954)	300
		200-1400	G	Freq, Thermo.	Gaunt	SA	10 (1958)	57
SbF ₅ K ₅	Potassium pentafluoro antimonite	-	-	Struct	Mellish	TFS	51 (1955)	1311
SbN	Antimony nitride	-	-	Freq	Clark	TFS	33 (1937)	1390
SbF ₆ NO ₂	Nitronium hexafluoroantimonate	2-16/ μ	S	Spec, Struct	Cook	JCP	33 (1960)	1669
SbO ₃ K	Potassium antimonate	400-4000	-	Spec, Assign, Struct	Siebert	ZAUA	301 (1959)	161
SbO ₃ K.2.2H ₂ O	Potassium antimonate 2.2 hydrate	400-4000	-	Spec, Struct, Assign	Siebert	ZAUA	301 (1959)	161
SbO ₃ Na	Sodium antimonate	400-4000	-	Spec, Struct, Assign	Siebert	ZAUA	301 (1959)	161
SbO ₄ K.1.7H ₂ O	Potassium peroxy antimonate 1.7 hydrate	400-4000	-	Constitution study	Siebert	ZAUA	301 (1959)	161
		-	-	Struct	Siebert	ZAUA	301 (1959)	316
SbO ₄ K.1.8H ₂ O	Potassium peroxy antimonate 1.8 hydrate	400-4000	-	Constitution study	Siebert	ZAUA	301 (1959)	161
		-	-	Struct	Siebert	ZAUA	301 (1959)	316

$SbO_4 Na \cdot 2H_2O$	Sodium peroxy antimonate dihydrate	400-4000	-	Constitution study Struct	Siebert Siebert	ZAUA ZAUA	301 (1959) 301 (1959)	161 316
SbP	Antimony phosphide	-	-	Freq	Clark	TFS	33 (1937)	1390
SbS ₄	Antimony tetrasulfide ion	-	-	FC	Pistorius	JCP	28 (1958)	514
SbAs	Antimony arsenide	-	-	Freq	Clark	TFS	33 (1937)	1390
$Sb_2C_6H_6Cl_6$	Antimony trichloride benzene complex	650-5000	S	Thermo.	Daasch	SA	15 (1959)	726
$Sb_2C_8H_{10}Cl_7N_3$	p-dimethylamino benzene diazonium chloride antimony trichloride	3-14 μ	S	Freq	Gremillion	JACS	81 (1959)	6134
$Sb_2C_{12}H_{14}O_6$	Phenylstibonic acid (dimer)	600-4000	S	Freq	Braunholtz	JCS	- (1959)	868
Sb_2O_3	Antimony trioxide	2-15 μ 2-15 μ 300-880	S S S	Spec Spec Spec	Miller Harkins Miller	AC AC SA	24 (1952) 31 (1959) 16 (1960)	1253 541 135
Sb_2O_5	Antimony pentoxide	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$Sb_3HO_{12}K \cdot 3.5H_2O$	Potassium triperoxy antimonate 3.5 hydrate	400-4000	-	Constitution study Struct	Siebert Siebert	ZAUA ZAUA	301 (1959) 301 (1959)	161 316
<u>Sc COMPOUNDS</u>								
$ScC_{15}H_{21}O_6$	Scandium acetylacetonate	-	Sol	Spec	Freed	JCP	8 (1940)	840

ScF ₄	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
Scandium (III)-fluoride complex ion							
ScN ₃ O ₉ ·4H ₂ O	700-1600	S	Freq, Assign	Ferraro	JMS	4 (1960)	99
Scandium nitrate tetrahydrate							
<u>Sm COMPOUNDS</u>							
SmF ₃	-	S	Spec	Freed	JCP	8 (1940)	840
Samarium fluoride							
SmN ₃ O ₉ ·6H ₂ O	700-1600	S	Absorption freq	Ferraro	JMS	4 (1960)	99
Samarium nitrate hexahydrate							
<u>Sn COMPOUNDS</u>							
SnCH ₃ I ₃	500-3500	Sol, S	Spec, Freq	Okawara	JACS	82 (1960)	3287
Methyl stannic iodide							
SnCH ₃ O	400-1500	S	Assign, Freq	Brown	SA	16 (1960)	595
Methyl tin oxide							
SnC ₂ H ₆ Br ₂	500-3500	S, Sol	Spec, Freq	Okawara	JACS	82 (1960)	3287
Dimethyl stannic bromide							
SnC ₂ H ₆ Cl ₂	500-3500	Sol	Spec	Okawara	JACS	82 (1960)	3287
Dimethyl stannic chloride							
SnC ₂ H ₆ I ₂	700-3000	S	Assign	Lippincott	JPC	57 (1953)	939
Dimethyl stannic iodide							
SnC ₂ H ₆ O	400-1500	S	Freq, Assign	Brown	SA	16 (1960)	595
Dimethyl tin oxide							
SnC ₂ H ₄ Br ₄ N ₄ O ₄	-	-	Spec	Bystrov	OS	9 (1960)	460
Tin (IV) tetrabromide complex with urea							

$\text{SnC}_2\text{H}_8\text{Cl}_4\text{N}_4\text{O}_2$	Tin (IV) tetra-chloride complex with urea	-	-	Spec	Bystrov	OS	9 (1960)	460
$\text{SnC}_2\text{H}_8\text{Br}_4\text{N}_4\text{S}$	Tin (IV) tetra-bromide complex with thiourea	-	-	Spec	Bystrov	OS	9 (1960)	460
$\text{SnC}_2\text{H}_8\text{Cl}_4\text{N}_4\text{S}$	Tin (IV) tetra-chloride complex with thiourea	-	-	Spec	Bystrov	OS	9 (1960)	460
$\text{SnC}_3\text{H}_7\text{ClO}_2$	Dimethylmono-carboxy stannic chloride	4-14 μ	S	Spec, Freq	Okawara	JACS	82 (1960)	3287
$\text{SnC}_3\text{H}_9\text{Br}$	Trimethyl stannic bromide	-	-	Ident	Pedley	TFS	53 (1957)	1612
$\text{SnC}_3\text{H}_9\text{F}$	Trimethyl stannic fluoride	500-3500	L, Sol	Spec, Freq	Okawara	JACS	82 (1960)	3287
$\text{SnC}_3\text{H}_9\text{I}$	Trimethyl stannic iodide	500-3500	S	Spec, Freq	Okawara	JACS	82 (1960)	3287
$\text{SnC}_4\text{H}_8\text{O}_4$	Dimethyltin dicarboxylate	704-4350	L	Assign	Lippincott	JPC	57 (1953)	939
$\text{SnC}_4\text{H}_{10}\text{O}_2$	Trimethyl tin monocarboxylate	500-3500	Sol, L	Spec, Freq	Okawara	JACS	82 (1960)	3287
$\text{SnC}_4\text{H}_{11}\text{Cl}_3\text{O}_2$	Ethoxytin tri-chloride ethano-late	400-3000	S	Spec, Freq	Okawara	JACS	82 (1960)	3287
$\text{SnC}_4\text{H}_{12}$	Tetramethyl tin	400-3000	S	Spec, Freq	Okawara	JACS	82 (1960)	3287
		2-15.5 μ	S	Spec	Laubengayer	JACS	76 (1954)	5985
		1-16 μ	G	Spec	Kettering	P	4 (1933)	39
		-	-	Spec, Freq	Pai	PRS	149 (1935)	29
		-	-	Assign	Anderson	JCP	4 (1936)	161

$\text{SnC}_4\text{H}_{12}\text{Cl}_4\text{O}_2\text{S}_2$	Tin (IV)-dimethyl sulfoxide complex chloride	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)	1534
$\text{SnC}_6\text{H}_5\text{Cl}_3$	Phenyl tin tri- chloride	650-3500	L, Sol	Assign, Freq	Griffith	JMS	5 (1960)	148
$\text{SnC}_6\text{H}_{16}$	Dimethyldiethyl tin	2-25 μ	L, G	Spec, Freq	Dillard	JOSA	50 (1960)	1271
$\text{SnC}_6\text{H}_{18}\text{Si}_2$	Tin (II)-trimethyl silanolate	2-16 μ	Sol	Spec	Tatlock	JOC	17 (1952)	1555
$\text{SnC}_7\text{H}_{18}$	Methyl triethyl tin	2-25 μ	L, G	Spec, Freq	Dillard	JOSA	50 (1960)	1271
$\text{SnC}_8\text{H}_{10}\text{Cl}_5\text{N}_3 \cdot \frac{1}{2}\text{H}_2\text{C}$	p-dimethylamino- benzene diazonium chloride tin tetra- chloride semihydrate	3-14 μ	S	Freq	Gremillion	JACS	81 (1959)	6134
$\text{SnC}_8\text{H}_{12}$	Tetravinyl tin	650-3500	L	Freq, Assign	Kaesz	SA	15 (1959)	360

$\text{SnC}_8\text{H}_{18}\text{Cl}_2$	Dibutyl tin dichloride	300-3200	S, Sol	Spec, Freq	Tobin	JMS	5 (1960)	65
$\text{SnC}_8\text{H}_{20}$	Tetraethyl tin	650-3500 2-25 μ	L L, G -	Spec, Assign Spec, Freq Spec, Assign	Kaesz Dillard Hoffman	SA JOSA ZE	(1959) 50 (1960) 64 (1960)	360 1271 616
$\text{SnC}_8\text{H}_{24}\text{O}_2\text{Si}_2$	Bis-(trimethyl-siloxy)dimethyl tin	2-16 μ	S	Spec	Tatlock	JOC	17 (1952)	1555
$\text{SnC}_{10}\text{H}_{10}$	Cyclopentadienyl tin	400-4000	Sol	Spec, Struct	Dave	JCS	- (1959)	3684
$\text{SnC}_{12}\text{H}_{10}\text{Cl}_2$	Diphenyl tin dichloride	650-3500	S, Sol	Freq, Assign	Griffiths	JMS	5 (1960)	148
$\text{SnC}_{12}\text{H}_{10}\text{O}$	Diphenyl tin oxide	-	-	Comparison	Gilman	JOC	20 (1955)	763
$\text{SnC}_{12}\text{H}_{36}\text{O}_4\text{Si}_4$	Tin (IV)-trimethyl silanolate	2-16 μ	S	Spec	Tatlock	JOC	17 (1952)	1555
$\text{SnC}_{18}\text{H}_{15}\text{Cl}$	Triphenyl tin chloride	650-3500	S, Sol	Assign, Freq	Griffiths	JMS	5 (1960)	148
$\text{SnC}_{18}\text{H}_{15}\text{O}$	Triphenyl tin oxide	-	-	Comparison	Gilman	JOC	20 (1955)	763
$\text{SnC}_{18}\text{H}_{16}\text{Br}_5$	Triphenylammonium pentachlorostannate	-	S	H bond, Freq	Nuttall	JCS	- (1960)	4965
$\text{SnC}_{18}\text{H}_{16}\text{O}$	Triphenyl tin hydroxide	-	Sol	H bond	West	JACS	82 (1960)	6269
$\text{SnC}_{19}\text{H}_{15}\text{Cl}_5$	Triphenyl methyl-pentachloro-stannate	600-3400	S	Spec	Sharp	JCS	- (1957)	4804

$\text{SnC}_{24}\text{H}_{20}$	Tetraphenyl tin	-	-	Ident	JOC	18 (1953)	680
		-	-	Ident, Anal	JOC	18 (1953)	1554
		-	-	Comparison	JOC	20 (1955)	763
		1075	Sol	Freq	JACS	77 (1955)	5858
		625-900	Sol	Vibrations	SA	7 (1955)	14
		8-11 μ	S	Band study	CIL	-	298
		650-3500	S, Sol	Assign, Freq	JMS	5 (1960)	148
$\text{SnC}_{25}\text{H}_{20}\text{O}_2$	p-Carboxyphenyl-triphenyl tin	-	-	Comparison	JOC	20 (1955)	763
$\text{SnC}_{36}\text{H}_{30}\text{Br}_4\text{O}_2\text{P}_2$	Tin (IV) bromide-triphenylphosphine oxide add. compd.	1100-1300	S	P-O band	JACS	80 (1958)	4775
$\text{SnC}_{36}\text{H}_{30}\text{Cl}_4\text{O}_2\text{P}_2$	Tin (IV) chloride-triphenylphosphine oxide add. compd.	1100-1300	S	P-O band	JACS	80 (1958)	4775
$\text{SnC}_{36}\text{H}_{30}\text{Cl}_6\text{N}_2$	Triphenyl ammonium hexafluorostannate	-	S	H bond, Freq	JCS	- (1960)	4965
SnH_4	Tin monohydride	-	-	FC	JCP	18 (1950)	932
		-	-	FC	JCP	18 (1950)	927
$\text{SnHF}_5\text{OK}_2 \cdot \text{H}_2\text{O}$	Tin (IV)-fluoride, hydroxide, complex (potassium salt) monohydrate	-	-	Spec, Config., FC	NWS	47 (1960)	393
SnH_4	Stannate	-	-	FC	JCP	14 (1946)	305
$\text{SnH}_8\text{Cl}_6\text{N}_2$	Diammonium tin hexachloride	-	S	Freq	JCS	- (1954)	1798
$\text{SnH}_8\text{F}_6\text{N}$	Tin (IV)-fluoride complex (ammonium salt)	-	-	Spec, Config., FC	NWS	47 (1960)	393
$\text{SnH}_{10}\text{F}_6\text{N}_4$	Tin (IV)-fluoride complex (hydrazinium salt)	-	-	Spec, Config., FC	NWS	47 (1960)	393
SnBr_4	Tin tetrabromide	-	-	Vibrations	PR	38 (1931)	1969
		-	-	Freq	CR	11 (1932)	369
		-	-	Vibrations	PR	46 (1934)	730
		-	-	FC	PR	49 (1936)	535
		-	-	FC	JCP	14 (1946)	305

$\text{SnCl}_2 \cdot 2\text{H}_2\text{O}$	Stannous chloride dihydrate	800-4000	S	Force field Force field Force field FC FC Freq FC	Heath Heath Linnett Gaunt Venkateswarlu Hahn Pistorius	TFS TFS TFS TFS JCP JCP JCP	44 (1948) 44 (1948) 48 (1952) 50 (1954) 23 (1955) 24 (1956) 28 (1958)	561 878 592 546 2365 921 514
SnCl_4	Tin tetrachloride	1.5-16 μ 0.8-2.0 μ	L L	Spec. Dispersion Magnetic rotation Vibrations Freq Vibrations Thermo. FC Force field Force field Force field FC FC Freq FC	Marvin Ingersoll Urey Villars Rosenthal Herman Gordy Heath Heath Linnett Bowers Gaunt Hahn Pistorius	PR JOSA PR CR PR JCP JCP TFS TFS TFS JCP TFS JCP JCP	34 (1912) 6 (1922) 38 (1931) 11 (1932) 46 (1934) 6 (1938) 14 (1946) 44 (1948) 44 (1948) 48 (1952) 21 (1953) 50 (1954) 24 (1956) 28 (1958)	161 663 1969 369 730 406 305 561 878 592 1117 546 921 514
$\text{SnCl}_4 \cdot 5\text{H}_2\text{O}$	Stannic chloride pentahydrate	800-4000	S	Vibrations	Lucchesi	JACS	78 (1956)	1347
SnCl_6	Tin hexachloride ion	314	-	Freq	Hahn	JCP	24 (1956)	921
$\text{SnCl}_{10}\text{O}_2\text{P}_2$	Phosphorous oxychloride stannic chloride complex	1100-1300	S	Band study	Sheldon	JACS	80 (1958)	4775
SnF_4	Tin tetrafluoride	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762

Chemical Formula	Compound Name	Wavenumber Range (μ)	Medium	Spec, Config., FC	Kriegsman	NWS	Year (Ref)	Page
$\text{SnF}_6 \cdot 2\text{H}_2\text{O}$	Tin (IV)-fluoride complex (potassium salt) monohydrate	-	-	FC	Baughan	TFS	53 (1957)	393
SnO	Tin monoxide	-	-	FC	Baughan	TFS	53 (1957)	1046
SnO_2	Tin oxide	1-8 μ 22-310 μ	S S	Emission Reflectance	Coblentz Weniger	BBS JOSA	5 (1908) 7 (1923)	159 517
SnO_3Ba	Barium stannate	350-700	-	Freq, Assign, FC	Yatsenko	IANS	22 (1958)	1456
SnO_3Sr	Strontium stannate	350-700	-	Freq, Assign, FC	Yatsenko	IANS	22 (1958)	1456
SnO_7P_2	Tin pyrophosphate	-	-	Spec	Steiger	ZAUA	303 (1960)	169
$\text{Sn}_2\text{C}_4\text{H}_{12}\text{Cl}_2\text{O}$	1,3-Dichloro-tetramethyl distannoxane	400-1500	S	Freq, Assign	Brown	SA	16 (1960)	595
$\text{Sn}_2\text{C}_3\text{H}_6\text{O}$	Hexaphenylditin	-	-	Ident Anal, Ident Comparison	Gilman Gilman Gilman	JOC JOC JOC	18 (1953) 18 (1953) 20 (1955)	680 1554 763
$\text{Sn}_2\text{C}_4\text{H}_4\text{O}$	Hexa-o-tolylditin	-	-	Ident	Gilman	JOC	18 (1953)	1554
$\text{Sn}_3\text{C}_6\text{H}_{18}\text{S}_3$	Dimethyl tin sulfide (trimer)	400-1500	S, Sol	Freq, Assign	Brown	SA	16 (1960)	595
Sr	COMPOUNDS							
$\text{SrCH}_3\text{O}_3\text{P} \cdot 2\text{H}_2\text{O}$	Strontium methyl phosphonate dihydrate	2-15 μ	S	Spec, Group freq, I	Corbridge	JCS	- (1954)	4555
SrCO_3	Strontium carbonate	2-16 μ 11-12.5 μ	S S	Spec Spec, Freq	Hunt Underwood	AC JACS	22 (1950) 77 (1955)	1478 317

Chemical Formula	Compound Name	Wavelength Range (μ)	State (S)	Measurement Type (Spec)	Author	Year (1956)	Reference Number
$\text{SrBr}_2 \cdot 6\text{H}_2\text{O}$	Strontium bromide hexahydrate	800-4000	S	Spec	Lucchesi	78	1347
SrCl_2	Strontium chloride	2-4 μ	Sol	Spec	Angstrom	3	47 (1914)
		0.8-2.3 μ	Sol	Spec	Collins	20	486 (1922)
$\text{SrCl}_2 \cdot 6\text{H}_2\text{O}$	Strontium chloride hexahydrate	800-4000	S	Spec	Lucchesi	78	1347 (1956)
$\text{SrF}_2 \cdot \text{P} \cdot \text{xH}_2\text{O}$	Strontium monofluorophosphate polyhydrate	2-15 μ	S	Spec, I, Freq	Corbridge	-	4555 (1954)
SrF_2	Strontium fluoride	-	-	Polarizability theory	Szigeti	45	155 (1949)
		2-16 μ	S	Spec, Freq	Miller	24	1253 (1952)
SrNO_6	Strontium nitrate	700-1600	S	Freq, Assign	Ferraro	4	99 (1960)
		300-880	S	Spec	Miller	16	135 (1960)
SrN_6	Strontium azide	635-3100	S	Freq, FC	Gray	53	901 (1957)
SrO	Strontium oxide	-	-	Polarizability theory	Szigeti	45	155 (1949)
		-	-	Freq	Szigeti	204	51 (1950)
SrO_2	Strontium dioxide	2-16 μ	S	Spec, Struct	Brame	4	90 (1957)
$\text{SrO}_3 \cdot \text{PSNa} \cdot 8\text{H}_2\text{O}$	Sodium strontium phosphoromono-thioate octahydrate	844-3140	S	I, Freq	Corbridge	-	4555 (1954)
$\text{SrO}_3 \cdot \text{Ti}$	Strontium titanate	-	S	Absorption	Linz	91	753 (1953)
		2-15 μ	S	Spec	Mara	96	801 (1954)
		0.35-15 μ	S	Spec	Noland	94	724 (1954)
SrO_4	Strontium sulphate	1-7.5 μ	S	Spec	Coblentz	2	457 (1907)
		5-12 μ	S	Reflectance, Spec	Coblentz	2	457 (1907)
		5-50 μ	S	Absorption	Cartwright	35	415 (1930)

SrO ₄ Cr	Strontium chromate	2-16/ μ 300-880	S S	Spec Spec	Meloche Miller	JINC	6 (1958)	104
						SA	16 (1960)	135
SrO ₄ Mo	Strontium molybdate	2-15/ μ	S	Spec	Harkins	AC	31 (1959)	541
						CPR	239 (1954)	249
SrO ₄ W	Strontium tungstate	290-650	S	Assign	Duval	CPR	239 (1954)	249
						JACS	71 (1949)	509
SrS	Strontium sulphide	-	-	IR-sensitive phosphor	Mason	PR	69 (1946)	5342
						JACS	69 (1947)	1725
SrSe	Strontium selenide	-	-	IR-sensitive phosphorescence	Ellickson	JACS	71 (1949)	509
						JACS	71 (1949)	2494
Sr ₂ O ₆ P ₂ ·2H ₂ O	Distrontium hypophosphate dihydrate	848-3360	S	I, Freq	Corbridge	JCS	- (1954)	4555
						JCS	- (1954)	493
Sr ₂ O ₇ P ₂	Distrontium pyrophosphate	2-15/ μ	S	Freq, Assign, I	Corbridge	JCS	- (1954)	493
						JCS	- (1954)	4555
Sr ₂ O ₈ P ₂ ·xH ₂ O	Distrontium peroxy diphosphate polyhydrate	732-3350	S	I, Freq	Corbridge	JCS	- (1954)	4555
						JCS	- (1954)	493
Sr ₂ O ₁₂ P ₄ ·5H ₂ O	Distrontium tetrametaphosphate pentahydrate	2-15/ μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	493
						JCS	- (1954)	1803
Sr ₃ Cl ₂ O ₈	Strontium sulfide-strontium chloride-strontium oxide	-	-	IR sensitive phosphor	Prener	JACS	71 (1949)	1803
						JCS	- (1954)	493
Sr ₃ O ₈ P ₂	Tristrontium orthophosphate	2-15/ μ 290-650 2-16/ μ	S S S	Freq, I, Assign Assign Spec	Corbridge Duval Meloche	JCS	- (1954)	493
						CPR	239 (1954)	249
						JINC	6 (1958)	104

$Sr_3O_{18}P_6 \cdot 7H_2O$	2-15 μ	S	Freq, I, Assign	Corbridge	JCS	- (1954)	493
Tristrontium trimetaphosphate heptahydrate							
<u>Ta COMPOUNDS</u>							
$TaC_{10}H_{10}Br_5$	2-15 μ	S	Spec	Wilkinson	JACS	76 (1954)	4281
Tantalum (V)- cyclopentadiene complex bromide							
TaF_4	-	S	Freq, Struct	Peacock	JOS	- (1959)	2762
Tantalum tetra- fluoride							
TaF_7	-	S	Freq, Struct	Peacock	JOS	- (1959)	2762
Tantalum (V)- fluoride complex ion							

<u>Te COMPOUNDS</u>							
$TeCS$	-	Sol	Microwave Spec, Ident	Hardy Wentik	PR JCP	95 (1954) 29 (1958)	385 188
TeH	-	-	FC	Sheline	JCP	18 (1950)	927
TeH_2	-	G	FC	Gordy	JCP	14 (1946)	305
	3.8-5.5 μ	G	Spec	Jarrell	PR	76 (1949)	199
	870-2000	G	Spec, Mol. Const.	Rossmann	JCP	24 (1956)	1276
	-	-	Band study, Mol. Const.	Orssmann	DA	19 (1958)	341
$TeH_4O_6K_3 \cdot 3H_2O$	400-4000	-	Spec	Siebert	ZAUA	- (1959)	301
Potassium tellurate trihydrate							
$TeH_4O_6Na_2$	400-4000	-	Spec	Siebert	ZAUA	- (1959)	301
Sodium tellurate							

TeH_6O_6	Telluric acid	400-4000	-	Spec	Siebert	ZAVA	- (1959)	301	
TeBr_2	Tellurium bromide	-	-	FC	Gordy	JCP	14 (1946)	305	
TeCl_2	Tellurium dichloride	-	-	FC, Bond dist.	Gordy	JCP	14 (1946)	305	
TeCl_4	Tellurium tetra- chloride	-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432	
TeF_6	Tellurium hexa- fluoride	-	-	Quant. Mech.	Wilson	JCP	2 (1934)	432	
		-	-	Quant. Mech.	VanVleck	JCP	7 (1939)	72	
		-	-	FC	Heath	TFS	45 (1949)	264	
		-	-	FC	Linnett	TFS	48 (1952)	592	
		400-5000	-	G	Spec, Assign, Thermo.	TFS	49 (1953)	1122	
		-	-	-	FC	Gaunt	TFS	50 (1954)	546
		25-40 μ	-	G	Freq	Gaunt	TFS	51 (1954)	893
		677	-	-	Freq	Hahn	JCP	24 (1956)	921
		-	-	-	FC	Califano	AAN	25 (1958)	284
		-	-	-	Jahn-Teller effect	Weinstock	JCP	31 (1959)	262
TeO_2	Tellurim dioxide	-	-	Anal	Duchesne	JCP	15 (1947)	631	
TeS	Tellurium sulfide	-	-	Freq	Clark	TFS	33 (1937)	1390	
		-	-	Freq	Clark	TFS	33 (1937)	1394	
TeSe	Tellurium selenium	-	-	Freq	Clark	TFS	33 (1937)	1390	
		-	-	Freq	Clark	TFS	33 (1937)	1394	
		3-8 μ	S	Photo response	Loferksi	PR	93 (1954)	707	
Te_2	Tellurium	0.5-9 μ	S	Reflectance	Coblentz	BBS	7 (1911)	197	
		-	-	Absorption	Cartwright	PR	35 (1930)	415	
		-	-	Spec	Ruedy	PR	41 (1932)	588	
		1-11 μ	S	Transmission	Pfund	JOSA	23 (1933)	375	
		0.185-10 μ	S	Reflectance	Andrews	PR	51 (1937)	1017	
		-	-	Freq	Clark	TFS	33 (1937)	1394	
		-	-	FC	Sutherland	JCP	8 (1940)	161	
4.5-10 μ	S	Transmission	Linnett	TFS	38 (1942)	1			
					Loferksi	PR	83 (1951)	876	

$\text{ThN}_4\text{O}_{12}\cdot 4\text{H}_2\text{O}$	300-880	S	Spec	Miller	SA	16 (1960)	135
Thorium nitrate tetrahydrate							
$\text{ThN}_4\text{O}_{12}\cdot 5\text{H}_2\text{O}$	700-1600	S	Freq, Assign	Ferraro	JMS	4 (1960)	99
Thorium nitrate pentahydrate							
ThO_2	1-8 μ	S	Spec	Coblentz	EBS	5 (1908)	159
	-	S	Emission	Pirani	JSI	16 (1939)	372
<u>Ti COMPOUNDS</u>							
$\text{TiO}_2\text{H}_6\text{Cl}_4\text{O}$	-	-	Spec	Cassinatis	HCA	43 (1960)	424
Acetone titanium tetrachloride adduct							
$\text{TiC}_4\text{H}_6\text{Br}_4\text{N}_2$	600-3000	-	Spec, Struct, Assign	Rao	ZAUA	304 (1960)	351
Titanium (IV) bromide complex with methylcyanide							
$\text{TiC}_4\text{H}_6\text{Cl}_4\text{N}_2$	400-3000	-	Spec, Struct, Assign	Rao	ZAUA	304 (1960)	351
Titanium (IV) chloride complex with methylcyanide							
$\text{TiC}_4\text{H}_6\text{F}_4\text{N}_2$	400-3000	-	Spec, Struct, Assign	Rao	ZAUA	304 (1960)	351
Titanium (IV) fluoride complex with methylcyanide							
$\text{TiC}_4\text{H}_8\text{Br}_4\text{O}_2$	500-1500	S	Spec, Struct	Hendra	JCS	- (1960)	5105
Titanium (IV)-dioxane complex bromide							
$\text{TiC}_4\text{H}_{12}\text{O}_4$	-	-	Spec, Assign	Kriegsman	ZE	62 (1958)	1163
Titanium methoxide							
$\text{TiC}_5\text{H}_5\text{F}_4\text{N}$	660-3000	-	Spec	Rao	NWS	46 (1959)	556
Titanium tetrafluoride-2-pyridine							

TiC ₅ H ₅ I ₁ N ₄	-	Config.	Rao	NWS	46 (1959)	556
Titanium tetraiodide-2-pyridine	660-3000	-				
TiC ₆ H ₁₀ Br ₄ N ₄	600-3000	-	Rao	ZAUA	304 (1960)	351
Titanium (IV)-bromide complex with ethylcyanide		Spec, Struct, Assign				
TiC ₆ H ₁₀ Cl ₁ N ₄	600-3000	-	Rao	ZAUA	304 (1960)	351
Titanium (IV)-chloride complex with ethylcyanide		Spec, Struct, Assign				
TiC ₆ H ₁₀ F ₁ N ₄	600-3000	-	Rao	ZAUA	304 (1960)	351
Titanium (IV)-fluoride complex with ethylcyanide		Spec, Struct, Assign				
TiC ₇ H ₅ Cl ₅ O	-	S	Cassimatis	HCA	43 (1960)	424
Benzoyl chloride titanium tetrachloride adduct		Spec				
TiC ₈ H ₂ O ₄	-	-	Kriegsmann	ZE	62 (1958)	1163
Titanium ethoxide		Spec, Assign				
TiC ₁₀ H ₁₀ Br ₂	2-15 μ	- S	Wilkinson Wilkinson	JACS JACS	75 (1953) 76 (1954)	1011 4281
Titanium (IV)-cyclopentadiene, bromide complex		Struct Spec				
TiC ₁₀ H ₁₀ Br ₄ N ₄	600-3000	-	Rao	ZAUA	304 (1960)	176
Titanium (IV)-bromide, pyridine complex		Spec				
TiC ₁₀ H ₁₀ Cl ₄ N ₄	400-3000	-	Rao	ZAUA	304 (1960)	176
Titanium (IV)-chloride, pyridine complex		Spec				
TiC ₁₀ H ₁₀ F ₄ N ₄	660-3000	-	Rao	NWS	46 (1959)	556
Titanium (IV)-fluoride, pyridine complex	400-3000	-	Rao	ZAUA	304 (1960)	176
TiC ₁₀ H ₁₀ I ₄ N ₄	660-3000	-	Rao	NWS	46 (1959)	556
Titanium (IV)-iodide, pyridine complex	400-3000	-	Rao	ZAUA	304 (1960)	176
TiC ₁₀ H ₁₄ N ₂ O ₉ ·H ₂ O	800-1800	S	Donald	JACS	82 (1960)	4191
Titanyl (IV)-ethylene-diamine tetraacetic acid monohydrate		Spec				

$\text{TiC}_{10}^{\text{H}}\text{O}_{14}^{\text{O}}$	Titanyl acetyl acetate	1000	S	Assign	Barracough	JCS	-	(1959)	3552
$\text{TiC}_{12}^{\text{H}}\text{H}_{16}$	Titanium (IV)-cyclopentadiene, methyl complex	450-4000	Sol	Spec, Freq	Piper	JIMC	3	(1956)	104
$\text{TiC}_{12}^{\text{H}}\text{H}_{28}^{\text{O}}$	Titanium tetraisopropoxide	2-15 μ 600-3000	Sol	Spec, Freq, I Spec, Assign Spec, Assign	Bell Zeitler Kriegsmann	AC JPC ZE	25 61 62	(1953) (1957) (1958)	1720 1174 1163
$\text{TiC}_{12}^{\text{H}}\text{H}_{28}^{\text{O}}$	Titanium-n-propoxide	-	-	Spec, Assign	Kriegsmann	ZE	62	(1958)	1163
$\text{TiC}_{12}^{\text{H}}\text{H}_{36}^{\text{O}}\text{Si}_4$	Tetrakis (trimethylsiloxy) titanium	600-3000	Sol	Spec, Assign Spec, Assign	Zeitler Kriegsmann	JPC ZE	61 62	(1957) (1958)	1174 1163
$\text{TiC}_{14}^{\text{H}}\text{H}_{10}^{\text{Br}}\text{N}_4^{\text{O}}$	Titanium (IV)-bromide complex with phenylcyanide	600-3000	-	Spec, Struct, Assign	Rao	ZAUA	304	(1960)	351
$\text{TiC}_{14}^{\text{H}}\text{H}_{10}^{\text{Cl}}\text{N}_4^{\text{O}}$	Titanium (IV)-chloride complex with phenylcyanide	600-3000	-	Spec, Struct, Assign	Rao	ZAUA	304	(1960)	351
$\text{TiC}_{14}^{\text{H}}\text{H}_{10}^{\text{F}}\text{N}_4^{\text{O}}$	Titanium (IV)-fluoride complex with phenylcyanide	600-3000	-	Spec, Struct, Assign	Rao	ZAUA	304	(1960)	351
$\text{TiC}_{16}^{\text{H}}\text{H}_{36}^{\text{O}}$	Tetra-n-butoxy titanium	600-3000	Sol	Spec, Assign Spec, Assign	Zeitler Kriegsmann	JPC ZE	61 62	(1957) (1958)	1174 1163
$\text{TiC}_{16}^{\text{H}}\text{H}_{36}^{\text{O}}$	Titanium tetratert-butoxide	665-5000	L	Freq	Ory	AC	32	(1960)	509
$\text{TiC}_{36}^{\text{H}}\text{H}_{30}^{\text{Cl}}\text{O}_4\text{P}_2$	Titanium (IV)chloride-triphenylphosphine oxide acid. compd.	1100-1300	S	P-O band	Sheldon	JACS	80	(1958)	4775
$\text{TiC}_{72}^{\text{H}}\text{H}_{60}^{\text{O}}\text{Si}_4$	Tetrakis (triphenylsiloxy) titanium	600-3000	S	Spec, Assign	Zeitler	JPC	61	(1957)	1174

$\text{TiC}_9\text{H}_{60}\text{O}_{10}\text{Si}_8$	600-3000	Sol	Spec, Assign	Zeitler	JPC	61 (1957)	1174
16-Phenyl octa-siloxyspiro [9.9] titanate	-	-	FC	Platt	JCP	18 (1950)	932
$\text{TiH}_8\text{F}_6\text{N}_2$	-	S	Freq	Cox	JCS	- (1954)	1798
Titanium hydride	-	-	FC	Platt	JCP	18 (1950)	932
Diammonium titanium hexafluoride	-	S	Freq	Cox	JCS	- (1954)	1798
TiBr_4	185-3000	L, Sol	Assign, Thermo., FC	Miller	SA	16 (1960)	6
Phosphorous oxybromide titanium bromide complex	1100-1300	S	Bonding	Sheldon	JACS	80 (1958)	4775
TiCl_3	1-15 μ	Sol	Spec	Lagerquist	AF	12 (1957)	491
Titanium tetra-chloride	1.5-16 μ	L	Spec	Marvin	PR	34 (1912)	161
	0.8-2.0 μ	L	Magnetic rotation	Ingersoll	JOSA	6 (1922)	663
	-	-	Vibration	Urey	PR	38 (1931)	1969
	-	-	Freq	Villars	CR	11 (1932)	369
	-	-	Vibration	Rosenthal	PR	46 (1934)	730
	-	-	FC	Rosenthal	PR	49 (1936)	535
	-	-	Thermo.	Herman	JCP	6 (1938)	406
	-	-	FC	Gordy	JCP	14 (1946)	305
	-	-	Force field	Heath	TFS	44 (1948)	561
	2-15 μ	L	Spec, Assign	Johannessen	JRNB	53 (1954)	197
	-	G	Thermo.	Farber	JCP	23 (1955)	1460
	6-22 μ	G	Spec, FC, Thermo.	Hawkins	JCP	23 (1955)	1700
	-	-	FC	Horton	JCP	23 (1955)	1727
	-	-	FC	Venkateswarlu	JCP	23 (1955)	2365
	386	-	Freq	Hahn	JCP	24 (1956)	921
	-	-	FC	Pistorius	JCP	28 (1958)	514
	400-3000	-	Spec	Rao	ZAVA	304 (1960)	176
	400-3000	-	Spec	Rao	ZAVA	304 (1960)	176
TiCl_7OP	1100-1300	S	Bonding	Sheldon	JACS	80 (1958)	4775
Phosphorous oxy-chloride Titanium tetrachloride complex							

$\text{TiCl}_3 \cdot \frac{1}{2} \text{P}_2\text{O}_5$	Phosphorous oxychloride	1100-1300	S	Bonding	Sheldon	JACS	80 (1958)	4775
	Titanium tetra- chloride complex							
TiF_4	Titanium tetra- fluoride	400-3000	S	Freq, Struct Spec, Freq	Peacock Rao	JCS ZAUA	- (1959) 304 (1960)	2762 176
TiF_4	Titanium (III)- complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
$\text{TiI}_6 \cdot \frac{1}{2} \text{K}_2\text{IO}_4$	Potassium Titanium (IV) iodate	-	S	Spec, Struct	Dasent	JCS	- (1960)	2429
TiO	Titanium monoxide	-	-	FC	Badger	JCP	2 (1934)	128
		20.7-152 μ	S	Mol. Const. Reflection	Pekeris Seifert	PR RSI	45 (1934) 11 (1940)	98 365
		-	-	FC	Linnett	TFS	38 (1942)	1
TiO_2	Titanium dioxide	2-15 μ 2-15 μ 300-880	S S S	Absorption Spec Spec	Filimonov Harkins Miller	OS AC SA	5 (1958) 31 (1959) 16 (1960)	709 541 135
TiO_3	Barium titanate	300-1000 350-700	S -	Spec, I Assign, Freq, FC	Last Yatsenko	PR IANS	105 (1957) 22 (1958)	1740 1456
TiO_3	Calcium titanate	300-1000 350-700	S -	Spec, Struct Freq, Assign, FC	Last Yatsenko	PR IANS	105 (1957) 22 (1958)	1740 1456
TiO_3	Lead titanate	300-1000 350-700	S -	Spec, Struct Freq, Assign, FC	Last Yatsenko	PR IANS	105 (1957) 22 (1958)	1740 1456
TiO_3	Strontium titanate	300-1000 350-700	S -	Spec, Struct Freq, Assign, FC	Last Yatsenko	PR IANS	105 (1957) 22 (1958)	1740 1456
TiO_3	Titanium pyrophosphate	-	-	Spec	Steger	ZAUA	303 (1960)	169

Tl COMPOUNDS

Tl	Compound	Wavelength	Source	Spec	Waddington	JCS	Year	Page
TlClO	Thallium isocyanate	-	S	Spec		JCS	(1959)	2499
Tl ₅ C ₅ H ₅	Cyclopentadienyl thallium	4.7 μ	G	Struct	Cotton	JACS	80 (1958)	269
Tl ₅ C ₅ H ₇ O ₂	Thallium acetyl acetate	625-5000	S	Spec, Struct	West	JINC	5 (1958)	295
Tl ₂₄ H ₁₆ Cl ₄ N ₄ O ₄	Thallium-1;10-phenanthroline complex perchlorate	600-2000	S	Spec	Schilt	JINC	9 (1959)	211
TlH	Thallium monohydride	-	-	FC	Platt	JCP	18 (1950)	932
		-	-	FC	Sheline	JCP	18 (1950)	927
TlBr	Thalious bromide	0.3-0.5 μ	S	Photoelectric properties	Coblentz	BBS	18 (1922)	489
		117 μ	S	Residual rays	Weniger	JOSA	7 (1923)	517
		117 μ	S	Residual rays	Schaefer	TFS	25 (1929)	841
		10-130 μ	S	Reflection, Spec	Barnes	PR	39 (1932)	562
		8.7 μ	-	Dispersion	Korff	RMP	4 (1932)	471
		-	-	Christianson filter	Barnes	PR	49 (1936)	732
		117 μ	S	Residual rays	Seifert	RSI	11 (1940)	365
		-	-	Properties of crystal	Tuttle	JCP	14 (1946)	571
		1 μ	S	Photoconductivity	Caldwell	PR	74 (1948)	1207
		2.2-37 μ	S	Spec	Plyler	JRNB	41 (1948)	125
		-	-	Anal	Knowles	AC	21 (1949)	1539
		-	-	Pressed disk	Ford	JSI	31 (1954)	338
		80-230 μ	S	Reflectance, Spec	Sinton	JOSA	44 (1954)	503
		-	-	Spec, Mol. Const.	Barrett	PR	109 (1958)	1572
		17-55 μ	S	Transmittance	Plyler	JRNB	64C (1960)	55
TlCl	Thallium chloride	0.3-0.5 μ	S	Photoelectric	Coblentz	BBS	18 (1922)	489
		91.6 μ	S	Residual rays	Weniger	JOSA	7 (1923)	517
		91.6 μ	S	Residual rays	Schaefer	TFS	25 (1929)	841
		10-130 μ	S	Spec	Barnes	PR	39 (1932)	562
		8.7 μ	-	Dispersion	Korff	HMP	4 (1932)	471
		-	S	Reflection	Barnes	PR	43 (1933)	31

$Tl^{205}Cl^{35}$	Thallium chloride (isotopic)	-	-	-	Christianson filter Spec	Barnes Plyler	PR JRNB	49 (1936) 41 (1948)	732 125
		21-28 μ	S	-	Polarizability theory	Szigeti	TFS	45 (1949)	155
		-	-	-	Freq	Szigeti	PRS	204 (1950)	51
		80-230 μ	S	-	Spec	Sinton	JOSA	44 (1954)	503
		20-200 μ	S	-	Reflectance	Yoshinaga	PR	100 (1955)	753
		-	-	-	Microwave, Mol. Const.	Fritzky	ZP	151 (1958)	351
		-	-	-	Spec, Mol. Const.	Barrett	PR	109 (1958)	1572
		-	-	-	Residual rays	Schaefer	TFS	25 (1929)	841
		151 μ	-	-	Microwave, Mol. Const.	Fritzky	ZP	151 (1958)	
		-	-	-	Spec, Mol. Const.	Barrett	PR	109 (1958)	1572
TlI	Thallous iodide	0.3-0.6 μ	S	-	Photoelectrical properties	Coblentz	BBS	18 (1922)	489
		151.8 μ	S	-	Residual rays	Weniger	JOSA	7 (1923)	517
		8.7 μ	-	-	Dispersion	Korff	RMP	4 (1932)	471
		-	-	-	Christianson filter	Barnes	PR	49 (1936)	732
		152 μ	S	-	Residual rays	Seifert	RSI	11 (1940)	365
		-	-	-	Crystal preparation	Tuttle	JCP	14 (1946)	571
		-	-	-	Anal	Knowles	AC	21 (1949)	1539
		-	S	-	Stabilization	Smakula	JOSA	43 (1953)	822
		-	-	-	Pressed disk	Ford	JSI	31 (1954)	338
		80-230 μ	S	-	Spec	Sinton	JOSA	44 (1954)	503
$Tl^{205}I$	Thallium (I) iodide (isotopic)	1.5-3 μ	-	-	Microwave, Mol. Const.	Happ	ZP	147 (1957)	567
	Thallium iodide (isotopic)	-	-	-	Spec, Mol. Const.	Barrett	PR	109 (1958)	1572
$TlIO_3$	Thallium iodate	-	S	-	Spec, Struct	Basent	JCS	- (1960)	2429

$TlNO_3$	Thallous nitrate	680-3600	S	Anal	Keller	JCP	17 (1949)	26
		-	S	Polarization	Haford	PR	78 (1950)	348
		700-3400	S	Assign	Newman	JCP	18 (1950)	1276
		700-1500	S	Spec	Newman	JCP	18 (1950)	1291
		700-1600	S	Freq, Assign	Ferraro	JMS	4 (1960)	99
Tl_2O_4	Thallium (III) ortho-phosphate	290-650	S	Assign	Duval	CPR	239 (1954)	249
Tl_8S_8Cr	Thallium sulfate alum	-	S	Freq assign, Spec	Kraus	JCP	9 (1941)	133
Tl_8Se_2	Thallium selenate alum	-	S	Freq assign, Spec	Kraus	JCP	9 (1941)	133
TlS	Thallium sulfide	0.8-20 μ	S	Reflectance	Agnew	JOSA	43 (1953)	999
$Tl_2H_2NO_3P_3$	Dithallium phosphoridate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
Tl_2S	Thallous sulfide	-	-	Reflection and transmission	VonHippel	JCP	14 (1946)	355
$Tl_3 - H_2N_2O_7P_3$	Thallium diimido-trimetaphosphate (ring)	650-5000	S	Photoelectricity	VonHippel	JCP	14 (1946)	370
$Tl_3 - H_2N_2O_6P_3$	Thallium (I)-trimetaphosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
Tl_3O_4P	Thallium (I)-phosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$Tl_3O_9P_3$	Thallium (I)-cyclictrimeric phosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909

$Tl_4 - HNO_3P_6$	Thallium (I)- imidodiphosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$Tl_4 - HNO_3P_3$	Thallium di- imidotrimeta- phosphate (ring) compound with TlOH	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$Tl_4 - HNO_3P_7$	Thallium trimeta- phosphinate compound with TlOH	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$Tl_4 - HNO_3P_4$	Thallium (I)- tetrametaphos- phimate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$Tl_4 - O_3P_2$	Thallium (I)- pyrophosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$Tl_5 - HNO_3P_3$	Thallium (I)- diimidotri- phosphate (chain)	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
<u>Tm COMPOUNDS</u>								
TmH	Thulium hydride	-	-	PC	Platt	JCP	18 (1950)	932
<u>U COMPOUNDS</u>								
$UC_{46}O_6$	Uranyl acetate	4.5-13.5 μ 600-1600	S S	Spec, Struct Spec, Assign	Conn Caldow	TFS CJC	34 (1938) 38 (1960)	1483 772
$UC_{411}H_3N_9O$	Dimethylthanolamine uranyl nitrate	2-15 μ	-	Spec	Barr	JACS	74 (1952)	4430

UC ₄ O ₈ ·5H ₂ O	-	S	Spec	Cappellina	ANCR	50 (1960)	615
Uranium (IV)-oxalate pentahydrate							
UC ₆ H ₉ O ₈ Na	400-3000 800-2000	S	Spec, Assign, FC Bond dist.	Jones Jones	JCP SA	23 (1955) 15 (1959)	2105 409
UC ₁₀ H ₁₀ N ₄ O ₈	2-15/μ	-	Spec	Barr	JACS	74 (1952)	4430
UC ₁₂ H ₁₂ N ₂ O ₉	2-15/μ	-	Spec	Barr	JACS	74 (1952)	4430
UC ₁₄ H ₂₀ O ₆	1200-1800	S	Assign	Charette	SA	16 (1960)	689
UC ₁₆ H ₂₄ Cl ₂ N ₂ O ₈	2-15/μ	-	Spec	Barr	JACS	74 (1952)	4430
UC ₁₆ H ₂₈ O ₆	1200-1800	S	Assign	Charette	SA	16 (1960)	689
UC ₁₈ H ₁₈ N ₂ O ₄	8-15/μ	S	Group freq, Spec	Charles	SA	8 (1956)	1
UC ₂₀ H ₁₆ N ₂ O ₈	2-15/μ	-	Spec	Barr	JACS	74 (1950)	4430
UC ₂₄ H ₂₀ Cl ₂ N ₂ O ₆	2-15/μ	-	Spec	Barr	JACS	74 (1952)	4430

$UC_{30}H_{31}ClN_2O_3$	Uranium (IV)-chloride, quinoline, 2-quinoline carboxylic acid complex	2-15 μ	-	Spec	Barr	JACS 74 (1952)	4430
$UC_{48}H_{108}O_8P_4$	Uranium (VI)-di-n-butyl phosphate	714-5000	S	Group interaction study	Smith	JINC 9 (1959)	150
$UC_{54}H_{36}N_6O_6$	Uranium (VI)-8-hydroxyquinolate	-	S	Spec	Charles	AC 25 (1953)	530
$UC_{1808}H_{3010}O_6$	Uranyl polymethacrylacetone complex	1200-1800	S	Assign	Charette	SA 16 (1960)	689
UBr_2O_2	Uranyl bromide	-	-	Ion study	Prigent	CPR 247 (1958)	1737
UCl_2O_2	Uranyl chloride	13.5 μ	S	Spec, Struct Ion study	Corn Prigent	TFS 34 (1938) CPR 247 (1958)	1483 1737
$UCl_2O_2Cs_2$	Uranyl (VI)-chloride complex cesium salt	800-2000	-	Group freq Bond distance	Jones Jones	SA 10 (1958) SA 15 (1959)	395 409
UCl_2O_{10}	Uranyl perchlorate	800-1060	Sol	Spec	Jones	JCP 21 (1953)	542
UCl_4	Uranium (IV)-chloride	2-15 μ	-	Spec	Barr	JACS 74 (1952)	4430
UF_2O_2	Uranyl fluoride	2-15 μ	-	Spec	Barr	JACS 74 (1952)	4430
UF_4	Uranium tetrafluoride	-	S	Freq	Conweg	JCP 31 (1959)	1002
$UF_5^0K_3$	Uranyl fluoride complex (potassium salt)	800-200	-	Bond distance	Jones	SA 15 (1959)	409

UF ₆	Uranium hexafluoride	2-17 μ	G	Assign Orbital valency	Bigeleisen Heath	JCP JFS	16 (1948) 45 (1949)	442 264
		2-40 μ	G	Spec, Assign	Burke	JCP	20 (1952)	447
		400-5000	G	Spec, Assign	Gaunt	JFS	49 (1953)	1122
		-	G	Spec	Llewellyn	JCP	21 (1953)	28
		-	-	FC	Gaunt	JFS	50 (1954)	546
		-	-	Freq, Assign	Hawkins	JCP	23 (1955)	2191
		656	-	Stretch freq	Hahn	JCP	24 (1956)	921
		-	-	FC	Califano	AAN	25 (1958)	284
		-	-	Jahn-Teller effect	Weinstock	JCP	31 (1959)	262
UN ₂ O ₈	Uranyl nitrate	-	Sol	Raman	Corn	JFS	34 (1938)	1483
UN ₂ O ₈ ·2H ₂ O	Uranyl nitrate dihydrate (N ¹⁵ , N ¹⁴)	700-3700	S	Spec, Assign	Gatehouse	JCS	- (1958)	3965
UN ₂ O ₈ ·2H ₂ O	Uranyl nitrate dihydrate	700-3800 600-1600	S S	Spec, Assign Spec, Assign	Allpress Caldow	AJC CJC	12 (1959) 38 (1960)	569 772
UN ₂ O ₈ ·3H ₂ O	Uranyl nitrate trihydrate	700-3700	S	Band assign Group freq	Gatehouse Jones	JCS SA	- (1958) 10 (1958)	3965 395
		700-3800	S	Spec, Assign	Allpress	AJC	12 (1959)	569
		700-1600	S	Absorp. Freq	Ferraro	JMS	4 (1960)	99
UN ₂ O ₈ ·6H ₂ O	Uranyl nitrate hexahydrate	2-15 μ 700-3700 700-3800 600-1600 300-880	S S S S S	Spec Spec, Band assign Spec, Assign Spec, Assign Spec	Barr Gatehouse Allpress Caldow Miller	JACS JCS AJC CJC SA	74 (1952) - (1958) 12 (1959) 38 (1960) 16 (1960)	4430 3965 569 772 135
UN ₃ O ₉ Rb	Uranyl (VI)-nitrate complex (Rubidium salt)	-	-	Group freq	Jones	SA	10 (1958)	395
UN ₃ O ₉ Cs	Uranyl (VI)-nitrate complex (cesium salt)	-	-	Group freq	Jones	SA	10 (1958)	395

$U_3O_{11}K$	Uranyl (VI)- nitrate complex (potassium salt)	-	700-3800	-	S	Group freq Spec, Assign	Jones Allpress	SA AJC	10 (1958) 12 (1959)	395 569
$U_3O_{11}Rb$	Rubidium uranyl nitrate	S	700-4000 800-2000	-	S	Spec assign Bond dist.	Gatehouse Jones	JCS SA	- (1958) 15 (1959)	3965 409
$U_4O_{14}K_2$	Uranyl (VI)- nitrate complex (potassium salt)	-	-	-	-	Group freq	Jones	SA	10 (1958)	395
$U_4O_{14}Rb_2$	Uranyl (VI)- nitrate complex (Rubidium salt)	-	-	-	-	Group freq	Jones	SA	10 (1958)	395
UO_2	Uranyl ion	-	860	-	-	Vib. Freq Stretch freq	Kasha Hahn	JCP JCP	17 (1949) 24 (1956)	349 921
UO_3	Uranium trioxide	-	897	-	-	Stretch freq	Hahn	JCP	24 (1956)	921
UO_6S	Uranyl sulfate	Sol	-	-	-	Raman	Corn	TFS	34 (1938)	1483
$U_2C_{15}H_{15}Cl_8N_3$	Uranium (IV)- chloride pyridine complex	-	2-15/ μ	-	-	Spec	Barr	JACS	74 (1952)	4430
U_2O_3	Uranium oxide	S	1-8/ μ	-	-	Emission	Coblentz	BBS	5 (1908)	159
$U_4C_8H_{16}O_4$	Potassium tetra- uranyl (IV) oxalate	S	-	-	-	Spec	Cappellina	ANCR	50 (1960)	615
$VC_4H_8N_2O_9 \cdot 2H_2O$	Vanadyl (III)-oxalate complex dihydrate (ammonium salt)	S	1000	-	-	Assign	Barracough	JCS	- (1959)	3552

V COMPOUNDS

Chemical Formula	Compound Name	Wavenumber (cm ⁻¹)	State	Assignment	Author	Year	Reference
VC ₆ H ₁₂ N ₂ O ₉ ·4H ₂ O	Vanadyl (IV)-malonic acid complex tetrahydrate (ammonium salt)	1000	S	Assign	Barracclough	- (1959)	3552
VC ₉ H ₅ O ₄	Vanadium (I)-carbonmonoxide cyclopentadiene complex	600-5000 1700-2200	Sol Sol	Spec, Config. Spec, Struct	Piper Colton	1 (1955) 1 (1955)	165 175
VC ₁₀ H ₁₀ Br ₂	Vanadium (IV)-cyclopentadiene complex bromide	-	-	Struct	Wilkinson	75 (1953)	1011
VC ₁₀ H ₁₀ Cl ₂	Vanadium (IV)-cyclopentadiene chloride complex	2-15/μ	S	Spec	Wilkinson	76 (1954)	4281
VC ₁₀ H ₁₂ N ₂ O ₈ Na·5H ₂ O	Vanadium (III)-ethylenediamine tetraacetic acid (sodium salt) pentahydrate	800-1800	S	Spec	Donald	82 (1960)	4191
VC ₁₀ H ₁₂ N ₂ PNa ₂ ·5H ₂ O	Vanadyl (IV)-ethylenediamine tetraacetic acid (sodium salt) pentahydrate	800-1800	S	Spec	Donald	82 (1960)	4191
VC ₁₀ H ₁₄ O ₅	Vanadyl (IV)-acetylacetonate	1000	S	Assign	Barracclough	- (1959)	3552
VH ₄ O ₃	Ammonium meta-vanadate	2-16/μ 880-3000	S S	Spec Spec	Miller Miller	24 (1952) 16 (1960)	1253 135
VCl ₃	Vanadium tri-chloride	1-15/μ	Sol	Spec	Lagerquist	12 (1957)	491
VCl ₃ O	Vanadium oxytrichloride	-	-	Band freq	Johannesen	53 (1954)	197

VC1 ₄	Vanadium tetra- chloride	358-2061 1000	L L	Spec Group freq	Miller Barracough	JCP JCS	26 (1957) - (1959)	329 3552	
VF ₄	Vanadium tetra- fluoride	0.8-1.2 μ	Sol	Absorp.	Whittaker	JCP	17 (1949)	188	
VF ₄ ⁻	Vanadium tetra- fluoride	-	S	Freq	Peacock	JCS	- (1959)	2762	
VF ₄ ⁻	Vanadium (III)- complex fluoro ion	-	S	Freq	Peacock	JCS	- (1959)	2762	
VO ₃ Na ₄ H ₂ O	Sodium vanadate tetrahydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135	
VO ₄ K ₃	Potassium ortho- vanadate	290-650	S	Assign	Duval	CPR	239 (1954)	249	
VO ₅ S	Vanadyl sulfate	0.5-1.4 μ 1000	Sol S	Study Group freq	Pfund Barracough	JOSA JCS	29 (1939) - (1959)	56 3552	
V ₂ O ₅	Vanadium pentoxide	0.4-8 μ 1000	S S	IR Group freq	Baros Barracough	ZP JCS	126 (1949) - (1959)	721 3552	
<u>W COMPOUNDS</u>									
WC ₆ O ₆	Tungsten carbonyl	2-15 μ	S	Spec, Group freq	Sheline	JACS	72 (1950)	5761	
WC ₈ N ₈ K ₃	Tungsten (V) cyanide complex (potassium salt)	2-32 μ	S	Spec, I	Brame	JINC	6 (1958)	99	
WC ₈ N ₈ K ₃ ·2H ₂ O	Tungsten (V) cyanide complex dihydrate (potassium salt)	2-32 μ	S	Spec, I	Brame	JINC	6 (1958)	99	

WC ₈ K ₈	Tungsten (IV) cyanide complex (potassium salt)	2-32 μ	S	Spec, I	Brame	JINC	6 (1958)	99
WC ₈ K ₄ .2H ₂ O	Tungsten (IV) cyanide complex (potassium salt) dihydrate	2-32 μ -	S S,Sol	Spec, I Spec	Brame Fabbri	JINC AAN	6 (1958) 25 (1958)	99 299
WC ₉ H ₈ O ₃	Tungsten carbon- monoxide cyclo- pentadiene methyl complex	450-4000	Sol	Spec, Freq	Piper	JINC	3 (1956)	104
WC ₁₀ H ₁₀ O ₃	Tungsten carbon- monoxide cyclo- pentadiene ethyl complex	450-4000	Sol	Spec, Freq	Piper	JINC	3 (1956)	104
WC ₁₀ H ₁₂	Cyclopentadienyl tungsten hydride	-	S	Struct, Spec	Fritz	ZN	156 (1960)	419
WC ₁₃ H ₁₃ N ₃ O ₅ S ₃	Tungsten (VI) hydroxide pyridine complex isothio- cyanate	-	S	Group freq	Mitchell	JCS	- (1960)	1912
WH	Tungsten hydride	-	-	FC, Bond dist.	Platt	JCP	18 (1950)	932
WF ₄	Tungsten tetra- fluoride	-	S	Freq, Struct	Peacock	JCS	- (1959)	2769
WF ₆	Tungsten hexa- fluoride	2-40 μ 400-5000 - - 772 -	G G - - - -	Spec, Assign Spec, Assign FC Freq Stretch freq FC Jahn-Teller effect	Burke Gaunt Gaunt Matraw Hahn Califano Weinstock	JCP TFS TFS JCP JCP AAN JCP	20 (1952) 49 (1953) 50 (1954) 23 (1955) 24 (1956) 25 (1958) 31 (1959)	447 1122 546 985 921 284 262

WF_7^-	Tungsten (VI) complex fluoro ion	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
WO_3	Tungstic anhydride	350-700	-	Freq, Assign	Yatsenko	IANS	22 (1958)	1456
WO_4^{--}	Tungstate ion	-	-	Struct FC	Woodward Pistorius	TFS JCP	52 (1956) 28 (1958)	615 514
WO_4Ca	Calcium tungstate	2-16/ μ 290-650 300-880	S S S	Spec Assign Spec	Miller Duval Miller	AC CPR SA	24 (1952) 239 (1954) 16 (1960)	1253 249 135
WO_4Co	Cobaltic tungstate	290-650	S	Assign	Duval	CPR	239 (1954)	249
WO_4K_2	Potassium tungstate	2-16/ μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
WO_4Na_2	Sodium tungstate	290-650 300-880	S S	Assign Spec	Duval Miller	CPR SA	239 (1954) 16 (1960)	249 135
$WO_4Na_2 \cdot 2H_2O$	Sodium tungstate dihydrate	2-16/ μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
$W_2C_{16}H_{10}O_6$	Tungsten carbon- monoxide cyclo- pentadiene complex	2-16/ μ	S, Sol	Spec, Band freq	Wilkinson	JACS	76 (1954)	209
$W_2C_{16}H_{10}O_6$	Cyclopentadienyl tungsten (I)- μ - hexacarbonmonoxide cyclopentadienyl tungsten (I)	1700-2200	Sol	Spec, Struct	Cotton	JINC	1 (1955)	175
$YC_{24}H_{54}O_{12}P_3$	Yttrium (III)-di-n- butyl phosphate	714-5000	S	Metal ion study	Smith	JINC	9 (1959)	150

Y COMPOUNDS

YF_4^-	-	S	Freq, Struct	Peacock	JCS	- (1959)	2762
Yttrium (III) complex fluoro ion							
$YN_3O_9 \cdot 3H_2O$	700-1600	S	Freq, Assign	Ferraro	JMS	4 (1960)	99
Yttrium nitrate trihydrate							
Y_2O_3	1-8 μ	S	Spec	Coblentz	BBS	5 (1908)	159
Yttrium oxide							
$Yb^{3+}YGG$	9600-11200	S	Spec, Assign	Pappalardo	JCP	33 (1960)	1734
Ytterbium doped yttrium gallium garnet							
$ZnCO_3$	22-310 μ	S	Reflection Residual rays	Weniger Schaefer	JOSA TFS	7 (1923) 25 (1929)	517 841
Zinc carbonate							
$ZnC_2H_5O_3$	1000-1500	Sol	Freq	Goulden	SA	16 (1960)	715
Zinc glycolate							
ZnC_2H_6	-	-	FC	Thompson	PRS	160 (1937)	539
Dimethyl zinc	1-17 μ	G	Spec, Assign	Thompson	TFS	36 (1940)	797
	-	-	FC	Linnett	TFS	41 (1945)	223
	500-4500	G	Freq, Assign	Gutowsky	JCP	17 (1949)	128
	-	-	theory, FC	Sheline	JCP	18 (1950)	602

Yb COMPOUNDS

Zn COMPOUNDS

$ZnCl_2 \cdot 4N_2S_4$	Zinc (II) thiourea chloride complex	2-15 μ	S	Spec, Freq	Yamaguchi	JACS	80 (1958)	527
$ZnF_2 \cdot 4S_2$	Zinc trifluoromethane sulphenate	9-10 μ	S	Assign	Haszeldine	JCS	- (1955)	2901
$ZnCN_2$	Zinc cyanide	300-880	S	Spec	Miller	SA	16 (1960)	135
ZnH_3O_3	Zinc lactate	1000-1500	Sol	Freq	Goulden	SA	16 (1960)	715
ZnH_3Br_2O	Zinc bromide acetone system	400-4000	L	Complex	Yamada	BCSJ	33 (1960)	666
ZnH_4	Divinyl zinc	650-3500	L	Assign	Kaes	SA	15 (1959)	360
ZnH_4O	Diethyl zinc	- 650-3500	- L	FC Assign	Thompson Kaes	PRS SA	160 (1937) 15 (1959)	539 360
$ZnH_4N_2O_5$	Zinc (II)-glycine complex monohydrate	2-15 μ	S	Assign	Saraceno	JACS	80 (1958)	5018
$ZnH_4Br_2O_2S_2$	Zinc (II) DMSO complex bromide	650-4000	S	Assign, Spec	Cotton	JPC	64 (1960)	1534
$ZnH_4Cl_2N_2S_2$	Zinc (II) methyl thiourea chloride complex	2-15 μ	S	Spec	Lane	JACS	81 (1959)	3824
$ZnH_4Cl_2O_2S_2$	Zinc (II) DMSO complex chloride	650-4000	S	Assign	Cotton	JPC	64 (1960)	1534
ZnN_4^{--}	Zinc (II) tetra-cyanide complex ion	250-2200	S	Spec, Assign	Hidalgo	ANS	56A (1960)	9
$ZnN_4S_4Ba \cdot 2H_2O$	Zinc (II)-isothiocyanate complex (barium salt) dihydrate	-	S	Stretch freq	Mitchell	JCS	- (1960)	1912

ZnC ₄ N ₄ K ₄	250-2200	-	Assign	Hidalgo	CPH	249 (1959)	233
Zinc (II) cyanide complex (potassium salt)							
ZnC ₅ H ₇ O ₂	-	Sol	Group freq	Bellamy	JCS	- (1954)	4491
Acetylacetone zinc chelate							
ZnC ₆ H ₁₀ O ₂ S ₄	2.8-15 μ	S	Spec	Pearson	APS	12 (1958)	116
Ethyl zinc dixanthate							
ZnC ₆ H ₁₂ N ₂ O ₂	650-4000	S	Freq, Assign	Segnini	SA	16 (1960)	540
Zinc (II) alanine (1- and dl-) complex							
ZnC ₆ H ₁₆ N ₂ O ₄	400-1750	S	Spec, Config.	Powell	JCS	- (1959)	791
Zinc (II) ethylene-diamine complex oxalate							
ZnC ₇ H ₅ O ₂	-	S	Group freq	Bellamy	JCS	- (1954)	4491
Salicylaldehyde zinc chelate							
ZnC ₈ H ₄ F ₃ O ₂ S	-	Sol	Group freq	Bellamy	JCS	- (1954)	4491
Thenoyltrifluoro-acetone zinc chelate							
ZnC ₈ H ₁₀ Cl ₃ N ₃ ·2H ₂ O	3-14 μ	S	Freq	Gremillion	JACS	81 (1959)	6134
p-Dimethyl amino-benzene diazonium chloride zinc chloride dihydrate							
ZnC ₁₀ H ₁₄ Br ₂ N ₂ O ₂ C ₄	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
Zinc (II)- γ -Bromo-allyl glycine complex							
ZnC ₁₀ H ₁₄ Cl ₂ N ₂ O ₂ C ₄	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
Zinc (II)- γ -chloroallyl glycine complex							

$ZnC_{10}H_{14}O_4$	Zinc acetyl acetate	600-5000	S	Spec, Struct	West	JINC	5 (1958)	295
$ZnC_{10}H_{16}N_2O_4$	Zinc (II)-allyl glycine complex	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$ZnC_{10}H_{18}O_2S_4$	Butyl zinc dixanthate	2.8-15 μ	S	Spec	Pearson	APS	12 (1958)	116
$ZnC_{10}H_{12}N_2O_8Na_2 \cdot 3.5H_2O$	Zinc (II)-EDTA complex (sodium salt) 3.5 hydrate	800-1800	S	Freq, Assign	Sawyer	JACS	81 (1959)	816
$ZnC_{12}H_{18}N_2O_4$	Zinc (II)-2- pyridine carboxylic acid chelate	-	-	Struct	Lumme	SK	31B (1958)	294
$ZnC_{12}H_{10}N_2S_2$	Zinc (II) pyridine isothiocyanate complex	-	S	Assign	Mitchell	JCS	- (1960)	1912
$ZnC_{12}H_{20}N_2O_4$	Zinc (II)- γ -methyl allyl glycine complex	2-15 μ	S	Assign	Moreno	SA	16 (1960)	1368
$ZnC_{12}H_{36}Cl_2O_{14}S_6$	Zinc (II)-DMSO perchlorate complex	650-4000	S	Spec, Assign	Cotton	JPC	64 (1960)	1534
$ZnC_{14}H_{10}O_4$	Zinc tropolonate	-	S, Sol	Band freq	Bryant	JOC	19 (1954)	1889
$ZnC_{14}H_{20}O_4$	Zinc (II)-methacroyl acetone complex	1200-1800	S	Assign	Charette	SA	16 (1960)	689
$ZnC_{16}H_{28}O_4$	Zinc (II)-pivaloyl acetone complex	1200-1800	S	Assign	Charette	SA	16 (1960)	689
$ZnC_{18}H_{12}N_2O_2$	8-Hydroxyquinoline zinc chelate	- 8-15 μ	S S	Spec Spec	Charles Charles	AC SA	25 (1953) 8 (1956)	530A 1

ZnC ₂₀ H ₁₂ N ₂ O ₄	-	-	Struct	Lumme	SK	31B (1958)	294
Zinc (II)-8-quinoline carboxylic acid chelate							
ZnC ₂₀ H ₁₆ N ₂ O ₂	8-15 μ	S	Assign	Charles	SA	8 (1956)	1
2-Methyl-8-hydroxy quinoline zinc chelate							
ZnC ₂₀ H ₁₆ N ₂ O ₂	8-15 μ	S	Assign	Charles	SA	8 (1956)	1
4-Methyl-8-hydroxy quinoline zinc chelate							
ZnC ₂₀ H ₂₂ O	-	S	Group freq	Bryant	JOC	19 (1954)	1889
Zinc- γ -isopropyl tropolonate							
ZnC ₂₀ H ₂₈ Cl ₄ N ₆	3-14 μ	S	H bond	Gremillion	JACS	81 (1959)	6134
p-Di-(diethylamino-benzene diazonium chloride) zinc chloride							
ZnC ₂₀ H ₂₈ Cl ₄ N ₆ ·2H ₂ O	3-14 μ	S	H bond	Gremillion	JACS	81 (1959)	6134
p-Di-(diethylamino-benzene diazonium chloride) zinc chloride dihydrate							
ZnC ₃₂ H ₁₆ M ₈	3-15 μ	S	Spec	Ebert	JACS	74 (1952)	2806
Zinc phthalocyanine							
ZnC ₃₆ H ₂₄ Cl ₂ N ₆ O ₈	600-2000	S	Spec	Schilt	JINC	9 (1959)	211
Zinc (II)-1:10-phenanthroline complex perchlorate							
ZnC ₃₆ H ₇₀ O ₄	2-14 μ 6-8 μ	- S	Spec Spec	Sheppard Ellis	TFS M	41 (1945) 181 (1958)	261 181
Zinc stearate							
ZnC ₇₂ H ₆₀ Cl ₂ O ₂ P ₁₂	900-1300	S	Group freq	Cotton	JCS	- (1960)	2199
Zinc (II) perchlorate triphenylphosphine oxide complex							

$Zn^{C}_{18}H_{30}O_4$	Zinc polymethacroyl acetone complex	1200-1800	S	Assign	Charette	SA	16 (1960)	689
ZnH	Zinc hydride	-	-	Doubling theory Thermo.	Mulliken	PR	38 (1931)	85
		-	-	FC, Bond dist.	Hulburt	JCP	9 (1941)	61
		-	-	FC, Bond dist.	Platt	JCP	18 (1950)	932
		-	-		Sheline	JCP	18 (1950)	927
ZnH^+	Zinc hydride ion	-	-	Coupling constant	Pekeris	PR	45 (1934)	98
ZnH_2NO_3P	Zinc phosphoramidate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
ZnH_4F_3N	Ammoniumfluoride zinc fluoride	1400-4000	S	Spec	Crocket	JACS	82 (1960)	4158
$ZnH_4N_2O_5S$	Zinc sulfamate	-	-	Freq, Assign	Bicelli	AC	47 (1957)	1380
ZnH_8Cl_2N	Zinc (II)-hydrazine chloride complex	15-35 μ	-	Thermo.	Sacconi	N	186 (1960)	549
ZnH_8NO_4P	Zinc diamido-phosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909
$ZnH_{12}N_4$	Tetrammine zinc (II) ion	-	-	Group freq	Leonard	JACS	77 (1955)	2029
$ZnH_{18}N_6$	Hexammine zinc ion	-	-	FC, Absorption, Freq	Schultz	JCP	10 (1942)	1942
$ZnBr_2$	Zinc bromide	0.6-2.8 μ 2.8-6 μ	Sol	Assign	Gordy	JCP	2 (1934)	621
		1.5-2.8 μ 4.75 μ	-	Spec, Assign	Plyler	JCP	2 (1934)	470
			Sol	Assign	Barr	JCP	4 (1936)	92
			-	Absorption	Barr	JCP	7 (1939)	8
$ZnCl_2$	Zinc chloride	0.6-2.8 μ 2.8-6 μ 1.5-2.8 μ	Sol	Assign	Gordy	JCP	2 (1934)	621
			Sol	Spec, Assign	Plyler	JCP	2 (1934)	470
			-	Assign	Barr	JCP	4 (1936)	92
ZnF_4^{-2}	Zinc (II) fluoride complex ion	-	S	Freq	Peacock	JCS	- (1959)	2762

ZnF ₄ K ₂	Zinc (II)-fluoride complex (potassium salt)	300-1500	S	Spec	Lecomte	CPR	249 (1959)	1991
ZnF ₆ Si ₆	Zinc fluorosilicate	488-735	-	Band	deLatre	JCP	20 (1952)	1180
ZnI ₂	Zinc iodide	50-150 μ	Sol	Absorp. Freq	Cartwright	JCP	5 (1937)	776
ZnN ₂ O ₆	Zinc nitrate	0.8-2.3 μ 2-16 μ 2-15 μ	Sol S S	Spec Spec Spec	Collins Meloche Addison	PR JINC JCS	20 (1922) 6 (1958) - (1960)	486 104 613
ZnN ₂ O ₆ .6H ₂ O	Zinc nitrate hexahydrate	700-1600 300-880	S S	Absorp. Freq Spec	Ferraro Miller	JMS SA	4 (1960) 16 (1960)	99 135
ZnO	Zinc oxide	1-8 μ 1-2 μ 6.7-33 μ 1-4 μ 0.5-2.4 μ 0.6-9.0 μ - 0.4-4 μ - - 1-13 μ 1-4 μ 1-12 μ 1200-2000	S G G S S S - S - - S S S S	Emission Transmission Transmission Filter Transmission Refr. ind. Scattering Spec Absorp. Spec Freq Spec Spec Spec	Coblentz Pfund Strong Leberknight Pfund Pfund Gamble Barnett Filimonov Miloslauskii Armeth Collins Thomas Matsustuta	BBS PR PR PR JOSA JOSA IEC JPC OS OS ZP PCS PCS JCP	5 (1908) 36 (1930) 37 (1931) 43 (1933) 24 (1934) 26 (1936) 9 (1937) 46 (1942) 5 (1958) 5 (1958) 155 (1959) 11 (1959) 10 (1959) 32 (1960)	159 71 1565 967 143 230A 310 69 709 614 595 190 47 982
ZnO ₃ S ₂ H ₂ O	Zinc sulphate dihydrate	2-16 μ 300-880	S S	Spec Spec	Miller Miller	AC SA	24 (1952) 16 (1960)	1253 135
ZnO ₄ S	Zinc sulphate	0.8-2.3 μ 8-11 μ 7.5-10.5 μ	Sol L S	Solute effect Reflection Spec	Collins Plyler TaiHan	PR PR AC	20 (1922) 28 (1926) 29 (1957)	486 284 1430
ZnO ₄ S ₇ H ₂ O	Zinc sulphate heptahydrate	- 2-16 μ	S S	Spec Compar.	Hafele Meloche	ZP JINC	148 (1957) 6 (1958)	262 104

$Zn_2HNO_3P_6$	Zinc imidodiphosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909	
$Zn_2H_2N_2O_2P_8Na_3$	Zinc diimidotriphosphate (chain)	650-5000	S	Spec	Pustinger	SA	15 (1959)	909	
$Zn_2O_3P_4Na$	Dizinc sodium triphosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909	
$Zn_2O_3P_4Na \cdot 9H_2O$	Dizinc sodium triphosphate nonahydrate	2-15 μ	S	Group freq, I	Corbridge	JCS	- (1954)	493	
$Zn_3OH_4O_7 \cdot 2H_2O$	Basic zinc carbonate	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478	
$Zn_3O_3P_8$	Zinc phosphate	650-5000	S	Spec	Pustinger	SA	15 (1959)	909	
$Zn_3O_3P_8 \cdot 4H_2O$	Zinc phosphate tetrahydrate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104	
$Zn_5C_2O_{11} \cdot 4H_2O$	Basic zinc carbonate tetrahydrate	2-16 μ	S	Spec	Meloche	JINC	6 (1958)	104	
<u>Zr COMPOUNDS</u>									
$ZrC_8H_{18}O_5P$	Zirconyl-di-n-butyl phosphate	714-5000	S	Metal ion	Smith	JINC	9 (1959)	150	
$ZrC_{10}H_{10}Br_2$	Zirconium (IV)-cyclopentadiene complex bromide	- 2-15 μ	- S	Struct Spec	Wilkinson Wilkinson	JACS JACS	75 (1953) 76 (1954)	1011 4281	
ZrH	Zirconium hydride	-	-	FC, Bond dist.	Platt	JCP	18 (1950)	932	
ZrF ₄	Zirconium tetrafluoride	-	S	Freq	Peacock	JCS	- (1959)	2762	

ZrO ₂	Zirconium oxide	1-8 μ	S	Spec	Coblentz	BBS	5 (1908)	159
ZrO ₃ Ba	Bariumzirconate	350-700	-	Freq, Assign	Yatsenko	IANS	22 (1958)	1456
ZrO ₃ Pb	Lead zirconate	350-700	-	Freq, FC	Yatsenko	IANS	22 (1958)	1456
ZrO ₃ Sr	Strontium zirconate	350-700	-	Freq, FC	Yatsenko	IANS	22 (1958)	1456
ZrO ₄ Si	Zircon	1-4 μ 22-310 μ	S	Spec	Coblentz	BBS	6 (1910)	301
		-	S	Transmission	Weniger	JOSA	7 (1923)	517
		8-12 μ	S	Spec	Pirani	JSI	16 (1939)	372
		-	S	Spec	Pfund	JOSA	35 (1945)	611
		-	-	Struct	Matossi	JCP	17 (1949)	679

III. Polymeric Compounds



Formula	Name	Range	State	Remarks	Reference
$(\text{CH}_2)_n \text{C}_{10}^{\text{H}_8\text{Fe}}$	Polyethylene ferrocene	-	-	Bands, Discussion	DANS 125 (1959) 1037
$(\text{CH}_2\text{O})_n$	Formaldehyde polymer	6-12 μ	S	Spec, Compar. with monomer	TFS 52 (1956) 13
		300-4000	S	Spec, Assign, Struct NCA	TFS 55 (1959) 1484 SA 16 (1960) 1233
$(\text{CH}_2\text{O})_n$	Polyformaldehyde-d ₂	300-4000	S	Spec, Assign, Struct	TFS 55 (1959) 1484
$(\text{C}_2\text{H}_2\text{D}_2)_n$	Polyethylene-d ₂	5.58-6 μ	S	Oxidation study	JPS 45 (1960) 451
$(\text{C}_2\text{H}_2\text{Br}_2)_n$	Polyvinylidene bromide	400-3100	S	Spec, Assign	JPS 37 (1959) 251
$(\text{C}_2\text{H}_2\text{Cl}_2)_n$	Polyvinylidene chloride	500-1500 600-1500 2800-3500 2.5-100 μ	S - S -	Spec Spec Spec, Struct Abstract, Assign, Struct	PRS 184 (1945) 21 TFS 41 (1945) 246 PRS 199 (1949) 183 PR 98 (1954) 1547
		70-3000 400-3100 500-1500	S S S	Spec, Assign Spec, Assign Spec, Assign	JPS 22 (1956) 95 JPS 37 (1959) 251 JAPP 4 (1960) 69
$(\text{C}_2\text{H}_2\text{Cl}_2\text{O})_n$	Polydichloroacetaldehyde	300-4000	S	Spec, Assign	CJC 37 (1959) 1722
$(\text{C}_2\text{H}_3\text{D})_n$	Polyethylene-d ₁	5.58-6 μ	S	Oxidation study	JPS 45 (1960) 451
$(\text{C}_2\text{H}_3\text{DO})_n$	Polyacetaldehyde-d ₁	300-4000	S	Spec, Assign	CJC 37 (1959) 1710
$(\text{C}_2\text{H}_3\text{DO})_n$	Polyvinyl alcohol-d ₁	2-13 μ	S	Spec, Assign	JCP 23 (1955) 1351
		-	-	OD def. freq	JCP 25 (1956) 778
		-	-	Spec, Assign	BCSJ 32 (1959) 1252
$(\text{C}_2\text{H}_3\text{Br})_n$	Polyvinyl bromide	500-3100	S	Spec, Assign	JPS 37 (1959) 273

$(C_2H_3Cl)_n$	Polyvinyl chloride	2.2-14.8 μ	S	Spec, Freq	Sears	JAP	12 (1941)	35
		500-1500	S	Spec	Thompson	PRS	184 (1945)	21
		600-1500	-	Spec	Thompson	TFS	41 (1945)	246
		2800-3500	S	Spec, Struct	Ambrose	PRS	199 (1949)	183
		700-2000	S	Cooling effect on spec	King	JAP	20 (1949)	559
		2-15 μ	-	Spec, Struct	Cotman	ANN	57 (1953)	417
		2-15 μ	S	Spec, Assign	Campbell	JPS	18 (1955)	461
		2-14 μ	S	Spec, Reduction study	Cotman	JACS	77 (1955)	2790
		70-3000	S	Spec, Assign	Krimm	JPS	22 (1956)	95
		2-15 μ	-	Spec	Schurz	MC	23 (1957)	152
		650-5000	S	Changes in struct	Berch	JRNB	60 (1958)	481
		600-700	S	C-Cl freq	Berens	CIL	- (1958)	1512
		2-15 μ	S	Reduction study	George	CIL	- (1958)	1114
		-	S	O.D.	Grisenthwaite	CIL	- (1958)	719
		-	S	C-Cl freq, Struct	Krimm	CIL	- (1958)	1512
		2-15 μ	S	Spec, Decomp. study	Stromberg	JRNB	60 (1958)	147
		2-7 μ	S	Stabilization of the polymer	Frye	JPS	40 (1959)	419
		-	-	C-Cl freq, Struct	Grisenthwaite	CIL	- (1959)	433
		800-3000	-	Spec	Kawasaki	BCSJ	32 (1959)	1149
		580-720	S	Spec, C-Cl freq	Krimm	CIL	- (1959)	433
		500-3100	S	Spec, Assign	Narita	JPS	37 (1959)	273
		-	-	Thermal ageing study	Pirozhnaya	IANS	23 (1959)	1202
		600-700	-	C-Cl freq, Struct	Shimanouchi	JCP	30 (1959)	1365
		612-690	S	Spec, Freq, Struct	Asahina	NKZ	81 (1960)	1011
		-	S	Temp. effect on C-Cl	Asahina	NKZ	81 (1960)	1370
		-	-	Spec, Assign	Asahina	NKZ	81 (1960)	1374
		400-900	S	Spec, Crystallinity	Kawai	JPS	46 (1960)	273
		500-1500	S	Spec, Assign	Nambu	JAPP	4 (1960)	69
$(C_2H_3ClO)_n$	Polymonochloroacetaldehyde	300-4000	S	Spec, Assign	Novak	CJC	37 (1959)	1722
$(C_2H_3FO_2S)_n$	Polyvinyl sulfonyl fluoride	1-15 μ	S	Spec	Kern	MC	39 (1960)	1
$(C_2H_3NO)_n$	Polyglycine	700-1700 1200-3500	S -	Spec, Struct Line spec	Astbury Thompson	N DFS	162 (1948) 9 (1950)	596 222

	1500-3400	S	Spec, Struct	Ambrose	PRS	205	(1951)	47
	4400-5000	S	Spec	Ambrose	PRS	206	(1951)	206
	-	-	C=O, N-H freq, Struct	Ambrose	JACS	74	(1952)	1946
	4000-6500	S	Spec, Bands, Struct	Hurd	JACS	75	(1953)	624
	2.5-14 μ	S	Spec, Group freq	Becher	JACS	76	(1954)	3707
	1300-1800	S	Spec	Elliot	PRS	221	(1954)	104
	-	S	C=O, N-H freq, Struct	Elliot	PRS	226	(1954)	408
	800-3000	S	Spec	Elliot	TFS	50	(1954)	1013
	-	-	Struct	Fraser	JCP	24	(1956)	89
	2 μ	S	Freq, Dichroism	Oro	N	186	(1960)	156
	1015-1690	S	Bands					
	650-4000	S	Spec, Struct	Blout	JACS	74	(1952)	1946
(C ₂ H ₃ NO) _n OCH ₃								
Polyglycine methyl ester								
(C ₂ H ₃ NO) _n								
Polyvinyl nitrate	70-3600	S	Assign, Dichroism	Krimm	JAP	29	(1958)	1407
(C ₂ H ₃ NO) _n								
Polyethylene (polythene)	2-18 μ	S	Spec	Thompson	PRS	184	(1945)	3
	600-1800	S	Spec, Assign	Thompson	TFS	41	(1945)	246
	2800-3500	S	Spec, Struct	Ambrose	PRS	199	(1949)	183
	-	-	NCA	Kellner	N	163	(1949)	877
	700-2000	S	Cooling effect on spec	King	JAP	20	(1949)	559
	700-3450	S	Oxidation study	Cross	DFS	9	(1950)	235
	-	-	Interpretation of spec	Kellner	PRS	64	(1951)	521
	2-15 μ	-	Spec	Cotman	ANN	57	(1953)	417
	3.3-15.0 μ	S, Sol	Spec, Polyethylene resins study	Rugg	JPS	11	(1953)	1
	667-5000	S	Spec, Assign	Smook	IE	45	(1953)	273
	10.2-11.8 μ	S	Irradiation effect	Dole	JACS	76	(1954)	4304
	725	S	Crystallinity	Keller	JPS	13	(1954)	511
	13.7 μ	S	Crystallinity study	Reding	JAP	25	(1954)	848
	2.5-12 μ	S	Spec, Oxidation study	Rugg	JPS	13	(1954)	535
	2.6-3.2 μ	-	Spec, Oxidation study	Burnett	JPS	15	(1955)	592
	725	S	Struct	Keller	JPS	15	(1955)	133
	2-14 μ	S	Spec, Assign	Rossmann	JCP	23	(1955)	1355
	-	S	Assign	Ferguson	JCP	24	(1956)	1115
	13.8 μ	S	Spec, Temp. effect	Fischer	NWS	43	(1956)	223
	70-3000	S	Spec, Assign	Krimm	JCP	25	(1956)	549
	650-3500	S, L	Spec, Crystallinity	Tobin	JCP	25	(1956)	1044
	-	-	Config	Dole	JACS	79	(1957)	4809
	700-5800	S	Spec, Assign	Nielsen	JCP	26	(1957)	1391

$(C_2H_6Si)_n$	Polyvinylsilane	2-16 μ	-	Spec	Brinckman	JINC	11 (1959)	24
$(C_2H_6Ge)_n$	Polyvinylgermane	2-16 μ	S	Spec	Brinckman	JINC	11 (1959)	24
$(C_2D_2Cl_2)_n$	Polyvinylidene chloride	400-5000	S	Spec, Assign	Narita	JPS	37 (1959)	263
$(C_2D_3Cl)_n$	Polyvinyl chloride-d ₃	700-2400	S	Spec, Assign	Narita	JPS	37 (1959)	281
$(C_2D_3NO)_n$	Polyglycine-d ₃	650-4000	S	Spec	Blout	NKZ	81 (1960)	1374
$(C_2ClF_3)_n$	Polychlorotrifluoroethylene	70-4000 450-1300 440-1290	S S S	Spec, Assign, NCA Crystallinity study Crystallinity study	Liang Matsuo Matsuo	JCP JPS JPS	25 (1956) 21 (1956) 25 (1957)	2082 1548 563 331 234
$(C_2F_4)_n$	Polytetrafluoroethylene	2.0-14.5 μ 2.5-100 μ 70-4000 2.5-8 μ 270-5000	S - S S S	Spec Abstract, Freq, Struct Spec, Assign, NCA End groups study Spec, Crystallinity	Hanford Liang Liang Bro Moynihan	JACS PR JCP JPS JACS	68 (1946) 98 (1954) 25 (1956) 38 (1959) 81 (1959)	2082 1548 563 289 1045
$(C_3H_3D_3)_n$	Polypropylene-3,3, 3-d ₃	650-4000	S	Spec	Liang	JPS	44 (1960)	549
$(C_3H_5N)_n$	Polyacrylonitrile	- 2-14 μ - 2-15 μ 70-3200 1-15 μ 2.5-15 μ 2.5-14.4 μ	- G,S - - S - S S	Group freq Spec, Pyrolysis study Spec, Assign, Saponification Spec Spec, Assign Spec Abs. bands, Struct Spec	Drummond Burlant Bayzer Schurz Liang Schulz Arthur Furukawa	JCS JPS ZPC MC JPS MC JPC MC	- (1954) 22 (1956) 13 (1957) 23 (1957) 31 (1958) 29 (1959) 64 (1960) 38 (1960)	2456 249 30 152 513 190 1332 244
$(C_3H_5NO)_n$	Acrylonitrile polymeric peroxide	2-15 μ	-	Spec	Smeltz	JACS	74 (1952)	623
$(C_3H_4D_2)_n$	Polypropylene-1,1-d ₂	650-4000	S	Spec	Liang	JPS	44 (1960)	549

$(C_3H_4O)_n$	Polyacrolein	2-15 μ 1-15 μ	- -	Spec Spec	Schurz Schulz	MC MC	23 (1957) 29 (1959)	152 190
$(C_3H_4O_2)_n$	Polyacrylic acid	2-15 μ -	- -	Spec Spec, Struct	Schurz Simon	MC JPS	23 (1957) 30 (1958)	152 201
$(C_3H_4O_2)_n$	Polyvinyl formate	2800-3500	S	Spec, Struct	Ambrose	PRS	199 (1949)	183
$(C_3H_5)_n C_4H_5O_2 Mg$ acetato magnesium	Polymethacryl- acetato magnesium	1200-1800	S	IR shifts, Assign, Stability const	Charette	SA	16 (1960)	689
$(C_3H_5)_n$ - $C_4H_5O_2 Mn$	Polymethacryl- acetato manganese	1200-1800	S	IR shifts, Assign, Stability const	Charette	SA	16 (1960)	689
$(C_3H_5)_n$ - $C_4H_5O_2 Ni$	Polymethacryl- acetato nickel	1200-1800	S	IR shifts, Assign, Stability const	Charette	SA	16 (1960)	689
$(C_3H_5)_n C_4H_5O_4 U$	Polymethacryl- acetato uranyl	1200-1800	S	IR shifts, Assign, Stability const	Charette	SA	16 (1960)	689
$(C_3H_5D)_n$	Polypropylene-2-d ₁	650-4000	S	Spec	Liang	JPS	44 (1960)	549
$(C_3H_5DO)_n$	Polypropionaldehyde-d ₁	300-4000	S	Spec, Assign	Novak	CJC	37 (1959)	1710
$(C_3H_5NO)_n$	Polyacrylamide	2-15 μ 2-15 μ	- -	Spec Spec	Schulz Schurz	MC MC	12 (1954) 23 (1957)	20 152
$(C_3H_5NO)_n$	Poly-L-alanine	700-1700 1500-1700	S S	Spec, Struct Spec, Assign	Astbury Elliot	N A	162 (1948) 221 (1954)	596 104
		-	S	C=O, N-H freq, Struct	Elliot	PRS	221 (1954)	104
		800-3000	S	Spec, Struct	Elliot	PRS	226 (1954)	408
		1200-1300	S	Spec, Band	Asai	JPC	59 (1955)	322
		2 μ	S	Freq, Dichroism	Fraser	JCP	24 (1956)	89
		700-4000	S	Struct	Elliot	N	180 (1957)	1340
$(C_3H_5NO)_n$	Poly-DL-alanine	- -	S -	Effect of H ₂ O on struct C=O, N-H freq, Struct, effect of water	Elliot Elliot	N PRS	170 (1952) 221 (1954)	1066 104

	800-3000 2-16 μ	S	Spec	Group freq, I	Elliot Asai	PRS JPC	226 (1954) 59 (1955)	408 322
(C ₃ H ₅ NO) _n	-	-	Group freq		Berger	JACS	76 (1954)	5552
(C ₃ H ₅ NOS) _n	600-4000	S	Spec, Ident		Sakakibara	BCSJ	29 (1956)	85
(C ₃ H ₅ NO ₂) _n	-	S	Amide I, Amide II bands, Struct		Blout	JACS	82 (1960)	3787
	-	S, Sol	Struct		Fasman	JACS	82 (1960)	2262
Polypropylene	700-3000	-	Spec		Pokrovskii	DANS	115 (1957)	552
	800-1400	S	Spec of melted films		Abe	JPS	36 (1959)	536
	660-5000	-	Charges on electron irradiation		Black	PRS	253 (1959)	322
	-	S	Spec, Freq, Struct		Pokrovskii	IANS	23 (1959)	1208
	700-1400	S	Crystallinity		Heinen	JPS	38 (1959)	545
	3-15 μ	S	Spec, Struct		Peraldo	GCI	89 (1959)	798
	8-13 μ	S	Struct, Tacticity		Erader	JAPS	3 (1960)	370
	2-15 μ	S	Spec		Gossl	MC	42 (1960)	1
	650-6000	S	Spec, Assign		Liang	JMS	5 (1960)	290
	650-4000	S	Spec		Liang	JPS	44 (1960)	549
	600-1800	S	Spec, Tacticity		Luongo	JAPS	3 (1960)	302
	300-3100	S	Spec, Assign		Tobin	JPC	64 (1960)	216
Polymethyl ethylene oxide	700-1500	S	Spec		Ishida	BCSJ	33 (1960)	924
Polypropionaldehyde	300-4000	S	Spec, Assign		Novak	CJC	37 (1959)	1710
Polypropylene glycol	2-15 μ	L	Ident, Spec, Anal		Corish	AC	31 (1959)	1298
Polypropylene oxide	833-3420 650-3300	S, Sol S	Abs, Bands Spec, Assign, Rot iso.		Price Kawasaki	JACS POL	78 (1956) 1 (1960)	4787 315
Polyethylene formal	7-14 μ	S	CH ₂ rocking freq		Miyake	JACS	82 (1960)	3040
Polyvinyl methane- sulfonate	-	S	Group freq		Sauer	JACS	77 (1955)	3793

$(C_3F_7NO)_n$	Tetrafluoroethylene-trifluoronitrosomethane copolymer	-	L	Bands	Barr	JCS	- (1955)	1881
$(C_4HF_7)_n$	Tetrafluoroethylene-trifluoroethylene copolymer	8-12 μ	S	Spec	Iwasaki	JPS	26 (1957)	116
$(C_4H_3NO_2)_n$	Poly-L-Succinimide	-	-	Spec	Noguchi	NKZ	81 (1960)	620
$(C_4H_4)_n$	Polyvinyl acetylene	3.04-11.08 μ	L	Abs. bands	Price	JPS	41 (1959)	445
$(C_4H_4D_2)_n$	Polybutadiene-2,3-d ₂	450-3500	S	Spec, Assign	Golub	SA	16 (1960)	1165
$(C_4H_4Cl_2)_n$	Poly-2,3-dichlorobutadiene	3-15 μ	S	Spec	Mochel	JACS	71 (1949)	4082
$(C_4H_4O_2)_n$	Polyvinyl aceto- β -lactone	2.5-15 μ	S	Spec, Struct	Kawasaki	MC	42 (1960)	25
$(C_4H_5D)_n$	Polybutadiene-2-d ₁	450-3500	S	Spec, Assign	Golub	SA	16 (1960)	1165
$(C_4H_5Cl)_n$	Neoprene	2.2-14.8 μ 500-1500 2-15 μ 3-20 μ 2-16 μ 600-3700	S S S S - -	Spec, Freq Spec Spec, Anal Spec, Crystallinity Spec, Charact. freq Spec	Sears Thompson Dinsmore Mochel Harms Cheverley	JAP PRS AC JACS AC APS	12 (1941) 184 (1945) 20 (1948) 71 (1949) 25 (1953) 10 (1960)	35 21 11 4082 1140 192
$(C_4H_5Cl_3)_n$	Polyvinylchloride-vinylidenechloride (1:1) copolymer	600-1700 70-3000 400-4000	S S S	Spec Spec Spec, Struct	Thompson Krimm Narita	TFS JPS JPS	41 (1945) 22 (1956) 36 (1959)	246 95 389
$(C_4H_5N)_n$	Polymethacrylonitrile	650-4000 2-15 μ 1640-1675 2-15 μ	- - S -	Spec Spec Bands Spec	Beaman Schurz Overberger Skoda	JACS MC JPS MC	70 (1948) 23 (1957) 34 (1959) 29 (1959)	3115 152 109 156
$(C_4H_5NO_3)_n$	Poly-L-aspartic acid	1000-1800	S	Spec	Berger	JACS	73 (1951)	4084

$(C_4H_6)_n$	Buna-85 rubber	700-900 600-2000 600-1800	- - S	Spec, Review Spec Spec	Thompson Thompson Thompson	JCS PRS TFS	- 184 41	(1944) (1945) (1945)	183 3 246
$(C_4H_6)_n$	Polycyclopropane	600-3200 3.2-10 μ	S S	Spec, Bands Struct	Ivin Hodgkins	JCS JOC	- 23	(1956) (1958)	2241 1369
$(C_4H_6)_n$	Polybutadiene	800-3000 800-3600 - 900-1000 600-2000 914-996	S - - Sol S -	Spec, Struct Spec, Oxidation Struct Spec, Struct Spec Struct	Field Cole D'Ianni Hart Treuemann D'Ianni Simpson	JAP IE IE JACS AC IE JACS	17 39 40 71 21 42 73	(1946) (1947) (1948) (1948) (1949) (1950) (1951)	386 174 253 1980 1161 95 5363
		13.6-15.0 μ	-	Conjugation, Internal dispersion forces Spec, Anal Composition Ident Spec, Unsaturation distribution	Binder Binder Anderson Silas	AC IE JPC AC	26 46 63 31	(1954) (1954) (1959) (1959)	1877 1727 765 529
$(C_4H_6)_n$	1,2-Polybutadiene	- 2-15 μ	Sol -	Struct Spec, Assign Struct	Gaylord Golub Kuntz	JPS SA JPS	42 16 42	(1960) (1960) (1960)	417 1165 299
$(C_4H_6)_n$	cis-1,4-Polybutadiene	900-1400	L,Sol, S	Anal Spec	Small Moreno	AC	31	(1959) (1960)	478 136
$(C_4H_6)_n$	trans-1,4-Polybutadiene	-	Sol	Struct	Natta Cunneen	ANC JPS	68 40	(1956) (1959)	615 1
$(C_4H_6O)_n$	Polybutadiene monoxide	650-3300	S	Spec, Assign	Kawasaki	POL	1	(1960)	315
$(C_4H_6O)_n$	Poly-2,3-dihydrofuran	-	-	Abs. bands, Struct	Barr	JCS	-	(1954)	3766
$(C_4H_6O)_n$	Polydimethylketene	2.5-14 μ	S,Sol	Spec, Struct	Natta	JACS	82	(1960)	4742

$(C_4H_6O_2)_n$	Polymethacrylic acid	2-8 μ	Sol	Spec	Ehrlich	N	172 (1953)	671
$(C_4H_6O_2)_n$	Polymethyl acrylate	600-3200 3-13 μ	- S	Spec Spec, Ident	Thompson Boyer	TFS BSCF	41 (1945) - (1958)	246 240
$(C_4H_6O_2)_n$	Polyvinyl acetate	500-3200 2800-3500	- S	Spec Spec, Struct Spec, Assign, Polymerization study	Thompson Ambrose Simon	TFS PRS JPS	41 (1945) 199 (1949) 30 (1958)	246 183 201
$(C_4H_7ClO_3)_n$	Ethyl chloropoly-ethylene sulfonate	2-15 μ	S	Spec	Smook	IE	45 (1953)	2731
$(C_4H_7NOS)_n$	Poly-S-methyl-L-cysteine		S	Amide I and II bands, Struct	Blout	JACS	82 (1960)	3787
$(C_4H_8)_n$	Polyisobutene	700-1900 600-1800 2-14 μ 650-1100 11 μ	S S L - S	Spec Spec, Assign Reaction mechanism Abs. bands Spec, Irradiation Spec, Polymerization Spec	Thompson Thompson Dainton Flett Alexander Kozyreva Cheverley	PRS TFS JPS JCS PRS OS APS	184 (1945) 41 (1945) 4 (1949) - (1952) 232 (1955) 6 (1959) 10 (1960)	3 246 37 3355 31 478 192
$(C_4H_8Cl_2)_n$	Rubber dichloride	5.7-14 μ	S	Spec, Struct	Saloman	DFS	9 (1950)	291
$(C_4H_8O)_n$	Poly-isobutyraldehyde	300-4000	S	Spec, Assign	Novak	CJC	37 (1959)	1718
$(C_4H_8O)_n$	Poly-n-butyraldehyde	300-4000	S	Spec, Assign	Novak	CJC	37 (1959)	1718
$(C_4H_8O)_n$	Poly-1,1-dimethyl-ethylene oxide	700-1500	S	Spec	Ishida	BCSJ	33 (1960)	924
$(C_4D_6)_n$	Polybutadiene-d ₆	450-3500	S	Spec, Assign	Golub	SA	16 (1960)	1165
$(C_4Br_6)_n$	Polybromoprene	3-21 μ	S	Spec	Mochel	JACS	71 (1949)	4082

(C ₄ ClF ₇) _n	8-12 μ	S	Spec, Configuration	Iwasaki	JPS	26 (1957)	116
Tetrafluoroethylene-trifluoroethylene copolymer	3-16 μ	S	Spec	Mochel	JACS	71 (1949)	4082
Chlorinated neoprene (polychloroprene)	3.02-11.25 μ	L	Abs. bands	Price	JPS	41 (1959)	445
Polyisopropenyl acetylene	700-4000	S	Structure	Elliott	N	180 (1957)	1340
Sodium poly L-glutamate	-	S	Spec	Lenormant	JACS	80 (1958)	6191
Sodium poly-α, L-glutamate	-	S	Amide I and II, Struct	Blout	JACS	82 (1960)	3787
Poly-O-acetyl-L-Serine	1100-1800	S, Sol	Spec, Conformation	Fasman	JACS	82 (1960)	2262
Poly-O-acetyl-DL-Serine	-	-	Ident	Frankel	JCS	- (1953)	1991
Polyglutamic acid	-	-	Ident	Hanby	N	161 (1948)	132
Poly-L-glutamic acid	-	-	D _{C=O} , D _{NH}	Elliott	A	221 (1954)	104
Poly-α-L-glutamic acid	1300-1800	S	Spec, Config	Lenormant	JACS	80 (1958)	6191
Polyglutamic acid	1000-1800	S	Spec, Group freq	Hanby	JCS	- (1950)	3239
	-	S	Struct, CO, NH freq	Elliott	PRS	221 (1954)	104
	-	-	Struct	Waley	JCS	- (1955)	517
Polyisoprene	800-1600	S	Spec, Struct	Field	JAP	17 (1946)	386
	800-3600	-	Spec, Oxidation study	Cole	IE	39 (1947)	174
	-	-	Struct	D'Ianni	IE	40 (1948)	253
	2-15 μ	S	Spec, Struct	Binder	AC	29 (1957)	503
	800-1000	-	Spec, Config	Nelson	DANS	45 (1957)	545
	1.60-1.68 μ	Sol	Spec, Struct	Fragu	JPS	41 (1959)	522
	6-14 μ	S	Spec, Iso	Golub	JPS	36 (1959)	523

$(C_5H_8)_n$	1,4-cis-Polyisoprene	-	Struct Anal	Natta Small	ANC AC	68 (1956) 31 (1959)	615 1742
$(C_5H_8)_n$	Rubber	3.4-9 μ	Absorp	Williams	JCP	4 (1936)	460
		2.2-14.8 μ	Spec, Freq	Sears	JAP	12 (1941)	35
		600-1800	Spec, Assign	Thompson	TFS	41 (1945)	246
		800-1600	Spec, Struct	Field	JAP	17 (1946)	386
		800-3600	Spec, Oxidation study	Cole	IE	39 (1947)	174
		2-15 μ	Spec, Anal	Dinsmore	AC	20 (1948)	11
		700-2000	Cooling effect on spec	King	JAP	20 (1949)	559
		5.7-14 μ	Spec	Saloman	DFS	9 (1950)	291
		5-15 μ	Spec, Crystallinity	Sutherland	DFS	9 (1950)	281
		715-5000	Spec, Changes due to vulcanization	Salomon	JPS	14 (1954)	181
		4-20 μ	Chlorination study	Salomon	JPS	14 (1954)	287
		2-13 μ	Spec, Struct	Gupta	JPS	17 (1955)	255
		2-40 μ	Changes in struct due to vulcanization	Linning	JRNB	60 (1958)	9
		900-1400	Spec, Iso	Cumneen	JPS	40 (1959)	1
		800-1700	Effect of irradiation on spec	Evans	JAPP	2 (1959)	340
		600-3700	Spec	Kimmer	ZAC	170 (1959)	132
			Spec	Cheverley	APS	10 (1960)	192
$(C_5H_8)_n$	Polyvinylcyclopropane	2.5-15 μ	Spec, CH freq	Borchert	JPS	44 (1960)	483
$(C_5H_8Cl_2)_n$	Chlorinated rubber	2-15 μ	Struct	Ramakrishnan	JPS	19 (1956)	323
$(C_5H_8Cl_2O)_n$	Poly-3,3-bis (chloromethyl) oxetane	-	Ident	Kambara	JCSJ	59 (1956)	77
$(C_5H_8NO_2)_n$	Polyglycyl-DL-alanine	2-16 μ	Spec, Assign	Asai	JPC	59 (1955)	322
$(C_5H_8)_n$	Poly-2,3-dihydro-5-methylfuran	-	Abs. bands, Struct	Barr	JCS	- (1954)	3766
$(C_5H_8)_n$	Poly-1-methoxybutadiene	-	Struct	Heck	JPS	41 (1959)	521
$(C_5H_8O_2)_n$	Polymethyl methacrylate	500-3200	Spec	Thompson	TFS	41 (1945)	246
		650-4000	Spec	Beaman	JACS	70 (1948)	3115
		700-1900	Spec	Haslam	ANA	75 (1950)	63

$(C_5H_8O_2)_n$		1.5-2.7 μ	-	-	Anal, Spec Crystallinity	Miller	JAPC	6 (1956)	385
	Polyvinyl formal	2.0-16.0 μ	-	-	Anal	Miller	CIL	- (1958)	1323
$(C_5H_9NO)_n$	Poly-L-valine	-	S	S	Amide I and II bands, Struct	Small	JACS	82 (1960)	3787
$(C_5H_9NO_3)_n$	Poly-L-methionine	-	S	S	Amide I and II bands, Struct	Blout	JACS	82 (1960)	3787
$(C_5H_{10})_n$	Ethylene-propylene copolymer	2-15 μ	S	S	Spec, Composition	Gossel	MC	42 (1960)	1
$(C_5H_{10}O)_n$	Poly-1,1,2-trimethyl- ethylene oxide	700-1500	S	S	Spec	Ishida	BCSJ	33 (1960)	924
$(C_5H_{10}O)_n$	Poly-n-valeraldehyde	300-4000	S	S	Spec, Assign	Novak	CJC	37 (1959)	1718
$(C_6H_4S)_n$	Phenylenesulphide polymer	675-1600	S	S	Spec, Different kinds of polymers	Lenz	JPS	43 (1960)	167
$(C_6H_6C_3)_n$	Polyacrylic anhydride	-	-	-	Ident	Crawshaw	JACS	80 (1958)	5464
$(C_6H_7NO)_n$	Acrolein-acrylonitrile copolymer	1-15 μ	-	-	Spec	Schulz	MC	29 (1959)	190
$(C_6H_7NO_2)_n$	Acrylonitrile-acrylic acid copolymer	700-4000	S	S	Spec, Anal	Gentilhomme	BSCF	- (1960)	901
$(C_6H_7N_3C_{12})_n$	Cellulose nitrate	2.75-15 μ	S	S	Study of addition comps.	Champetier	MC	19 (1956)	185
$(C_6H_7N_3O_{12})_n$	Nitrocellulose	-	-	-	Structural changes on irradiation	Brocks	ZP	149 (1957)	353

$(C_6H_7O_6Na)_n$	Sodium alginate	2.4-3.8 μ	S	Effect of heat on struct	Yoshino	KKZ	61 (1958)	121
$(C_6H_7O_{14}S_3Na_3)_n$ (Na salt)	Sulphate of dextran (Na salt)	-	S, Sol	H bond, Study of addition compd.	Josien	CPR	248 (1959)	685
$(C_6H_8)_n$	Polyethylvinyl-acetylene	500-1500	-	Spec	Thompson	DFS	9 (1950)	222
$(C_6H_8O_4)_n$	Polyethylene succinate	700-1000	S	Spec, Assign	Nakanishi	BCSJ	29 (1956)	434
$(C_6H_8)_n$	Polyhexatriene	3.42-7.58 μ	L	Abs. bands	Price	JPS	41 (1959)	445
$(C_6H_8O_4)_n$	Polyethylene succinate	-	-	Conjugation, Internal dispersion forces	Simpson	JACS	73 (1951)	5363
$(C_6H_8O_6)_n$	Arginic acid	700-1400	S, L	Struct, Dichroism	Davison	JCS	- (1955)	242
$(C_6H_8O_6)_n$	Polygalacturonic acid	-	-	H bond, Heat	Sobue	KKZ	59 (1956)	983
$(C_6H_8O_6)_n$	Polygalacturonic acid	2-16 μ	-	Spec	Solms	HCA	37 (1954)	2153
$(C_6H_9ClO_2)_n$	Polyvinyl chloride polyvinyl acetate copolymer	600-1700 4.7-5.75 μ	S S	Spec Absorbance	Thompson Wiberly	TFS AC	41 (1945) 29 (1957)	246 210
$(C_6H_9NO)_n$	Polyvinylpyrrolidone	2-9 μ	-	Spec	Oster	JACS	76 (1954)	1393
$(C_6H_9NO_2)_n$	Acrolein-acrylamide copolymer	1-15 μ	-	Spec	Schulz	MC	29 (1959)	190
$(C_6H_9NO_3)_n$	Poly- γ -methyl-L-glutamate (α and β forms)	1500-3400	S	Spec, Struct CO, NH freq	Ambrose Elliot	PRS PRS	205 (1951) 221 (1954)	47 104
$(C_6H_9NO_3)_n$	Poly- γ -methyl-DL-glutamate	-	-	CO, NH freq	Elliot	PRS	221 (1954)	104
$(C_6H_9NO_5)_n$	Polygalacturonic acid amide	2-16 μ	-	Spec	Solms	HCA	37 (1954)	2153
$(C_6H_9O_5K)_n$	Charonin (K salt)	700-1000	S	Spec, Assign	Nakanishi	BCSJ	29 (1956)	434

$(C_6H_9O_5Na)_n$	Cellulose (Na salt)	700-1000	S	Spec, Assign	Nakanishi	BCSJ	29 (1956)	434
$(C_6H_{10})_n$	Methyl rubber	600-1800	S	Spec, Struct	Thompson	TFS	41 (1945)	246
$(C_6H_{10}^N_2O_5)_n$	Poly-D-galacturonic hydrazide	-	S	Group freq	Wolfrom	JACS	76 (1954)	4011
$(C_6H_{10}O)_n$	Poly-2,3-dihydro-2,2-dimethylfuran	-	-	Abs. bands, Spec	Barr	JCS	- (1954)	3766
$(C_6H_{10}O_5)_n$	Amylose	700-1000	S	Spec, Assign	Nakanishi	BCSJ	29 (1956)	434
$(C_6H_{10}O_5)_n$	Cellulose	0.3-7 μ	S	Reflectance	Hulbert	JOSA	17 (1928)	23
		-	S	Reflectance	Cartwright	PR	35 (1930)	415
		10-130 μ	S	Spec	Barnes	PR	39 (1932)	562
		-	-	Transmission	Hardy	PR	47 (1935)	789
		-	-	Struct	Ellis	JACS	62 (1940)	2859
		20.7-152 μ	S	Transmission	Seifert	RSI	11 (1940)	365
		2400-4000	S	Spec, H bond	Marrinon	JAPC	4 (1945)	204
		2-15 μ	S	Spec, Struct, Oxidation study	Rowen	JRNB	39 (1947)	133
		500-1500	-	Spec	Thompson	DPS	9 (1950)	222
		2.5-4.0 μ	S	Spec, Struct	Brown	JCS	- (1951)	1532
		0.4-2.7 μ	S	Reflectance spec	Derksen	JOSA	42 (1952)	263
		700-1000	S	Spec, Assign	Nakanishi	BCSJ	29 (1956)	434
		2-15 μ	S	Spec	O'Connor	AC	29 (1957)	998
		600-3800	S	Spec, Assign, Struct	Tsuboi	JPS	25 (1957)	159
		-	S	Struct, Crystallinity	Yoshino	KKZ	60 (1957)	1341
		-	-	Struct	Mann	JPS	27 (1958)	595
		2.4-3.8 μ	S	Effect of heat on struct	Yoshino	KKZ	61 (1958)	121
		-	S	Ident, Struct	Ellefsen	ACS	13 (1959)	853
		3 μ	S	Assign, Struct, H bond	Liang	JPS	37 (1959)	385
		640-1700	S	Spec, Assign	Liang	JPS	39 (1959)	269
		3 μ	S	Assign, Struct, H bond	Liang	JPS	37 (1959)	385
		2-15 μ	S	Spec, Oxidation study	Stepanov	IANS	23 (1959)	1222
		650-4000	S	Spec, Assign, Struct	Marchessault	JPS	43 (1960)	71
		-	S	Oxidation study	Spedding	JCS	- (1960)	3147
$(C_6H_{10}O_5)_n$	Charonin	700-1000	S	Spec, Assign	Nakanishi	BCSJ	29 (1956)	434
$(C_6H_{10}O_5)_n$	Dextran	720-950	S	Spec, Freq	Barker	JCS	- (1954)	171

	-		Struct	JACS	76 (1954)	Jens	JACS	5041
	-		Struct	JACS	76 (1954)	Rauskin	JACS	4435
	700-1000		Spec, Assign	BCSJ	29 (1956)	Nakanishi	BCSJ	434
	2-10 μ		Spec, Ident	BSCF	- (1958)	Boyer	BSCF	240
	2.6-3.6 μ		Spec, Struct	BCSJ	22 (1959)	Tsuboi	BCSJ	255
	450-4000		Spec, Crystallinity	JCP	25 (1956)	Tobin	JCP	1044
	4000-2000		Spec, Struct	JACS	74 (1952)	Blout	JACS	1946
	-	S,L	Assign, Struct	PRS	221 (1954)	Elliot	PRS	104
	1300-1800	S	Spec, Assign	JACS	76 (1954)	Becker	JACS	3707
	1520-1668	S	Freq, Assign	JACS	82 (1960)	Blout	JACS	3787
	4500-5300	S	Spec, Assign	PRS	219 (1953)	Abbott	PRS	17
	-	S	Assign, Struct	PRS	221 (1954)	Elliot	PRS	104
	-	-	Spec	NKZ	81 (1960)	Hayakawa	NKZ	618
	2-15 μ	S	Spec	IE	45 (1953)	Smook	IE	2731
	2-10 μ	-	Spec, Struct	JACS	71 (1949)	Klotz	JACS	1615
	1200-1300	S	Spec, Assign	JPC	59 (1955)	Asai	JPC	322
	-	S	Assign, Struct	PRS	221 (1954)	Elliot	PRS	104
	700-1500	S	Spec	BCSJ	33 (1960)	Ishida	BCSJ	924
	0-1600	S,L	Spec	JACS	72 (1950)	Marvel	JACS	1978
	2900-3600	S	Spec, D ₂ O reaction	TFS	52 (1956)	Mann	TFS	481
	-	-	D ₂ O reaction	TFS	52 (1956)	Mann	TFS	492
	600-3600	S	Spec, Struct	JPS	15 (1955)	Hass	JPS	503

$(C_7H_8OSi)_n$	Methyl-phenyl silicone polymer	650-4000	S	Spec, Struct	Lady	AC	31 (1959)	1100
$(C_7H_8OSi)_n$	Poly methyl phenyl siloxane	625-5000	Sol	Ident	Smith	AC	31 (1959)	1174
$(C_7H_8O_2)_n$	Polydiacrylmethane	2.9-6.1 μ	S	Ident	Jones	JPS	33 (1958)	7
$(C_7H_9N)_n$	Butadiene-acrylonitrile copolymer	600-3700	-	Spec	Cheverley	APS	10 (1960)	1921
$(C_7H_9N)_n$	Nitrile rubber	2-15 μ	S	Spec	Allison	AC	24 (1952)	630
$(C_7H_9NO_2)_n$	Acrylonitrile-methacrylate copolymer	700-4000	S	Spec, Anal	Gentilhomme	BSCF	- (1960)	901
$(C_7H_9O_5S_2Na)_n$	Cellulose xanthate (sodium salt)	2-15 μ	S	Spec	Andrews	CJC	38 (1960)	1381
$(C_7H_{10})_n$	Polyethylisopropenyl acetylene	3.43-11.15 μ	L	Freq	Price	JPS	41 (1959)	445
$(C_7H_{10}O_2)_n$	Polyallyl crotonate	-	S	Freq	Barnett	JOC	25 (1960)	309
$(C_7H_{10}O_3)_n$	Acrolein-vinylacetate copolymer	1-15 μ	-	Spec	Schulz	MC	29 (1959)	190
$(C_7H_{10}O_6)_n$	Polygalacturonic acid methyl ester	2-16 μ	-	Spec	Solms	HCA	37 (1954)	2153
$(C_7H_{12}O_2)_n$	Poly-n-butyl acrylate	700-1500	S	Spec	Furukawa	MC	42 (1960)	165
$(C_7H_{12}O_2)_n$	Polyisobutyl acrylate	700-1500	S	Spec	Furukawa	MC	42 (1960)	165
$(C_7H_{12}O_2)_n$	Poly-sec-butyl acrylate	700-1500	S	Spec	Furukawa	MC	42 (1960)	165
$(C_7H_{12}O_2)_n$	Poly-t-butyl acrylate	700-1500	S	Spec	Furukawa	MC	42 (1960)	165
$(C_7H_{14}O)_n$	Poly-n-heptaldehyde	300-4000	S	Spec, Assign	Novak	CJC	37 (1959)	1718
$(C_8H_5D_3)_n$	Poly- α, β, β -trideuterostyrene	600-3200	S	Assign, Dichroism	Tadokoro	JPS	36 (1959)	553

(C ₈ H ₇ D) _n	Poly- α , δ , γ -styrene	400-3500	S	Spec, Assign	Kobayashi	BCSJ	33 (1960)	1416
(C ₈ H ₇ Cl) _n	Poly-p-chlorostyrene	600-1500 2-15 μ	S	Spec, Crystallinity	Nagai	BCSJ	32 (1959)	771
			S	Spec	Manecke	MC	37 (1960)	119
(C ₈ H ₇ F) _n	Poly-p-fluorostyrene	400-3500 2-15 μ	S	Spec, Assign	Kobayashi	BCSJ	33 (1960)	1421
			S	Spec	Manecke	MC	37 (1960)	119
(C ₈ H ₈) _n	Polystyrene	700-3300	-	Spec	Stair	JRNB	15 (1935)	295
		500-2000	-	Spec	Thompson	PRS	184 (1945)	3
		600-1800	S	Spec, Struct	Thompson	TFS	41 (1945)	246
		1370-1700	-	Monomer detection	Hippel	IE	38 (1946)	1121
		1250-1720	Sol	Polymerization study	Pfann	JPS	1 (1946)	14
		3000-4000	-	Reaction study	Cohen	JPS	2 (1947)	511
		650-1900	Sol	Spec	Bryant	JCS	- (1949)	2389
		700-2000	S	Cooling effect on spec	King	JAP	20 (1949)	559
		600-2000	S	Spec	Treumann	AC	21 (1949)	1161
		700-1900	-	Spec	Hoslam	ANA	75 (1950)	63
		2-16 μ	S	Spec, Decomp. study	Achhammer	JRNB	47 (1951)	116
		2-8 μ	L	Band freq	Walling	JACS	76 (1954)	4878
		680-3350	S	Polymerization rate	Swolinski	JPS	17 (1955)	269
		2-15 μ	-	Spec, Struct	Brown	JCS	- (1957)	3620
		70-3200	S	Spec	Ashinkari	BCSJ	31 (1958)	540
		-	-	Spec, Assign	Liang	JPS	27 (1958)	241
		9.5-10.5 μ	S	Temp effect on spec	Simon	JPS	30 (1958)	201
		600-3500	S	Assign, Heat effect, Dichroism, Crystallinity	Braun	NWS	46 (1959)	444
		950-1550	S	Spec, Struct	Nozakura	JPS	36 (1959)	553
		650-4000	S	Spec, Config	Tadokoro	BCSJ	32 (1959)	313
		400-1100	S,Sol	Spec	Tadokoro	JPS	36 (1959)	553
		50-2500	S	Spec	Takeda	BCSJ	32 (1959)	1150
		650-3600	S	Spec	Decamps	CPR	250 (1960)	1827
		400-3500	S	Spec, Assign	Kawasaki	POL	1 (1960)	315
		-	-	Absorp.	Kobayashi	BCSJ	33 (1960)	1416
		650-5000	S	Spec, Tacticity	Kuwata	BCSJ	33 (1960)	1091
			S		Morero	NC	15 (1960)	122
(C ₈ H ₈) _n	Poly-p-xylylene	1-15 μ 290-3500	S	Spec	Corley	JPS	13 (1954)	137
			-	Spec, Assign	Tobin	JPC	61 (1957)	1392

(C_8H_8) _n ($C_8H_7O_2$) _n	Polystyrene tert-butyl peroxide	-	-	Group freq	Walling	JACS	76 (1954)	4878
($C_8H_8F_3NO$) _n	Perfluoromethyl propenyl ketone-acrylonitrile copolymer	-	-	Ident	Rausch	JACS	79 (1957)	4983
(C_8H_8O) _n	Poly-2,6-dimethyl-1,4-phenylene oxide	6.25-12.08 μ	Sol	Absorp. bands	Staffin	JACS	82 (1960)	3632
(C_8H_8O) _n	Poly-o-hydroxystyrene	600-4000	-	Spec Struct	Marvel Tanaka	JPS KKZ	4 (1949) 60 (1957)	703 1595
(C_8H_8O) _n	Poly-p-hydroxystyrene	2-15 μ	S	Spec	Manecke	MC	37 (1960)	119
(C_8H_8O) _n	Polystyrene oxide	650-3600	S	Spec, Assign	Kawasaki	POL	1 (1960)	315
(C_8H_8O) _n	p-Vinylphenol polymer	2.5-14 μ	-	Spec	Savish	JOC	24 (1959)	1345
($C_8H_8O_3S$) _n	Poly-p-styrenesulfonic acid	-	-	Ident	Houel	CPR	250 (1960)	3839
($C_8H_{11}NO_2$) _n	Acrylonitrile-methacrylate copolymer	700-4000	S	Spec, Anal	Gentilhomme	BSCF	- (1960)	901
($C_8H_{12}O_2$) _n	Poly- β -methallyl crotonate	-	S	C=C freq	Barnett	JOC	25 (1960)	309
($C_8H_{12}O_3$) _n	β -Polyvinylloxyethyl methacrylate	2-15 μ 2-15.5 μ	L -	Assign Spec, Struct	Walton Lal	JACS JPS	79 (1957) 44 (1960)	3985 523
($C_8H_{12}O_4$) _n	Polybutane-1,4-diol succinate	700-1400	S, L	Struct, Dichroism	Davison	JCS	- (1955)	2428
($C_8H_{12}O_4$) _n	Polyethylene adipate	700-1400 650-1000	S, L S	Struct, Dichroism Spec	Davison Bradbury	JCS TFS	- (1955) 56 (1960)	2428 1117

$(C_8H_{12}O_4)_n$	Polyethyleneglycol adipate	2-15 μ	S	Ident., Anal., Spec	Corish	AC	31 (1959)	1298
$(C_8H_{12}O_5S_2)_n$	S-Methyl cellulose xanthate	2-15 μ	S	Spec	Andrews	CJC	38 (1960)	1381
$(C_8H_{13}Cl)_n$	Cyclohexyl chloro-polyethylene	2-15 μ	S	Spec	Smook	IE	45 (1953)	2731
$(C_8H_{13}ClO_2)_n$	2-Chloroethyl vinyl ether vinyl ether copolymer	1000-1200	Sol	Composition	Glass	JACG	36 (1959)	100
$(C_8H_{13}NO_5)_n$	Chitin	-	S	Spec, Assign	Marchessault	BBA	45 (1960)	499
$(C_8H_{13}N_3O_7)_n$	L-Alanine-glycine copolymer	700-4000	S	Spec, Assign, H bond	Pearson	JPS	43 (1960)	101
$(C_8H_{14}N_2O_2)_n$	Glycine-L-leucine copoly peptide	800-1700	S	Spec	Elliott	PRS	226 (1954)	408
$(C_8H_{14}O_2)_n$	Ethyl vinyl ether-vinyl ether copolymer	1300-1800	S	Spec	Becher	JACS	76 (1954)	3707
$(C_8H_{16}Si)_n$	Polydiallyldimethylsilane	1000-1200	Sol	Composition	Glass	JACG	36 (1959)	100
$(C_8H_{18}ClNO_3S)_n$	Triethylamine chloro-polyethylene sulfonate	2-15 μ	S	Spec	Smook	IE	45 (1953)	2731
$(C_8H_{23}NO_3Si_3)_n$	Dimethylaminomethyl-dimethylpolysiloxane	2-15 μ	-	Spec	George	JACS	77 (1955)	3493
$(C_9H_8O_2)_n$	Polystyrene-p-carboxylic acid	-	-	Polymerization study	Houel	CPR	250 (1960)	2209
$(C_9H_9NO)_n$	Poly-DL-phenyl alanine	-	-	Struct, H bond	Elliott	N	165 (1950)	921
		-	Sol	C=O, NH freq	Elliott	PRS	221 (1954)	104
		-	Sol	Struct	Lapp	CPR	248 (1959)	2351

Chemical Formula	Polymer Name	Wavenumber (cm ⁻¹)	Sol	Structure	Author	Year	Page
(C ₉ H ₉ NO ₂) _n	Poly-L-tyrosine	700-4000	-	Struct	Elliott	180 (1957)	1340
(C ₉ H ₁₀) _n	Poly- <i>O</i> -methylstyrene	-	-	Absorption	Kuwata	33 (1960)	1091
(C ₉ H ₁₀) _n	Poly- <i>m</i> -methylstyrene	650-1900	Sol	Spec	Bryant	- (1949)	2389
		-	-	Conformation	Murahashi	32 (1959)	534
		950-1550	S	Spec, Struct	Tadokoro	32 (1959)	313
(C ₉ H ₁₀) _n	Poly- <i>p</i> -methylstyrene	600-1900	Sol	Spec	Bryant	- (1949)	2389
		-	-	Absorption	Kuwata	33 (1960)	1091
		-	-	Conformation	Murahashi	32 (1959)	534
		950-1550	S	Spec, Struct	Tadokoro	32 (1959)	313
(C ₉ H ₁₁ F ₃ O ₃) _n	Perfluoromethyl propenyl ketone-vinyl acetate copolymer	-	-	Ident	Rausch	79 (1957)	4983
(C ₉ H ₁₅ N ₆) _n	Triethylenemelamine polymer	-	-	Spec	Allen	27 (1955)	540
(C ₁₀ H ₄ D ₄ O ₄) _n	Polyethylene-d ₄ terephthalate	70-3600	S	Spec	Liang	3 (1959)	554
		2-15 μ	S	Spec, Assign	Miyake	38 (1959)	497
		5-15 μ	S	Spec	Farrow	38 (1960)	147
		10-32 μ	S	Spec, Assign	Miyake	33 (1960)	992
		4.3-4.9 μ	-	C-D stretching	Miyake	64 (1960)	510
		70-3600	S	Spec	Liang	3 (1960)	554
(C ₁₀ H ₈ F ₇ NO) _n	Perfluoropropyl propenyl ketone-acrylonitrile copolymer	-	-	Ident	Rausch	79 (1957)	4983
(C ₁₀ H ₈ O ₄) _n	Polyethylene terephthalate	650-2000	S	Spec	Ambroski	45 (1953)	2290
		875-898	-	Crystallinity	Thompson	176 (1955)	78
		2.6-5 μ	S	Spec, Assign of carboxyl and OH groups	Patterson	53 (1957)	291
		290-3500	S	Spec, Assign	Tobin	61 (1957)	1392
		70-3600	S	Spec, Assign, Struct	Liang	3 (1959)	554
		2-15 μ	S	Spec, Rot. iso	Miyake	38 (1959)	479
		2-15 μ	S	Spec, Assign	Miyake	38 (1959)	497

	5-15 μ	S	Spec, Config	Farrow	MC	38 (1960)	147
	5-15 μ	S	Crystallinity	Farrow	POL	1 (1960)	330
	10-32 μ	S	Spec, Assign	Miyake	BCSJ	33 (1960)	992
$(C_{10}H_{10})_n$	5-15 μ	-	Spec	Radzitzki	JPS	13 (1954)	477
$(C_{10}H_{10})_n$	5-15 μ	-	Spec	Radzitzki	JPS	13 (1954)	477
$(C_{10}H_8N_2O_4)_n$	2-15 μ	S	Ident, Anal, Spec	Corish	AC	31 (1959)	1298
$(C_{10}H_8O_2)_n$	1400-4000	-	Spec	Marvel	JPS	4 (1949)	703
$(C_{10}H_{11}NOS)_n$	-	S	Amide I and II bands, bands, Struct	Blout	JACS	82 (1960)	3787
$(C_{10}H_8O)_n$	2-15 μ	Sol	Bands, Assign	Walton	JACS	79 (1957)	3985
$(C_{10}H_4F_3O_3)_n$	-	-	Ident	Rausch	JACS	79 (1957)	4983
$(C_{10}H_6Cl_2S)_n$.775-2.9 μ	S	Transmission curves	Nichols	PR	1 (1893)	1
	750	S	Absorption	Cartwright	PR	35 (1930)	415
	2-8 μ	S	Freq	Williams	JCP	4 (1936)	460
	400-3000	S	Abs., Refl. spec	Williams	JAP	8 (1937)	497
	2.2-14.8 μ	S	Spec	Wells	JAP	11 (1940)	137
	1-15 μ	S	Spec	Sears	JAP	12 (1941)	35
	2-17 μ	S	Spec	Williams	JAP	15 (1944)	585
	-	-	Spec	Sheppard	TFS	41 (1945)	261
	-	-	Bands due to vulcanization	Sheppard	JCS	- (1947)	1699
$(C_{10}H_{16}O_2)_n$	700-1900	-	Spec	Hoslam	ANA	75 (1950)	63
$(C_{10}H_{16}O)_n$	700-1400	S, L	Dichroism struct	Davison	JCS	- (1955)	2428
$(C_{10}H_{16}O_4)_n$	650-1000	S	Spec, Crystallinity	Bradbury	TFS	56 (1960)	1117

$(C_{10}H_{16}O_4)_n$	700-1900	-	Spec	Hoslam	ANA	75 (1950)	63
Polymethyl methacrylate-polyethyl acrylate copolymer							
$(C_{10}H_{18}O_2)_n$	1000-1200	Sol	Composition	Glass	JAOC	36 (1959)	100
n-Butyl vinyl ether-vinyl ether copolymer							
$(C_{10}H_{18}O_2)_n$	1000-1200	Sol	Composition	Glass	JAOC	36 (1959)	100
Isobutyl vinyl ether-vinyl ether copolymer							
$(C_{10}H_{27}NO_5Si_3)_n$	2-15 μ	-	Spec	George	JACS	77 (1955)	3493
n-Butylaminomethyl-dimethylpolysiloxane							
$(C_{10}H_{27}NO_5Si_3)_n$	2-15 μ	-	Spec	George	JACS	77 (1955)	3493
Diethylaminomethyl-dimethylpolysiloxane							
$(C_{10}D_8O_4)_n$	70-3600	S	Spec	Liang	JMS	3 (1959)	554
Polyethylene-d ₄ terephthalate-d ₄							
$(C_{11}H_{11}F_7O_5)_n$	-	-	Ident	Rausch	JACS	79 (1957)	4983
Perfluoropropyl propenyl ketone-vinyl acetate copolymer							
$(C_{11}H_4NO_3)_n$	1520-1668	S	Freq, Assign, Conformations	Blout	JACS	82 (1960)	3787
Poly- β -benzyl-L-aspartate							
$(C_{11}H_{12}NO_3)_n$	-	-	Spec	Noguchi	NKZ	80 (1959)	85
Glycine-L-tyrosine copolymer							
$(C_{11}H_{13}N)_n$	800-3000	S	Spec	Field	JAP	17 (1946)	386
Butadiene-vinyl pyridine copolymer							
$(C_{11}H_{14})_n$	650-1900	Sol	Spec	Bryant	JCS	- (1949)	2389
Poly-2,4,5-trimethylstyrene							
$(C_{11}H_{14})_n$	650-1900	Sol	Spec	Bryant	JCS	- (1949)	2389
Poly-2,4,6-trimethylstyrene							
$(C_{11}H_{16}Si)_n$	-	-	Conformation Spec	Murahashi Noltes	BCSJ RTC	32 (1959) 79 (1960)	534 1076

$(C_{11}H_{16}Ge)_n$	Poly-p-trimethyl-germanium styrene	-	-	Spec	Noltes	RTC	79 (1960)	1076
$(C_{11}H_{16}Pb)_n$	Poly-p-trimethyl lead styrene	-	-	Spec	Noltes	RTC	79 (1960)	1076
$(C_{11}H_{16}Sn)_n$	Poly-p-trimethyl tin styrene	-	-	Spec	Noltes	RTC	79 (1960)	1076
$(C_{11}H_{21}NO)_n$	Nylon 11 (polymer of ω -aminoundecanoic acid)	450-4000	S,L	Spec, Crystallinity	Tobin	JCP	25 (1956)	1044
$(C_{11}H_{21}NO)_n$	Poly (N,N-di-n-butyl) acrylamide	1083-1200	-	Tacticity, Crystallinity	Butler	JPS	48 (1960)	357
$(C_{11}H_2NO_2S_2)_n$	Polyampholyte	-	-	Ident	Marvel	JOC	25 (1960)	2207
$(C_{12}H_{10}OSi)_n$	Phenyl silicone polymer	650-4000	S	Spectrum	Lady	AC	31 (1959)	1100
$(C_{12}H_{13}F_7O_3)_n$	Perfluoropropyl propenyl ketone-ethyl acrylate copolymer	-	-	Ident	Rausch	JACS	79 (1957)	4983
$(C_{12}H_{13}NO_3)_n$	Poly- γ -benzyl-L-glutamate	1500-3400	S	Spec, Struct	Ambrose Elliott	PRS PRS	205 (1951) 221 (1954)	47 104
				$\nu_{C=O}$, δ_{NH}				
		650-2000	Sol	Spec, Config	Blout	JACS	78 (1956)	955
		-	S	Amide I & II bands, Config	Blout Miyazawa	JACS JCP	82 (1960) 32 (1960)	3787 1647
$(C_{12}H_{13}NO_3)_n$	Poly- γ -benzyl-DL-glutamate	-	-	$\nu_{C=O}$, δ_{NH}	Elliott	PRS	221 (1954)	104
$(C_{12}H_{13}NO_3)_n$	Poly-L-glutamic benzyl ester	-	-	Struct, H bond	Elliott	N	165 (1950)	921
$(C_{12}H_{14})_n$	Polybutadiene-styrene copolymer	600-1700	S	Spec	Thompson	TFS	41 (1945)	246
		600-2000	S	Spec	Treumann	AC	21 (1949)	1161
		914-996	-	Struct	D'Ianni	IE	42 (1950)	42
		2.5-16 μ	-	Spec, Struct	Nielsen	IE	43 (1951)	341

$(C_{12}H_{14}N_2O_4)_n$		-	-	Anal	Binder	AC	26 (1954)	1877
		-	Sol	Composition	Binder	IE	46 (1954)	1727
		1.5-2.7 μ	-	Analysis	Miller	JAPC	6 (1956)	385
		600-3700	-	Spec	Cheverley	APS	10 (1960)	192
$(C_{12}H_{14}N_2O_4)_n$	Polyurethane from polypropylene glycol and 2,6-toluene diisocyanate	2-15 μ	S	Spec, Anal, Ident	Corish	AC	31 (1959)	1298
$(C_{12}H_{14}O_2)_n$	Styrene methacrylic acid copolymer	5.7-5.9 μ	Sol	COOH dimerization study	Chang	JPC	60 (1956)	782
		5.6-6 μ	-	H bonding	Longworth	JPS	29 (1958)	307
$(C_{12}H_{16})_n$	Poly-p-tert-butylstyrene	-	-	Spec	Noltes	RTC	79 (1960)	1076
$(C_{12}H_{16}O_8)_n$	Cellulose acetate	2-15 μ	S	Spec, Oxidation study, Struct	Rowen	JRNB	39 (1947)	133
		500-1500	-	Spec	Thompson	DFS	9 (1950)	222
		2.5-4 μ	S	Spec, Struct	Brown	JCS	- (1951)	1532
$(C_{12}H_{18}N_2O_4)_n$	Polyurethan from 2-butyn-1,4-diol and 1,6-hexamethylene diisocyanate	700-3500	-	Ident	Marvel	JACS	72 (1950)	1674
$(C_{12}H_{20}O_4)_n$	Polyethylene sebacate	670-1500	S, L	Spec	Davison	JCS	- (1955)	2428
		700-1400	S, L	Dichroism, Structure	Davison	JCS	- (1955)	2428
		500-3200	-	Spec, Struct	Thompson	TFS	41 (1945)	246
		2800-3500	S	Spec, Struct	Ambrose	PRS	199 (1949)	183
		-	-	Dichroism of C=O and NH bands	Elliott	N	172 (1953)	359
		2-16 μ	-	Spec	Harms	AC	25 (1953)	1140
		-	-	Dichroism	Caroti	N	178 (1956)	162
		2.5-11.5 μ	S	Spec	Coates	JOSA	43 (1953)	984
		2 μ	S	Freq, Dichroism	Fraser	JCP	24 (1956)	89
		1200-8000	Sol	Freq, Assign, Dichroism	Hecht	PRS	235 (1956)	174
		600-3600	S	Deuteration effect	Larose	CJC	35 (1957)	1239
		2.8-3.1 μ	S	Spec	Kinoshita	MC	33 (1959)	1
		400-3500	S	Spec	Cannon	SA	16 (1960)	302

$(C_{12}H_{22}N_2O_4)_n$	Polyurethane from butane-1,4-diol and 1,6-hexamethylene diisocyanate	700-3500	-	Ident	Marvel	JACS	72 (1950)	1674
$(C_{12}H_{25}NO_3Si_3)_n$	Anilinomethyl dimethyl-polysiloxane	2-15 μ 2.8-3.1 μ	-	Spec H bonding	George Trifan	JACS JPS	77 (1955) 28 (1958)	3493 443
$(C_{13}H_{11}N)_n$	Poly-4-(α -pyridyl)styrene	-	-	Ident	Guivetchi	CPR	250 (1960)	3656
$(C_{13}H_4F_3O)_n$	Perfluoromethyl propenyl ketone-styrene copolymer	-	-	Ident	Rausch	JACS	79 (1957)	4983
$(C_{13}H_{15}N_3O)_n$	Glycine-L-tyrosine copolymer	-	-	Spec	Noguchi	NKZ	80 (1959)	85
$(C_{13}H_{16}O_2)_n$	Polymethyl methacrylate-polystyrene copolymer	700-1900	-	Spec	Hoslam	ANA	75 (1950)	63
$(C_{13}H_{18}S_2)_n$	Benzaldehyde-hexamethylene-dithiol polymercaptol	2400-4000	-	Spec	Marvel	JACS	72 (1950)	2106
$(C_{15}H_{21}NO_6S_2)_n$	Diethylacetamido cellulose xanthate	2-15 μ	S	Spec	Andrews	CJC	38 (1960)	1381
$(C_{15}H_{24}N_2O)_n$	Polyurethane from pentane-1,5-diol and 1,6-hexamethylene diisocyanate	2.8-3.1 μ	-	H bonding	Trifan	JPS	28 (1958)	443
$(C_{15}H_{25}NO_3Si_3)_n$	N-Methylanilinomethyl-dimethylpolysiloxane	2-15 μ	-	Spec	George	JACS	77 (1955)	3493
$(C_{14}H_8F_{15}NO)_n$	Perfluorheptyl propenyl ketone-acrylonitrile copolymer	-	-	Ident	Rausch	JACS	79 (1957)	4983

$(C_{14}H_{12}N_2O_4)_n$	2-15 μ	S	Spec, Anal, Ident	Corish	AC	31 (1959)	1298
Polyurethane from polyethylene glycol and 1,5-naphthalene diisocyanate		-					
$(C_{14}H_{12})_n$	650-1200	-	Spec	Ishida	BCSJ	33 (1960)	924
$(C_{14}H_{12}O)_n$	650-1200	-	Spec	Ishida	BCSJ	33 (1960)	924
$(C_{14}H_{12}O_6)_n$	2-14 μ	S	Spec, Composition	Yoda	BCSJ	32 (1959)	1120
Diallylphthalate polymer	1644	-	Polymerization study Struct	LalauKeraly LalauKeraly	CPR CPR	249 (1959) 250 (1960)	1213 2967
$(C_{14}H_{18}N_2O_3)_n$	-	-	Struct, H bond	Elliott	N	165 (1950)	921
$(C_{14}H_{20}O_4)_n$	700-1500	-	Ident	Marvel	JACS	72 (1950)	1674
$(C_{14}H_{22}O_4)_n$	700-1900	-	Spec	Hoslam	ANA	75 (1950)	63
$(C_{14}H_{24}O_4)_n$	700-1400	S,L	Dichroism structure	Davison	JCS	- (1955)	2428
$(C_{14}H_{24}O)_n$	-	-	Ident	Marvel	JACS	72 (1950)	1674
$(C_{14}H_{26}N_2O_2)_n$	2.8-3.1 μ	-	H bond	Trifan	JPS	28 (1958)	443
$(C_{14}H_{26}N_2O_4)_n$	2.8-3.1 μ	-	H bonding	Trifan	JPS	28 (1958)	443

$(C_{14}H_{26}O_2)_n$	2-Ethylhexyl vinyl ether-vinyl ether copolymer	1000-1200	Sol	Composition	Glass	JAOc	36 (1959)	100
$(C_{15}H_{11}F_{15}O_3)_n$	Perfluoroheptyl propenyl ketone-vinyl acetate copolymer	-	-	Ident	Hausch	JACS	79 (1957)	4983
$(C_{15}H_{13}F_7O)_n$	Perfluoropropyl propenyl ketone-styrene copolymer	-	-	Ident	Hausch	JACS	79 (1957)	4983
$(C_{15}H_{18}N_2O_4)_n$	Poly- γ -methyl-L-glutamate-DL-phenylalanine (α form) (1:1)	1500-3400	S	Spec, Struct	Ambrose	PRS	205 (1951)	47
$(C_{15}H_{18}N_2O_4)_n$	Poly- γ -methyl-L-glutamate-DL-phenylalanine (β form) (1:1)	1500-3400	S	Spec, Struct	Ambrose	PRS	205 (1951)	47
$(C_{15}H_{20}N_2O_2)_n$	Poly-DL-leucine-DL-phenylalanine (1:1)	-	S	C=O, NH freq	Elliott	PRS	221 (1954)	104
$(C_{15}H_{20}N_2O_2)_n$	Poly-L-leucine-L-phenylalanine	-	S	C=O, NH freq	Elliott	PRS	221 (1954)	104
$(C_{15}H_{24}O_4)_n$	Polymethyl methacrylate-polycyclohexyl methacrylate copolymer	700-1900	-	Spec	Hoslam	ANA	75 (1950)	63
$(C_{15}H_{28}N_2O_2)_n$	Polyhexamethylene azalamide	2.8-3.1 μ	-	H bond	Trifan	JPS	28 (1958)	443
$(C_{15}H_{28}N_2O_4)_n$	Polyurethan from heptane-1,7-diol and 1,6-hexamethylene diisocyanate	2.8-3.1 μ	-	H bonding	Trifan	JPS	28 (1958)	443
$(C_{16}H_{15}F_{15}O_3)_n$	Perfluoroheptyl propenyl ketone-ethyl acrylate copolymer	-	-	Ident	Hausch	JACS	79 (1957)	4983

$(C_{16}H_{17}ClN_2O_7)_n$	Polymer from poly ethylene glycol adipate and m-chloro-p-phenylene diisocyanate	2-15/ μ	S	Spec, Anal, Ident	Corish	AC	31 (1959)	1298
$(C_{16}H_{18}N_2O_7)_n$	Polymer from poly ethylene glycol adipate and p-phenylene diisocyanate	2-15/ μ	S	Spec, Anal, Ident	Corish	AC	31 (1959)	1298
$(C_{16}H_{26}N_2O_7)_n$	Polymer from poly ethyleneglycol adipate and hexamethylene diisocyanate	2-15/ μ	S	Spec, Anal, Ident	Corish	AC	31 (1959)	1298
$(C_{16}H_{30}N_2O_2)_n$	Polyhexamethylene sebacamide	10/ μ 2.8-3.1/ μ	S -	Spec H bond	Sandeman Trifan	JPS JPS	19 (1956) 28 (1958)	401 443
$(C_{16}H_{30}N_2O_4)_n$	Polyurethane from octane-1,8-diol and 1,6-hexamethylene diisocyanate	2.8-3.1/ μ	-	H bonding	Trifan	JPS	28 (1958)	443
$(C_{17}H_{14}O_2)_n$	Polyfurfurylidene-cinnamylidene acetone	5.5-15/ μ	-	Spec	Borello	GCI	86 (1956)	899
$(C_{17}H_{26}S_2)_n$	Benzaldehyde-decamethylenedithiol polymercapital	600-4000	-	Spec	Marvel	JACS	72 (1950)	2106
$(C_{17}H_{32}N_2O_2)_n$	Polyhexamethylene undecandioic acid amide	2.8-3.1/ μ	-	H bonding	Trifan	JPS	28 (1958)	443
$(C_{17}H_{32}N_2O_4)_n$	Polyurethane from norane-1,9-diol and 1,6-hexamethylene diisocyanate	2.8-3.1/ μ	-	H bonding	Trifan	JPS	28 (1958)	443

$(C_{18}H_{18}N_2O_3)_n$	L-Phenylalanine-L-tyrosine copolymer	-	-	Spec	Noguchi	NKZ	80 (1959)	85
$(C_{18}H_{20}O_6)_n$	Polyanhydride of sebacic acid and terephthalic acid	2-14 μ	S	Spec, Composition	Yoda	ECSJ	32 (1959)	1120
$(C_{18}H_{20}Si)_n$	Polydiallyldiphenylsilane	-	-	Freq	Butler	JOC	25 (1960)	1643
$(C_{18}H_{22}N_2O_7)_n$	Polymer from polyethylene glycol adipate and 2,4-toluene diisocyanate	2-15 μ	S	Anal, Spec, Ident	Corish	AC	31 (1959)	1298
$(C_{18}H_{22}N_2O_7)_n$	Polymer from polyadipate and 2,6-toluene diisocyanate	2-15 μ	S	Anal, Spec, Ident	Corish	AC	31 (1959)	1298
$(C_{18}H_{34}N_2O_2)_n$	Polyhexamethylene dodecandioic acid amide	2.8-3.1 μ	-	H bonding	Trifan	JPS	28 (1958)	443
$(C_{18}H_{34}N_2O_4)_n$	Polyurethan from decane-1,10-diol and 1,6-hexamethylene diisocyanate	2.8-3.1 μ	-	H bonding	Trifan	JPS	28 (1958)	443
$(C_{19}H_{15}F_{15}O)_n$	Perfluoroheptyl propenyl ketone-styrene copolymer	-	-	Ident	Rausch	JACS	79 (1957)	4983
$(C_{20}H_{20}N_2O_7)_n$	Polyurethane from polyethylene glycol adipate and 1,5-naphthalene diisocyanate	2-15 μ	S	Ident, Anal, Spec	Corish	AC	31 (1959)	1298
$(C_{20}H_{23}Cl_{17})_n$	Polyvinyl chloride-vinylidene chloride (3:7) copolymer	600-1700	S	Spec	Thompson	TFS	41 (1945)	246

$(C_{22}H_{22}N_2O_7)_n$	Polymer from polyethylene glycol adipate and p,p'-diphenyl diisocyanate	2-15 μ	S	Anal, Spec, Ident	Corish	AC	31 (1959)	1298
$(C_{23}H_{24}N_2O_7)_n$	Polymer from polyethylene glycol adipate and p,p'-diphenylmethane diisocyanate	2-15 μ	S	Anal, Spec, Ident	Corish	AC	31 (1959)	1298
$(C_{27}H_{27}N_3O_4)_n$	2L-phenylalanine-L-tyrosine copolymer	-	-	Spec	Noguchi	NKZ	80 (1959)	85
$(C_{30}H_{37}N_3O_3)_n$	Poly-DL-leucine-DL-amino-n-caprylic acid (2:1)	-	-	δ C=O, NH	Elliott	PRS	221 (1954)	104
$(C_{37}H_{53}N_3O_{14})_n$	Glycine-DL-alanine, L-tyrosine copolymer	-	-	Spec	Noguchi	NKZ	80 (1959)	85
$(C_{904}H_{1505}O_2)_n$	Polymethacrylacetone	1200-1800	S	Stability const., Assign, IR shift	Charette	SA	16 (1960)	689
$(PNC1_2)_n$	Phosphonitrilic chloride polymer	2-21 μ	S	Spec	Daasch	AC	23 (1951)	853
$(KPO_3)_n$	Potassium metaphosphate polymer	2-15 μ	S	Assign, Struct	Corbridge	JCS	- (1954)	493
$(NaPO_3)_n$	Sodium metaphosphate polymer	2-15 μ	S	Assign, Struct	Corbridge	JCS	- (1954)	493



IV. Minerals and Ores

Formula	Name	Range	State	Remarks	Reference
CSi	Carborundum	1-15 μ 10.2-13 μ	S S	Refl. spec Refl. spec	BBS 2 (1907) 457 JOSA 29 (1939) 520
O ₂ Si	Chalcedony	22-310 μ	S	Refl. trans. factors	JOSA 7 (1923) 517
O ₂ Si	Chert	2-16 μ	S	Spec	AC 22 (1950) 1478
O ₂ Si	Coesite	300-4000	S	Spec, Assign	JRNB 61 (1958) 61
O ₂ Si	Cristobalite	700-1400	S	Refl. spec	JCP 21 (1953) 23
		-	S	Heat capacity	JCP 23 (1955) 597
		400-600	S	Refl. spec	JCP 23 (1955) 2407
		300-4000	S	Spec, Assign	JRNB 61 (1958) 61
O ₂ Si	Diatomaceous earth	2-16 μ	S	Spec	AC 22 (1950) 1478
O ₂ Si	Quartz	300-4000	S	Spec	JRNB 61 (1958) 61
O ₂ Si	α -Quartz	-	-	Electronic moments cal.	PIAS 30 (1949) 128
O ₂ Si	β -Quartz	-	-	Electronic moments cal.	PIAS 30 (1949) 128
O ₂ Si	Silica	300-4000	S	Spec	JRNB 61 (1958) 61
O ₂ Si	Tridymite	300-4000	S	Spec, Assign	JRNB 61 (1958) 61
O ₂ Si.xH ₂ O	Opal	1-8 μ 0.5-8 μ - 2-16 μ 12-13 μ	S S S S S	Spec Spec Refl. factors Spec Spec	BBS 2 (1907) 457 BBS 7 (1911) 619 JOSA 7 (1923) 517 AC 22 (1950) 1478 AC 25 (1953) 1169
AlHO ₂	Diaspore	7.5-11 μ 1-8 μ - -	S S - -	Refl. spec Emission spec H bond H bond	BBS 2 (1907) 457 BBS 6 (1910) 301 PRS 151 (1935) 384 JCP 20 (1952) 1487
AlHO ₂ 12Si ₃ Fe ₃ - KMg ₃	Biotite	4-14 μ 1-9 μ 4000-3500	S S -	Refl. spec Spec Spec, Freq	BBS 2 (1907) 457 AC 22 (1950) 1478 JCP 62 (1958) 1164

AlH_3O_3	Hydrargillite	410-1200 420-3700	S -	Assign Spec, Freq	Kolesova Kolesova	OS OS	6 (1959) 7 (1959)	38 261
$AlH_{12}O_9Mg_3$	Hydrotalcite	1-7 μ	S	Emission spec	Coblentz	BBS	6 (1909)	301
$AlH_{12}O_{22}Si_6Ca$	Stilbite	1-8 μ	S	Spec	Coblentz	BBS	2 (1907)	457
AlD_3O_3	Hydrargillite-d ₃	420-3700	-	Spec, Freq	Kolesova	OS	7 (1959)	261
AlF_6Na_3	Cryolite	22-310 μ - - -	S - S S	Ref. trans. factors Particle size FC Optical constns.	Weniger Bailey deLattre Scott	JOSA IJC JCP JOSA	7 (1923) 18 (1946) 19 (1951) 45 (1955)	517 365 1610 176
AlO_3Si_2K	Adularia	- 22-310 μ	S S	Emission Ref. trans. factors	Coblentz Weniger	BBS JOSA	5 (1909) 7 (1923)	159 517
AlO_4SiK	Mica	- - 107-310 μ 6.7-33 μ 10-130 μ .6-2.7 μ	S S S S S S	Freq Absorption Transmission Ref. trans. Spec Interference, Polarization effects	Bancroft Brown Weniger Strong Barnes Ellis	JPC PR JOSA PR PR JOSA	23 (1919) 21 (1923) 7 (1923) 37 (1931) 39 (1932) 23 (1933)	1 103 517 1565 562 88
AlO_4SiNa	Nepheline	- 2-14 μ 1-9 μ 100-600 μ 1300-800 3-15 μ - 2-16 μ	S S S S S S S	Use as shutter Spec Transmission Spec Ref. spec Spec Spec Spec	Fry White Fowler McCurbin Simon Sands Kaye Hunt	JAP JOSA HSI JOSA JOSA AC SC AC	17 (1946) 37 (1947) 20 (1949) 40 (1950) 41 (1951) 24 (1952) 6 (1954) 22 (1950)	150 713 175 537 336 791 257 1478
AlO_6Si_2K	Leucite	410-1200	S	Assign	Kolesova	OS	6 (1959)	38
$AlO_6Si_{12}H_1$	Spodumene (α, β)	410-1200 550-3000 410-1200	S St S	Assign Struct Assign	Kolesova Ignateva Kolesova	OS OS OS	6 (1959) 6 (1959) 6 (1959)	38 807 38

Al_6Si_2Na	Jadeite	410-1200	S	Assign	Kolesova	OS	6 (1959)	38
Al_8Si_3K	Orthoclase	-	S	Quant. anal	Hunt	AC	24 (1952)	607
		12.5-14.3 μ	S	Bands	Hunt	AC	25 (1953)	1169
		410-1200	S	Assign	Kolesova	OS	6 (1959)	38
Al_8Si_3K	Microcline	4-12 μ	S	Refl. spec	Coblentz	BBS	2 (1907)	457
		2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
Al_8Si_3Na	Albite	4-10.5 μ	S	Refl. spec	Coblentz	BBS	2 (1907)	457
		1-8 μ	S	Emission spec	Coblentz	BBS	5 (1909)	159
		2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
		8-12 μ	S	Spec	Hunt	AC	25 (1953)	1169
		410-1200	S	Assign	Kolesova	OS	6 (1959)	38
$Al_2HF_6Si_6$	Topaz	1-8 μ	S	Emission spec	Coblentz	BBS	5 (1909)	159
		1-6 μ	S	Emission spec	Coblentz	BBS	6 (1910)	301
		22-310	S	Refl. trans. factors	Weniger	JOSA	7 (1923)	517
		2-3 μ	S	H ₂ O Absorption	Lyon	PR	61 (1942)	482
$Al_2H_2F_2O_{11}Si_3KLi$	Lepidolite	4000-3000	-	Spec, Freq	Serratososa	JPC	62 (1958)	1164
$Al_2H_2O_{12}Si_4 \cdot xH_2O$	Montmorillonite	4000-3000	-	Spec, Assign	Serratososa	JPC	62 (1958)	1164
		1-8 μ	S	Spec	Coblentz	BBS	2 (1907)	457
$Al_2H_4O_5$	Bauxite	2.5-3.5 μ	S	OH band study	Frederickson	AC	26 (1954)	1883
$Al_2H_4O_8Si_2$	Kaolinite	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
		-	S	Quant. Anal	Hunt	AC	24 (1952)	607
		8-12 μ	S	Spec	Hunt	AC	25 (1953)	1169
		8-15 μ	S	Spec	Fridel	AC	28 (1956)	23
$Al_2H_4O_{12}Si_3Na_2$	Natrolite	2.5-4.0 μ	S	Spec	Romo	JPC	60 (1956)	987
		2-15 μ	S	Spec	Stubican	N	179 (1957)	542
$Al_2H_4O_{12}Si_3Na_2$	Natrolite	1-9 μ	S	Spec	Coblentz	BBS	2 (1907)	457
$Al_2H_4O_{14}Si_4Na_2$	Analcite	22-310 μ	S	Refl. trans. factors	Weniger	JOSA	7 (1923)	517
$Al_2H_6O_{13}Si_3Ca$	Scolecite	1-6 μ	S	Spec	Coblentz	BBS	2 (1907)	457

$Al_2H_{10}O_{21}Si_6Ca$	Heulandite	1-12 μ	S	Spec	Coblentz	BBS	2 (1907)	457
$Al_2H_{48}O_{40}S_4K_2$	Potassium alum	2.82 μ 1-3 μ 1.9-.779 μ -	Sol S S Sol	Transmission curves Spec Transmission Comparison with Raman	Nichols Coblentz Nicholson Hollaender	PR BBS PR PR	1 (1893) 2 (1907) 22 (1923) 34 (1929)	1 457 199 994
Al_2O_3	Corundum	20-150 μ - 9.3-12 μ - 1-6 μ 410-1200	S - S - S S	Reflectivity Use for windows with HF Refl. spec Transmitts to 6.5 Trans. curve Assign	Strong Vodar Pfund Chasmar Penner Kolesova	PR JCP JOSA JSI JCP OS	38 (1931) 8 (1940) 35 (1945) 28 (1951) 19 (1951) 6 (1959)	1818 349L 611 206 272 38
Al_2O_5Si	Cyanite	1-7 μ 410-1200	S S	Emission spec Assign	Coblentz Kolesova	BBS OS	6 (1910) 6 (1959)	301 38
$Al_2O_6Si_3xH_2O$	China clay	2-15 μ	S	Spec	Harkins	AC	31 (1959)	541
$Al_2O_8Si_2Ca$	Anorthite	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
$Al_2O_{12}SSiCa - Fe_2Mg$	Angren gliezh	-	-	Spec	Krylov	DANS	33 (1960)	5
$Al_2O_{12}Si_3Ca_3$	Grossularite	410-1200	S	Assign	Kolesova	OS	6 (1959)	38
$Al_2O_{12}Si_3Fe_3$	Garnet	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
$Al_2O_{12}Si_4Li_2$	Spodumene	22-310 μ 0.3-4.5 μ	S S	Refl. trans. factors Spec	Weniger Bayley	JOSA PR	7 (1923) 31 (1928)	517 1132
$Al_2O_{18}Si_6Be_3$	Beryl	1-8 μ 22-310 μ 2.4-3 μ 6.7-11 μ .7-1.7 μ - 10-3000	S S S S S - -	Emiss. spec Refl. trans. factors H ₂ O Absorp. Refl. spec Polarizer test Quant. Mech., Struct Spec, Struct	Coblentz Weniger Lyon Pfund Pfund Matossi Wickersheium	BBS JOSA PR JOSA JOSA JCP AM	5 (1909) 7 (1923) 61 (1942) 35 (1945) 37 (1947) 17 (1949) 44 (1959)	159 517 482 611 558 679 440

$\text{Al}_2\text{O}_3 \cdot 2\text{Si}_7\text{Ca}_2$ Fe_5Mg_5	Hornblende	2-16 μ	S		Hunt	AC	22 (1950)	1478
$\text{Al}_3\text{H}_2\text{O}_2 \cdot 12\text{Si}_3\text{K}$	Muscovite	11-14 μ	S	Spec	Coblentz	BBS	2 (1907)	457
		4-11 μ	S	Refl. spec	Coblentz	BBS	7 (1911)	619
		1-9 μ	S	Spec	Lyon	PR	61 (1942)	482
		2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
		13-14 μ	S	H ₂ O Absorp.	Hunt	AC	25 (1953)	1169
$\text{Al}_3\text{O}_3 \cdot \text{Si}_5\text{CaNa}$	Oligoclase	1-8 μ	S	Spec	Coblentz	BBS	5 (1909)	159
		2-16 μ	S	Emiss. spec	Hunt	AC	22 (1950)	1478
$\text{Al}_4\text{H}_4\text{O}_{10} \cdot 16\text{Si}_4$ Fe_6Mg_3	Vermiculite	4000-3000	S	Spec, Assign	Serratosa	JPC	62 (1958)	1164
$\text{Al}_6\text{H}_2\text{O}_{20} \cdot \text{Si}_4\text{K}_4 \cdot \text{nH}_2\text{O}$	Illite	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
		8-12 μ	S	Spec	Hunt	AC	25 (1953)	1169
		-	-	Freq	Pobeyguin	CPR	248 (1959)	2220
$\text{Al}_6\text{H}_4\text{O}_{24} \cdot \text{Si}_6\text{K}_2$	Muscovite	4000-3000	-	Spec, Assign	Serratosa	JPC	62 (1958)	1164
		-	-	Freq	Pobeyguin	CPR	248 (1959)	2220
$\text{Al}_6\text{Cl}_{10} \cdot \text{Si}_6\text{Na}_7$	Hackmanite	200-2000	S	Spec	Medceed	JCP	21 (1953)	1309
$\text{Ag}_3\text{S}_2\text{As}$	Proustite	0.58-2 μ	S	Photoelectric sensitivity	Coblentz	PR	17 (1921)	245
BaCO_3	Witherite	22-310 μ	S	Refl. trans. factors	Weniger	JOSA	7 (1923)	517
		-	-	Residual rays	Schaefer	TFS	25 (1929)	841
		1-15 μ	S	Spec, Assign	Narayanan	JIIS	40A (1958)	1
BaO_3	Barytes	2-15 μ	S	Spec	Harkins	AC	31 (1959)	541
$\text{BaO}_9\text{Si}_3\text{Ti}$	Benitoite	-	-	Quant. Mech., Struct	Matossi	JCP	17 (1949)	679
CaCO_3	Aragonite	-	-	Residual rays	Schaefer	TFS	25 (1929)	841
		5-40 μ	S	Refl.	Barnes	PR	39 (1932)	562

	41 μ	S	Residual rays	Seifert	RSI	11 (1940)	365
	-	-	Selection rules	Couture	JCP	15 (1947)	1532
	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
	8-15 μ	S	Spec	Louisfert	CPR	235 (1952)	287
	14.3 μ	S	Freq	Hunt	AC	25 (1953)	1169
$\text{CaC}^{12}\text{O}_3$	861	S	Intermolecular coupling	Decius	JCP	22 (1954)	1946
$\text{CaC}^{13}\text{O}_3$	861	S	Intermolecular coupling	Decius	JCP	22 (1954)	1946
CaCO_3	1-8 μ	S	Emiss. spec	Coblentz	BBS	5 (1909)	159
	93-116 μ	S	Residual rays	Weniger	JOSA	7 (1923)	517
	5.5-7.5 μ	S	Refl.	Pfund	JOSA	15 (1927)	69
	1.7-2.64 μ	S	Refl.	Plyler	PR	33 (1929)	948
	-	-	Residual rays	Schaefer	TFS	25 (1929)	841
	8.7 μ	-	Dispersion	Korff	RMP	4 (1932)	471
	3-9 μ	S	Spec	Pfund	PR	39 (1932)	64
	6.4-7.4 μ	S	Refl. trans. spec	Silverman	PR	39 (1932)	72
	4-8 μ	S	Refl. trans.	Pfund	JOSA	23 (1933)	375
	80-150 μ	S	Refl.	Bryant	JOSA	24 (1934)	139
	-	-	Christianson filter	Barnes	PR	49 (1936)	732
	6-11.5 μ	S	Refl.	Sanderson	JOSA	30 (1940)	566
	-	S	Residual rays	Seifert	RSI	11 (1940)	365
	.4-4 μ	S	Spec	Barnett	JPC	46 (1942)	69
	-	-	Selection rules	Halford	JCP	14 (1946)	8
	-	-	Selection rules	Couture	JCP	15 (1947)	1532
	-	-	Quant. Mech.	Hornig	JCP	16 (1948)	1063
	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
	-	S	Freq cal.	Giulotto	JCP	19 (1951)	1316
	-	S	Quant. Anal	Hunt	AC	24 (1952)	607
	8-15 μ	S	Spec	Louisfert	CPR	235 (1952)	287
	14 μ	S	Freq	Hunt	AC	25 (1953)	1169
	2-15.3 μ	S	Spec	Hackaylo	AC	26 (1954)	1410
	1430	-	Band length	Margoshes	JCP	22 (1954)	381
	1300-1600	S	Emiss. spec	Ketelaar	P	22 (1956)	1283
	20-35 μ	S	Spec, Assign	Hexter	SA	10 (1958)	281
	200-700	-	Freq	Louisfert	CPR	248 (1959)	1150
	-	-	Freq	Pobeyguin	CPR	248 (1959)	2220
	-	S	Assign	Shuttin	DANS	125 (1959)	767

$\text{CaC}^{12}\text{O}_3$	Calcite (isotopic)	878	S	Intermolecular coupling	Decius	JCP	22 (1954)	1946
$\text{CaC}^{13}\text{O}_3$	Calcite (isotopic)	850	S	Intermolecular coupling	Decius	JCP	22 (1954)	1946
$\text{CaC}_2\text{O}_6\text{Mg}$	Dolomite	-	-	Freq, Residual rays	Schaefer	TFS	25 (1929)	841
		2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
		-	S	Quant. Anal	Hunt	AC	24 (1952)	607
		13.7 μ 200-700	S	Spec, Freq	Hunt	AC	25 (1953)	1169
CaH_2O_2	Portlandite	-	-	Freq	Loiusfert	CPR	248 (1959)	1150
		2-3 μ	S	Struct	Pobeguín	CPR	248 (1959)	2220
$\text{CaH}_4\text{O}_6\text{S}$	Gypsum	-	S	Theoretical study	Petch	JOSA	44 (1954)	744
		1-7 μ	S	Spec	Hexter	JOSA	48 (1958)	770
		1-8 μ	S	Emiss. spec	Coblentz	BBS	2 (1907)	457
		.648-.093 μ	S	Spec	Coblentz	BBS	5 (1909)	159
		-	S	Comparison with Raman	Hollaender	BBS	7 (1911)	619
		-	-	Water of crystallisation study	Ellis	PR	34 (1929)	994
		8.7 μ	-	Dispersion formula	Korff	RMP	38 (1931)	693
		7-10 μ	S	Ref. spec	Sanderson	JOSA	4 (1932)	471
		2-16 μ	S	Spec	Hunt	AC	30 (1940)	566
		2 μ	S	Dispersion	Vanderberg	PH	22 (1950)	1478
CaF_2	Fluorite	15.1 μ	S	Spec, Freq	Hunt	AC	85 (1952)	755
		3000-9000	S	Spec	Webber	PH	25 (1953)	1169
		600-3400	S	Spec, Assign, Struct	Haas	PHS	96 (1954)	846
		2.5-3.3 μ	S	Spec, Struct	Lazerev	BASU	236A (1956)	427
		6131-7542	S	Spec	Stekhanov	BASU	21 (1957)	329
		-	-	Theoretical discussion on struct	Atoji	BASU	21 (1957)	319
		1-5.5 μ	S	Spec, Dichroism	Merritt	JCP	29 (1958)	1306
		24.4 μ	S	Residual rays plate	Rubens	PR	2 (1895)	424
		2-3 μ	S	Dichroism	Stewart	PR	4 (1897)	314
		.5-9 μ	S	Trans spec	Coblentz	BBS	9 (1913)	433
CaF_2	Fluorite	-	S	Spec	Gorton	PR	7 (1916)	66
		6-11 μ	S	Vib. freq theory	Coblentz	JOSA	4 (1920)	432
		-	S	Transmission	Nichols	PR	21 (1923)	712
		5.8 μ	S	Transmission	Nicholson	PR	22 (1923)	199

$\text{Ca}_5\text{FO}_{12}\text{P}_3$	Apatite	4-11 μ 1-8 μ 2-16 μ 11-12.5 μ 11-24 μ	S S S S S	Refl. spec Emiss. spec Spec, Freq Spec Spec	Coblentz Coblentz Hunt Underwood Fischer	BBS BBS AC JACS AC	2 (1907) 5 (1909) 25 (1953) 77 (1955) 29 (1957)	457 159 1169 317 431
$\text{Ca}_8\text{H}_{32}\text{O}_{57}\text{Si}_{16}\text{K}_2$	Apophyllite	8.8-10.4 μ	S	Refl. spec	Strong	JOSA	29 (1939)	520
$\text{Ca}_{10}\text{HO}_{25}\text{P}_6$	Hydroxyapatite (natural)	2-16 μ 11-24 μ	- S	Spec, Freq Spec	Homo Fischer	JACS AC	76 (1954) 29 (1957)	3924 431
CuS	Covellite	6 μ	S	Opaque	Crandall	PR	2 (1913)	343
$\text{Cu}_2\text{CH}_2\text{O}_5$	Malachite	22-310 μ	S	Refl. trans. factors	Weniger	JOSA	7 (1923)	517
Cu_2S	Chalcocite	6 μ	S	Opaque	Crandall	PR	2 (1913)	343
FeCO_3	Siderite	- 2-16 μ 13.5 μ	- S S	Residual rays Spec Spec, Freq	Schaefer Hunt Hunt	TFS AC AC	25 (1929) 22 (1950) 25 (1953)	841 1478 1169
FeHO_2	Gothite	1-10 μ -	S -	Spec H bond	Coblentz Bernal	BBS PRS	2 (1907) 151 (1935)	457 384
FeO_3Ti	Ilmenite	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
FeS_2	Pyrite	.8-13 μ 2-16 μ 680-2400	S S S	Refl. spec Spec Refl. Ext. coeff.	Coblentz Hunt Simon	BBS AC JOSA	2 (1907) 22 (1950) 41 (1951)	457 1478 7302
Fe_2O_3	Hematite	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
$\text{Fe}_2\text{O}_4\text{SiMg}_2$	Olivine	2-16 μ	S	Spec	Hunt	AC	22 (1950)	1478
$\text{Fe}_2\text{O}_4\text{Ni}_{0.3}\text{Zn}_{0.7}$	Nickel-zincferrite	280-4000	S	Spec, Assign, FC	Waldron	PR	99 (1955)	1727
$\text{Fe}_3\text{H}_4\text{O}_9\text{SiMg}_3$	Serpentine	1-9 μ	S	Spec	Coblentz	BBS	2 (1907)	457
Fe_3O_4	Magnetite	-	S	Kerr effect polarization	Ingersoll	JOSA	5 (1921)	156

MgCO ₃	Magnesite			Freq assign	Schaefer	TFS		
		-			Schaefer	TFS	25 (1929)	841
		2-16/ μ	S	Spec	Hunt	AC	22 (1950)	1478
		0.4-2.4/ μ	S	Refl. spec	Kaye	JOSA	41 (1951)	658
		0.4-2.7/ μ	S	Refl. spec	Derksen	JOSA	42 (1952)	263
		0.4-2.6/ μ	S	Refl. spec	Jacqauz	JOSA	45 (1955)	781
		200-700	-	Freq	Louisfer	CPR	248 (1959)	1150
Mg ₂ ClO ₆ Na ₃	Northupite	-	-	Freq	Schaefer	TFS	25 (1929)	841
MgH ₂ O ₂	Brucite	2-3.5/ μ	S	Spec	Mara	JOSA	43 (1953)	1100
		2-3/ μ	S	Struct	Petch	JOSA	44 (1954)	744
		2.3-3.5/ μ	-	Struct	Mara	JOSA	46 (1956)	464L
		-	S	Theoretical	Hexter	JOSA	48 (1958)	770
		350-11000	-	Spec, Struct	Mitra	DA	19 (1958)	841
MgO	β -Magnesia	8.7-32.8/ μ	S	Reflectivity	Strong	PR	37 (1931)	1565
		20-150/ μ	S	Reflectivity	Strong	PR	38 (1931)	1810
		-	-	Polarizability theory	Szigeti	TFS	45 (1949)	155
Mg ₃ H ₂ O ₁₂ Si ₄	Talc	7-11/ μ	S	Refl. spec	Coblentz	BBS	2 (1907)	457
		1-8/ μ	S	Emiss. spec	Coblentz	BBS	6 (1910)	301
		5-750/ μ	S	Absorption	Cartwright	PR	35 (1930)	415
		8.3-10.3/ μ	S	Refl. spec	Sanderson	JOSA	30 (1940)	566
		2-16/ μ	S	Spec	Hunt	AC	22 (1950)	1478
		15/ μ	S	Freq	Hunt	AC	25 (1953)	1169
Mg ₃ H ₄ O ₉ Si ₂	Antigorite	-	-	Spec, Assign	Brindley	AM	44 (1959)	185
Mg ₃ H ₄ O ₉ Si ₂	Chrysolite	2.75/ μ	-	Spec, Assign	Brindley	AM	44 (1959)	185
Mg ₃ C ₃ H ₈ O ₁₄	Hydromagnesite	-	-	Freq	Pobeguin	CPR	248 (1959)	2220
MnCO ₃	Rhodochrosite	2-16/ μ	S	Spec	Hunt	AC	22 (1950)	1478
MnH ₂ O ₂	Manganite	1-9/ μ	S	Spec	Coblentz	BBS	2 (1907)	457
MnH ₄ NO ₄ P	Mineral violet	2-15/ μ	S	Spec	Harkins	AC	31 (1959)	541
Na ₂ H ₄ ClO ₄ B	Teepelite	-	S	Spec, Assign	Edwards	JACS	77 (1955)	266

PbCO ₃	Cerussite	-	Residual rays	Schaefer	TFS	25 (1929)	841
		0.6-9.0 μ	Dispersion	Pfund	JOSA	26 (1936)	230A
		-	Particle size	Bailey	IEC	18 (1946)	365
		-	Selection rules	Couture	JCP	15 (1947)	1532
PbO ₄ S	Anglesite	1-8 μ	Spec	Coblentz	BBS	2 (1907)	457
		5-750 μ	Absorption	Cartwright	PR	35 (1930)	415
PbO ₄ Mo	Wulfenite	-	-	Duval	CPR	227 (1948)	1153
		650-290	Assign	Duval	CPR	239 (1954)	249
PbO ₄ W	Stolzite	650-290	Assign	Duval	CPR	239 (1954)	249
		0.5-13 μ	Refl. spec	Coblentz	BBS	2 (1907)	457
PbS	Galena	6 μ	Opaque	Crandall	PR	2 (1913)	343
		22.9-32.8 μ	Reflectivity	Strong	PR	37 (1931)	1565
		150 μ	Reflectivity	Strong	PR	38 (1931)	1818
		2-16 μ	Spec	Hunt	AC	22 (1950)	1478
		2-5 μ	Trans.	Clark	PR	85 (1952)	1043
		0.6-11 μ	Refl. spec	Coblentz	BBS	2 (1907)	457
Sb ₂ S ₃	Stibnite	1-7 μ	Trans. refl.	Crandall	PK	2 (1913)	343
		-	Freq	Bauerofit	JPC	23 (1919)	1
		22.9 μ	Reflectivity	Strong	PR	37 (1931)	1565
		20-150 μ	Reflectivity	Strong	PR	38 (1931)	1818
		.05-13 μ	Trans. spec	Billings	JOSA	37 (1947)	119
		-	Theo. const.	Scott	JOSA	45 (1955)	176
		.6-1.8eV	Photoconductivity	DeVore	PR	102 (1956)	86
Sc ₂ O ₇ Si ₂	Thortuveitite	-	Cryst. struct, Quant. Mech.	Matossi	JCP	17 (1949)	679
		22-310 μ	Refl. trans. factors	Weniger	JOSA	7 (1923)	517
SrCO ₃	Strontianite	1.5-2.5 μ	Assign	Plyler	PR	33 (1929)	948
		-	Residual rays	Schaefer	TFS	25 (1929)	841
ThO ₄ Si ₄	Orangite	650-290	Assign	Duval	CPR	239 (1954)	249
		1-8 μ	Emiss. spec	Coblentz	BBS	5 (1909)	159
TiO ₂	Rutile	22-310 μ	Refl. trans. factors	Weniger	JOSA	7 (1923)	517
		-	Residual rays	Schaefer	TFS	25 (1929)	841

Chemical	Wavelength	Source	Method	Author	Year	Page
ZnCO ₃	0.6-9.0 μ	S	Dispersion	Pfund	JOSA	26 (1936)
	3-300 μ	-	Refl. spec	Berberich	JAP	11 (1940)
	0.4-4 μ	S	Spec	Barnett	JPC	46 (1942)
	-	-	Polarizability	Sziiget	TFS	45 (1949)
	1.5 μ	-	Freq. Assign, Calc.	Dayal	PIAS	32 (1950)
	6-300 μ	S	Refr. Ind.	DeVore	JOSA	40 (1950)
	0.4-8 μ	S	Refl. spec	VonHippel	RMP	22 (1950)
	-	S	Dispersion	Cronmeyer	PR	82 (1951)
	-	S	Refl.	Studer	JOSA	41 (1951)
	0.3-8 μ	S	Refl. spec	Cronmeyer	PR	87 (1952)
ZnO	0.3-8 μ	S	Spec	Breckenridge	PR	91 (1953)
	0.9-2.65 μ	S	Refl.	Studer	JOSA	43 (1953)
	-	-	Heat cap due to optical vib.	Dugdale	PRS	224 (1954)
	-	-	Reflectivity surface	Haas	JOSA	45 (1955)
	-	S	Theoretical, Consts.	Scott	JOSA	45 (1955)
	-	-	Absorption	Cronmeyer	PR	113 (1959)
	2-16 μ	S	Spec	Hunt	AC	22 (1950)
	20-150 μ	S	Reflectivity	Strong	PR	38 (1931)
	650-290	S	Assign	Duval	CPR	239 (1954)
	Zn ₂ O ₄ Si					

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