

NEWS & EVENTS

Rochester Institute of Technology

Vol. 12, No. 24, July 3, 1980

Plough Named Executive Dean For Eisenhower Campus

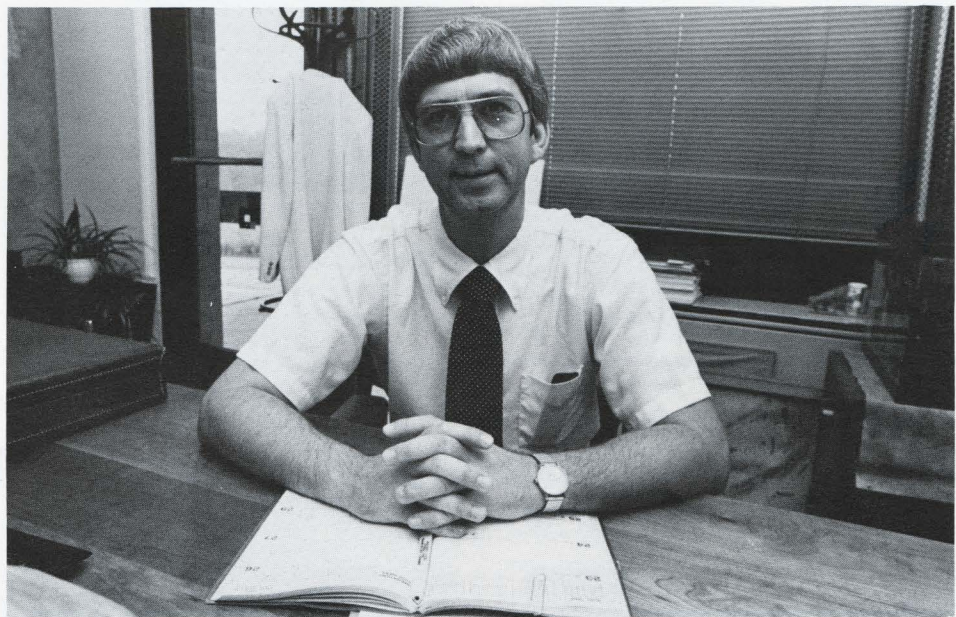
Dr. Thomas R. Plough assumed the positions of executive dean and professor of sociology at Eisenhower College of RIT, July 1, 1980.

Announcing Dr. Plough's appointment today, Dr. M. Richard Rose said, "In his work at the Institute since 1972 and in his role as chairman of the Academic Planning Project, which last summer charted future directions for Eisenhower College, Tom Plough has earned the respect of members of the RIT community in Rochester and in Seneca Falls. His appointment at Eisenhower is based not only on my confidence in him, but also on the strong recommendation of the Eisenhower student and faculty representatives who helped conduct the search for executive dean."

As executive dean reporting to RIT Vice President of Academic Affairs Roy I. Satre, Dr. Plough will be the chief operating officer for the Eisenhower campus and will have primary responsibility for leadership and development of academic programs and personnel at Eisenhower. Like the academic deans of the other colleges of RIT, Dr. Plough will be concerned with the recruitment, retention and development of faculty and other academic personnel.

Because Eisenhower is located away from the Rochester campus of RIT, Dr. Plough will have responsibilities for leadership and coordination that extend beyond the academic area to include day-to-day campus maintenance, business affairs, and general review of such concerns as admission goals and quality of the academic experience.

"One major direction," said Plough, "will be attention to the ethical and intellectual growth of students through



THOMAS R. PLOUGH

a combination of campus life programs, internship experiences and interdisciplinary liberal arts programs with career orientations. The Eisenhower campus has quality academic programs taught by an excellent faculty that should be attractive to many students and their parents."

As associate vice president for Student Affairs since 1972, Dr. Plough has had primary responsibility for nearly every department normally associated with student affairs, including the Learning Development Center, physical education and athletics, academic support programs such as Upward Bound and Special Services, and counseling and residence hall services.

Additionally, he has been assigned by the provost to frequent special projects in academic administration. He has

been responsible for academic advising and the conduct of a leadership program for academic department chairpersons at RIT and last summer directed a 20-member academic planning group that proposed new academic programming for the Eisenhower campus. He also holds appointment as associate professor of sociology in RIT's College of General Studies, teaching courses in the sociology of work and education.

Eisenhower Chancellor Joseph Coffee said, "I welcome the appointment of Dr. Plough to the new position of executive dean of Eisenhower College. My colleagues and I know and respect his commitment to further the advancement of Eisenhower within the RIT family of

continued on page 8

Forman Named Director of SAIS

RIT has announced the appointment of James D. Forman as director of the new School for Applied Industrial Studies in the College of Continuing Education.

In that position he will hold the Russell C. McCarthy Professorship, a chair established in 1979 through the cooperative effort of Lucius and Fred Gordon and two Rochester industries, Mixing Equipment Co. and General Railway Signal Co. Mr. McCarthy, an RIT trustee, was long-time manager of the Industrial Management Council of Rochester before his retirement.

Forman has been associated with RIT since 1970 as director, Center for Community College Faculty Development, and then as the first director of the School of Applied Science. In that capacity he was responsible for initiating and overseeing the development of that school and its successor, the School of Engineering Technology.

In announcing the appointment, Dr. Robert Clark, dean of the College of Continuing Education, cited Forman's industry experience and leadership in the fields of community college de-



JAMES D. FORMAN

velopment, technical education and recruitment as the "ideal background for the new position."

A Rochester native, Forman received a bachelor of science degree in mechanical engineering from RIT in 1959 and a master of science degree from Alfred University in 1963. He held the positions of head of mechanical technology at Alfred State College, dean of Career Programs, Anne Arundel Community College in Maryland, and coordinator-technical training in the Apparatus Division of Eastman Kodak Co. before returning to RIT.

He is a founder and current president of the Council for Engineering Technology in N.Y. State, director in the cooperative education division and technical college council of the American Society for Engineering Education, consultant to the National Science Foundation and a member of numerous other professional organizations.

"I look forward to guiding the development of SAIS toward realizing its potential as a unique training resource for Rochester industry and as a school that can achieve national leadership in technical training," Forman said upon accepting the appointment.

Smith Promoted to Associate Vice President



JACK F. SMITH

Jack F. Smith has been promoted to associate vice president for Institutional Advancement at Rochester Institute of Technology.

Smith has served as director of Communications and Alumni Affairs since 1978. He will continue his management of RIT media relations, publications, alumni relations and the alumni annual fund and will assume special projects in Institutional Advancement on behalf of the senior vice president, Dr. Robert Frisina.

From 1976-78 Smith was executive director of the White House Conference on Handicapped Individuals under President Ford and President Carter. The Conference established meetings in all states and territories leading to a White House Conference to define needs and solutions to the problems facing this nation's 35 million disabled persons.

From 1969-76 Smith held a variety of positions at RIT ranging from coordinator of Communications to assistant dean with the National Technical Institute for the Deaf.

He played a central role in the organization and implementation of RIT's 150th Anniversary Celebration this past year. RIT's public relations range from special events to publications, video and radio and to alumni fund raising.

This year these programs were cited for their excellence by the Council for Advancement and Support of Education (CASE). In competition with all U.S. colleges and universities, RIT's communications and alumni affairs programs ranked second only to Brown University.

Smith is a 1960 graduate of the University of Pittsburgh.

Teaching Awards Presented in CCE

The College of Continuing Education recently presented Excellence in Teaching awards to three members of the adjunct faculty at the annual meeting of that faculty on the Institute campus.



DAVID ABBOTT

The three receiving awards were David Abbott, staff member in Instructional Media Services (see "Profile" this issue), instructor of basic design and illustration; Peter Connelly, manager of multinational materials, Xerox Corp., instructor of corporation finance and statistics; and Kalman Vizy, product planning, Eastman Kodak Co., instructor in physics and nuclear physics.

Announcing the awards, Dr. Frederick Gardner, executive director of the evening college and summer session of the

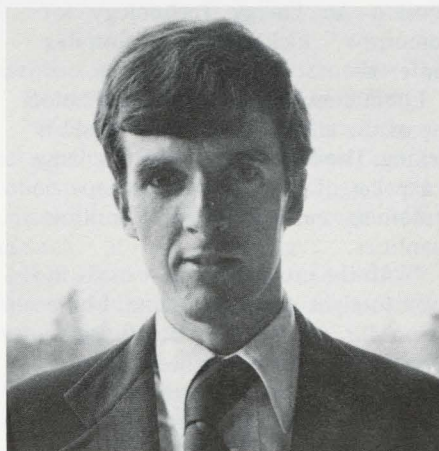


KALMAN VIZY

College of Continuing Education, said the winners were selected as the result of student nominations and were "representative of the more than 300 part-time instructors we are fortunate enough to have in the College of Continuing Education."

Gardner presented Connelly's awards and quoted from citations students had submitted: "Of all the instructors I've had at RIT, none is as sincere in his concern for the student as Peter Connelly.... His courses are as tough as any at RIT but are also the most enjoyable.... Many students stay in touch with him long after his courses end."

Vizy's award was presented by Alfred C. Haacke, chairman of the physics program, CCE, who stated, "First of all, Kal Vizy knows his subject matter very well. He has a deep love of teaching and,



PETER CONNELLY

finally, he has an appreciation for students' difficulties and, therefore, tries to teach rather than blunder ahead blindly."

Twenty members of the adjunct faculty who have taught for 20 or more years also received citations at a dinner prior to the meeting. Special citations were presented to Robert M. Jones, instructor in mathematics, and Mary Donadio, instructor of photography, both of whom have taught in the college for 38 years.

NEWS & NEWSMAKERS

Dr. William E. Castle, vice president of RIT and director of NTID at RIT, was recently elected the president-elect of the Alexander Graham Bell Association of the Deaf (AGBAD) by members of that association.

Dr. Castle will serve as the association's president-elect for two years as of July 1 and will assume the role of AGBAD president during the association's 1982 international convention in Toronto. He will serve as the association's president until 1984 and will continue to serve on its board of directors until 1986 as past president.

Professors **Richard G. Budynas** and **Wayne W. Walter**, Mechanical Engineering Department, have been awarded funding by the Institute Committee on Projects Relating to Productivity for the development of their project, "Strength of Materials Video Laboratory Modules."

Larry J. Lomaglio, assistant professor at NTID, has been appointed by Governor Hugh Carey to serve a three-year term on the Board of Visitors of Rochester Psychiatric Center. Board members report on and advise the governor on conditions at the center and make appropriate recommendations to both the governor and the director of the facility.

Graham Marks has been hired as an associate professor in the School for American Craftsmen. A review and photograph of his work appeared in the March *Art News*, and the University of Colorado (Boulder) recently purchased one of his pieces for its permanent collection.

Sue Weissler recently was hired as staff photographer in the Communications Dept.

Lorie Hammond, Communications, has been promoted to publications assistant.



Chemists Still Fission for Fusion

The essence of "Communicating Chemistry" comes down to a dialogue between teacher and student.

So, at the Sixth Biennial Chemical Education Conference held last week at NTID, high school science teachers and secondary chemical educators took their turns as students to learn how to better communicate chemistry in their classrooms.



Taking a pause in a hectic schedule are Earl Krakower (left), head of RIT's chemistry department and conference chairman; speaker Glenn T. Seaborg (center); and conference program chairman Leonard W. Fine.

"Communicating Chemistry," the theme for this year's conference hosted by RIT's chemistry department, was also the central theme for a series of specific lectures during the week entitled "The Art of the Lecture."

Whether it be a slide presentation or a chemical demonstration, it all boils down to showmanship and preparation. A father and son team—the Bents—put the lecture on a pedestal as a dynamic art form.

Harry E. Bent, father, also talked about chemistry lecture-demonstrations in the early 1900s. His congenial manner and wit, his earnest interest in the excitement of chemistry and his long career prompted a standing ovation from the crowd of fellow chemists attending his lecture. Any teacher who can arouse a round of applause for an 8:30 a.m. lecture obviously practices what he preaches!

David Harpp of McGill University outlined the aspects of symmetry in a display of lap-dissolve presentations, followed by the University of Wisconsin's Bassam Shakhshiri who walked the audience through the magic of properly planned chemical demonstrations.

Energy was one of the main themes of the conference. A controversial issue and hard to keep up with, energy was discussed from the viewpoints of three distinguished speakers.

When two nuclei combine under very energetic conditions a fusion reaction produces enormous amounts of energy. Laser expert Moshe Lubin predicts that that energy will power our world for generations to come.

Lubin is director of the Laboratory for Laser Energetics at the University of Rochester. His Sunday evening talk, "Fusion—An Energy Technology for Tomorrow," kicked off the four-day conference.

Lubin considers laser initiated fusion one of the energy answers the world is seeking. The fuel for this type of energy is a pellet of the hydrogen isotope, deuterium, and is available in limitless quantities.

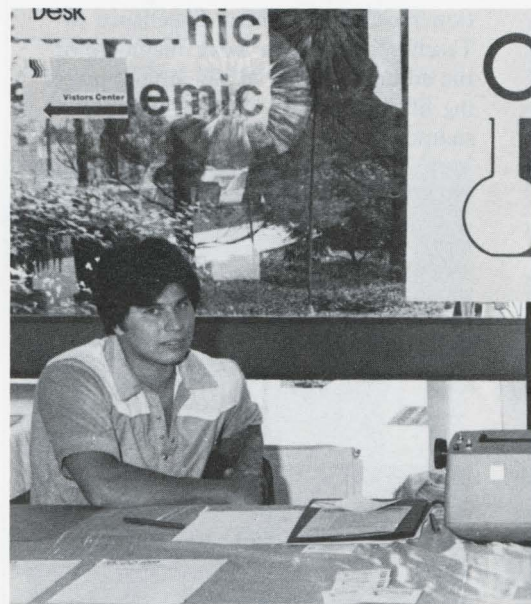
"With the progress we have made in a seven to eight year time frame, I have reason for optimism in the future," says Lubin. He predicts laser breeder reactors will be in prototype stage by 1995 and possibly fusion reactors will be on-line by the year 2050.

Lubin believes laser fusion is important both scientifically and economically. "Fusion energy is a clean, dependable, efficient and inexhaustible energy for the future progress of the world," Lubin told the audience.

The next morning the energy theme was continued by Glenn T. Seaborg, Nobel laureate for his discovery of 10 transuranium elements beginning with plutonium.

"Never again will we be in a position to take energy for granted," says Seaborg.

He sees nuclear fusion and breeder reactors as the major long-term solutions to our energy problem. Conventional nuclear reactors are inefficient, using only one percent of the fuel, Seaborg believes.



Behind the scenes, these four people saw that all conference attendees were well taken care of: Gail Binder of the NTID science support staff; and

"At present, the only sources that can make a continuing impact on the millions of barrels of oil a day we use are coal and conventional nuclear power," Seaborg states.

Regardless of the environmental problems or small return for the effort, Seaborg feels no source of energy should be overlooked.

Seaborg is currently University Professor of Chemistry at the University of California at Berkeley and was formerly chairman of the Atomic Energy Commission.

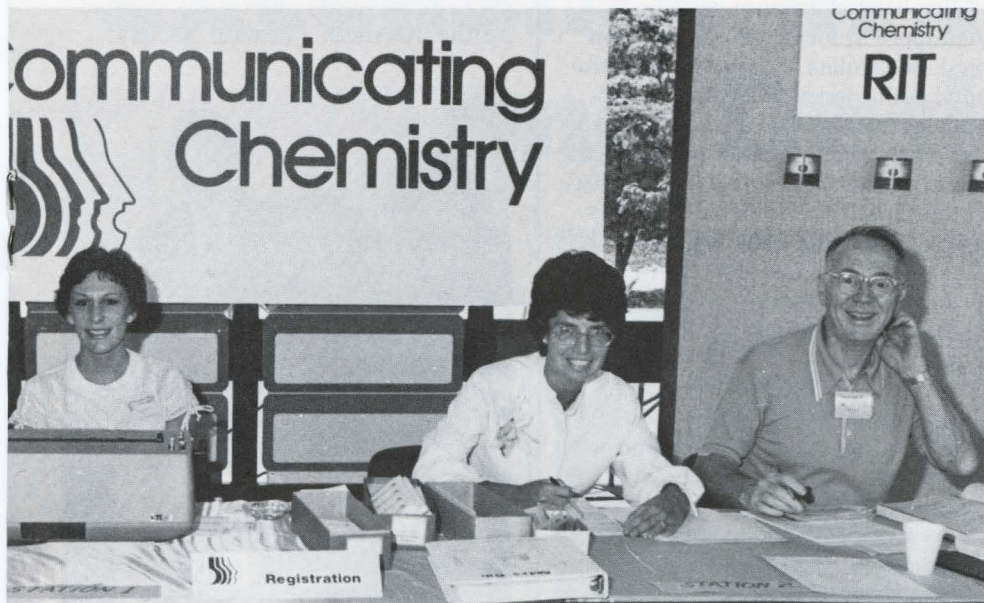
The major portion of Bethe's speech to the overflow audience at NTID dealt with nuclear energy.

"Nuclear energy is the most dangerous option," admits Bethe, who worked with Einstein in the early days of nuclear power, "but it is necessary. The public's fear of meltdown and possible resulting physical harm has to be acknowledged.

"But the public should also know of Nobel prize winning physicist Hans Albrecht Bethe warned the conference participants Tuesday evening of an "energy catastrophe by the year 2000," when oil production will no longer keep up with demand.

"It is necessary for us to accept the fact that there will be a permanent scarcity of oil," Bethe says.

on but They've Got Energy to Run



...ce details ran smoothly: RIT student John Manos; Helen Dorsett, chemistry department secretary; and Jim Wilson, treasurer of the American Chemical Society.

the good safety record of the nuclear industry. We have never had a meltdown."

Bethe sums up his confidence in the safety of nuclear power by stating that the average effect of nuclear power on the United States population "is less adverse than smoking one cigarette in terms of causing cancer."

The final sections of his speech dealt with methods of nuclear waste disposal.

Besides energy, conference speakers presented their views on a number of other issues currently being debated by

scientists and the average citizen alike.

Recombinant DNA is one of these.

"We're living on the edge of the genetic age," proclaims **Gary Wilson**, an associate professor of microbiology at the University of Rochester and a respected researcher in DNA technology.

Excited at the prospect himself, Wilson admits not everyone shares his enthusiasm.

Recombinant DNA involves splitting chromosomes—the stuff of which all life is made—to either add or substitute additional genes and then to recombine

the altered chromosomes.

These reprogrammed chromosomes alter the bacteria's function. Some bacteria have been programmed to produce human insulin, human growth hormones and interferon, which is being tested today as a cancer remedy.

Although food additives are generally perceived as neutral or harmful, two additives, BHT and BHA, have been found to inhibit carcinogenicity in some persons.

Under proper conditions disease resistant strains of vegetables could be produced or large-yield crops developed, which would help solve the world's growing food shortage, he says.

He adds that the possible benefits of this type of research are immense.

Cancer, chemical hazards and mutagenesis were also discussed by experts.

Remember how your mother told you vegetables were good for you? There was probably more truth to what she was saying than she realized.

Tests using extracts from carrots, brussels sprouts and spinach have shown that those extracts can cause a drop in mutagenic response enzymes, says **Andrew Tometsko**, head of Rochester's Littron Labs.

These enzymes can react in cells to cause genetic defects. They are produced by the body as a reaction to outside substances.

continued on page 6



"Afterglow sessions" were held every evening at the conference in NTID's outdoor quad. Using one such occasion to chat with Nobel laureate Hans Bethe (second from right), are conference participants Moshe Lubin of the laser lab at the University of Rochester (behind Bethe) and RIT chemistry faculty member Bill Hayles (left).



Thursday's CHEMATHON '80 was one of the concluding highlights of the conference.

Chem. Conference ...

continued from page 5

Tometsko's company tests chemicals for carcinogenic (cancer causing) and mutagenic (mutation causing) properties.

Learning how to stimulate the body's natural detoxification process will be helpful in screening new cancer drugs, Tometsko told the group of teachers at his lecture.

"Ever since the International Agency for Research on Cancer said ten years ago that most human cancers were caused by chemicals, the wagging finger has been pointed at the chemical industry," says **Francis L. Scott**, director of chemical research at Pennwalt Pharmaceuticals and chemistry faculty member at RIT.

"Everything is a poison," says Scott. "In large quantities salt and sugar can cause adverse reactions. Everything in large amounts can cause damage or even death.

"The body's beneficial system depends on vulnerability to dose and stress. We can't stop using materials that might be harmful," he says. "If we eliminated materials that might be hazardous, we'd run out of materials to use."

Chemical education for specialized groups was another highlight of the conference—women, minorities, high

school students, non-science majors, and handicapped students.

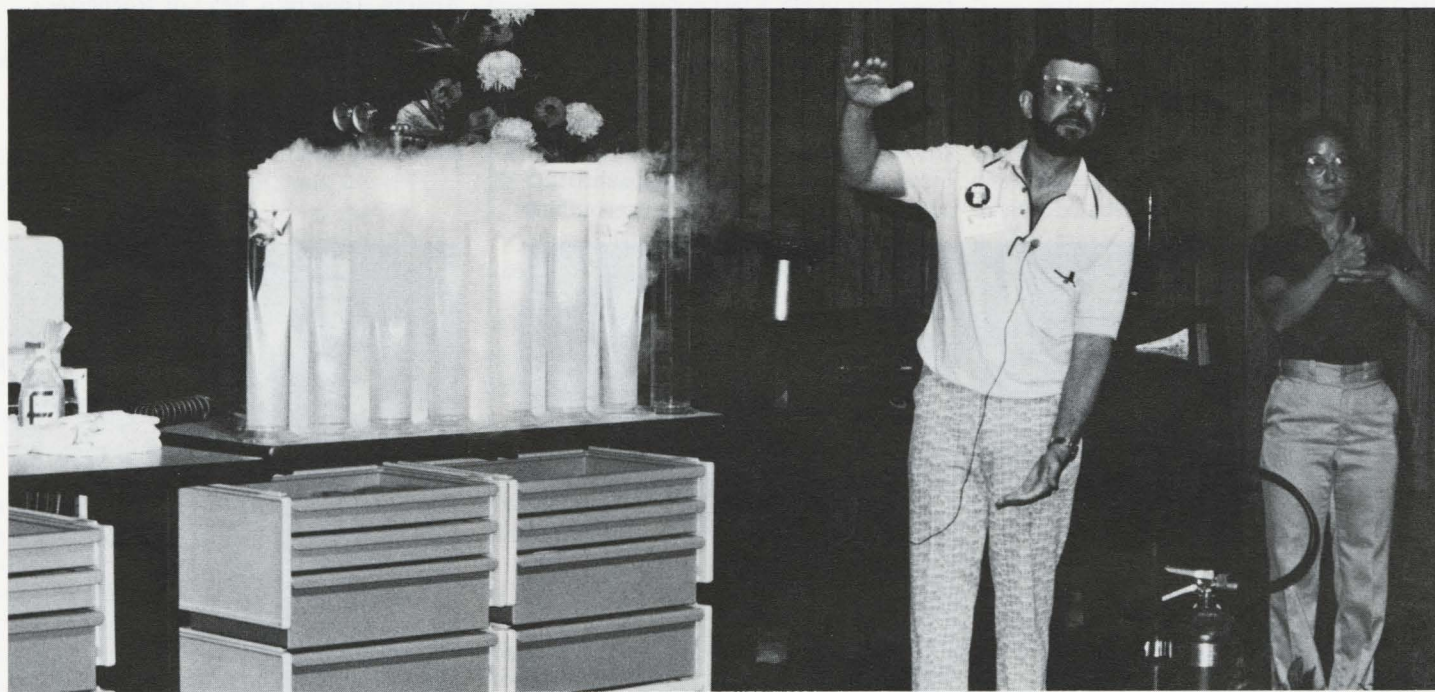
The key to providing education for the handicapped is to meet their actual needs, believes **Martha Redden** of the American Association for the Advancement of Science. Joining Redden at the conference were three others who have had first-hand experience working with handicapped students. **R. C. Morrison** from East Carolina University was instrumental in the design of a talking micro-computer to aid a blind student enrolled in his classes. **Mary Richardson** of Brock University described perfecting an adjustable wheelchair for use by a chemistry major at Brock. **Ed Cain**, formerly of NTID and a new member of RIT's chemistry department, spoke about teaching deaf individuals and offered tips and safety advice.

On the other side of "Communicating Chemistry" is how the press and the public view science. **William Burrows**, current chairman of the journalism department at New York University, gave a humorous but thought-provoking presentation of the state of the science. A former science writer for the *New York Times*, *Wall St. Journal*, and the *Washington Post* he related his own confusions and conflicts in reporting advances and controversies in science. Excerpts from Burrows' lecture were printed on the editorial page of Rochester's *Democrat and Chronicle* on Monday.

Nearly 150 events made up the conference, including poster sessions, exhibits, workshops, special discussion sessions, general papers, a chemical magic show and CHEMATHON '80—a series of three races for early morning chemistry runners. **Earl Krakower**, head of RIT's chemistry department, was the chair of this year's conference sponsored by the American Chemical Society.



Harry E. Bent, chemist and professor for over 50 years, demonstrates one of his "bang-up" classroom techniques to a "student" volunteer.



Bassam Shakhshiri of the University of Wisconsin-Madison vividly demonstrates how to make chemistry classes more interesting. An interpreter signs the presentation beside him. NTID's interpreters made a big hit with the crowd, most of whom had never encountered sign language before.

PROFILE

Excellence in Teaching and Design

Precision, discipline and strategy are words more frequently associated with the military than with the creative process. But when Instructional Media producer and designer David Abbott speaks of his multi-dimensional career in art, those words are heard repeatedly.

A recent winner of an Excellence in Teaching Award from the College of Continuing Education, where he has taught basic design and illustration as a member of the adjunct faculty since 1968, Abbott teaches correct terminology to his students along with design basics.

"I really am strict about students' ability to analyze and express the concepts of their design solutions within the established vocabulary of the art world. In class I strive to get away from slogans such as 'gut feeling,' because art professionals should be able to talk design as well as to do it.

"I also teach my students that there is a strategy to every successful painting. It may develop subliminally from life experience and education, but it is always there," he concluded.

Abbott received a master of fine arts degree in 1968 from RIT, where he first taught as a graduate assistant under Prof. Leonard Barkin. He remembers Barkin as a "provocative teacher who shared a wealth of information on every aspect of art and who set a standard of excellence in teaching which I have continually tried to reach."

The excellence of Abbott's design work can be seen in 12 years of RIT publications, posters and teaching materials, including the familiar Instructional Media IMS and Division of Career Education logos.

However, the diversity of his interests and accomplishments becomes apparent after a close look at the art on the walls of his office on the lower level of Wallace Memorial Library.



A German grenadier (hired by the British during the Revolutionary War) of the Regiment von Dittfurth, one of David Abbott's Heritage Collection

Arranged among many educational and commercial graphic designs is a striking collection of military figures portrayed in fine line drawings and colorful paintings, rich in historical detail. Abbott has produced these on commission for the Company of Military Historians, the New York State Historic Commission, Old Fort Niagara, Sackett's Harbor restoration and other groups.

"As a child growing up in Amsterdam, N.Y., in the middle of the Mohawk Valley," Abbott explained, "early American military history became very real to me." He recalls frequent visits to Fort Ticonderoga and to the nearby home of Col. William Johnson, British Commissioner of Indian Affairs.

"Today, I especially like doing the research for each drawing. Every design requires discipline, great attention to detail and an extensive knowledge of anatomy and history in order to draw the uniforms accurately," he continued. "Also, it is interesting to see how uniform designs influenced the fashions of their day and still do."

Many of Abbott's uniformed soldier drawings and paintings have been published in the *Journal* of the Company of Military Historians, of which he is an active member. Abbott's collection has been reproduced in silkscreen, lithograph and hand colored editions and is, understandably, a source of pride to him.

Although his subjects are frequently military and his methods reflect an appreciation of discipline and precision, David Abbott regards himself as totally a "people person." His empathy and sensitivity come through even in casual conversation but perhaps are most apparent in the painting he does for himself. "What I like to paint most is people," smiles Abbott.

On Saturday mornings he can frequently be seen with his sketch pad at the Athens Restaurant in Rochester's public market observing and drawing the faces of "a fascinating parade of people."

Away from his art, Abbott enjoys a "friendly" game of tennis or golf, "more for the fun than the competition. But I really love horseback riding," he quickly adds.

And then the precise David Abbott is heard again. "You have to be definite when you communicate with an animal. Many smart horses will come to a complete halt if the orders they receive are confused or imprecise."

David Abbott's students, associates and clients do not seem confused. They are clear and precise in their appreciation of his many talents.



Rochester Institute of Technology

One Lomb Memorial Drive
Rochester, New York 14623

Plough...

continued from page 1

colleges and schools as a national memorial to President Dwight D. Eisenhower."

Dr. Plough is a graduate of Michigan State University with bachelor of arts (social sciences), master of arts (student personnel administration) and doctor of philosophy (higher education administration) degrees. He joined RIT from Alma College (Michigan) where he worked from 1963 until 1972, advancing from head advisor in the residence halls to assistant professor of sociology and assistant dean of students and ultimately to dean of students.

Dr. Plough has written scholarly articles and reviews, most dealing with topics of higher education administration. His paper "Integrating Liberal Arts and Career Education Models" has been accepted for presentation at the Sixth International Conference of Improving University Teaching to be held in July in Lausanne, Switzerland.

He serves on the editorial board of the "Journal of College Student Personnel" and on the Board of Directors of the Convalescent Hospital for Children.

Dr. Plough is 39 years old, married, and the father of boys who are 14, 10 and 4 years of age.



Dr. Todd H. Bullard among the many Institute well-wishers who attended the reception for him and his wife before their departure for Bethany College, where Bullard takes over as president on August 1

NEWS & EVENTS

Published weekly on Thursday during the academic year by the Communications Office at Rochester Institute of Technology and distributed free of charge to the Institute community. For information call 475-2750.

Norman Bate Dies

Norman Arthur Bate, professor of art at RIT since 1957, died Saturday, June 29, at Clifton Springs Hospital and Clinic after a long illness. He was 64.

Bate was an internationally-known artist and illustrator who wrote and illustrated seven classic children's books. He won numerous awards for both his printmaking and his books, and his works are part of permanent collections of prints and in galleries and museums throughout the U.S. and Europe.

Bate's etchings were on display as part of a four-artist exhibition at Bevier Gallery in March.

Friends may contribute to the Norman A. Bate Memorial Fund for the College of Fine and Applied Arts. A special RIT memorial service is being planned for the fall.

Bate is survived by his wife Hollis Barton Bate, Geneva, N.Y.