

# Call For Papers

Third international conference on

**GROUP TECHNOLOGY / CELLULAR MANUFACTURING**

- exploiting similarities in parts, products, services, and processes -

**GTCM 2006**

July 3-5, 2006 Groningen, The Netherlands

GTCM 2006 focuses on the

- exchange of research outcomes
- exploration of the link between practice and theory
- generation of ideas for further research



Conference location, Groningen

## Background

Group Technology and Cellular Manufacturing have been widely-researched areas in the past 25 years and much progress has been made in all branches of GT/CM. Many firms and service organizations have implemented concepts of GT/CM, i.e., by introducing work teams, family based scheduling, etcetera. In order to align research efforts in this field, two international conferences on GT/CM were organized by a group of leading researchers. The first conference was held in Puerto Rico, 2000, the second in Columbus, Ohio, 2003. The conferences attracted researchers as well as practitioners. The programs of both GT/CM conferences included tracks of practice-oriented papers, research papers, and panel sessions. Furthermore, tutorials were given by experts to teach and inform PhD students, lecturers, and practitioners on developments in the GT/CM area. The GT/CM 2006 conference will proceed in this tradition.

## Introduction

Resulting from research efforts, numerous techniques, design guidelines, and theories have been developed for GT/CM applications. These applications concern, among other things, the structuring of engineering data-bases, the design and operation of cellular manufacturing systems, the design of planning and control systems of cells, performance evaluation of alternative cell designs, the design and operation of flexible automated cells and systems, team-based approaches for organizing the work force, and much more.

The basic thought behind GT/CM:

Organizations may gain substantial benefits from exploiting similarities in parts, products, services, and processes.

GT/CM has helped many firms to increase the efficiency and effectiveness in product design and process planning departments. It has helped many organizations to streamline their operations, to shorten lead times, to improve quality, and to lower costs. GT/CM is seen as a major ingredient of approaches such as mass-customization, quick response manufacturing, socio-technical work systems, lean production, and business process re-engineering. GT/CM has its applications in industry as well as service organizations. Developments in information systems, combined with the critical competitive situation of many organizations, challenges the research community and practitioners to reconsider the current level of application of GT/CM concepts.

This conference is meant to

- (i) highlight scientific studies and applications in the area of GT/CM,
- (ii) inform academic researchers and practitioners about the outcomes of research efforts, and
- (iii) support researchers to increase the relevance of their future investigations and design projects.

A special focus of the conference is to bring researchers and practitioners together in order to gain synergy between theoretical developments and industrial experiences and needs.

GTCM 2006 consists of

- firm visits
- panel discussions
- industry related tutorials
- research sessions

The organizing committee strongly encourages researchers and practitioners to submit research papers and papers that report experiences, lessons, and perspectives.

## Topics that are of interest include but are not limited to:

- Cell formation
- Cells and flexible automation
- Focused factories
- GT / modularity & mass customization
- GT and standardization
- GT in process planning
- GT in product design
- GT/CM methods in the design and operation of flexible manufacturing cells and systems
- GT/CM principles in service organizations
- GT/CM versus functional-oriented approaches
- GT/CM related to approaches such as
  - Agile manufacturing
  - Lean manufacturing
  - Quick response manufacturing
- Human factors in GT/CM environments
- Implementation issues of GT/CM
- Integration of design and control of cells
- Performance measurement for CM
- Planning and scheduling of cells
- Reconfigurable manufacturing systems
- The role of information systems in GT/CM applications
- Virtual manufacturing cells
- Work teams

## Submission

Authors are invited to submit **abstracts** of about 400 words within the conference scope. Abstracts should be written in English and sent electronically to [gcm2006@rug.nl](mailto:gcm2006@rug.nl) before **November 30, 2005**. An abstract should include the full title of the paper, the authors and their affiliations, postal and email addresses, telephone and fax numbers. Abstracts should clearly state the purpose, results, and conclusions of the work to be described in the final paper. Abstracts will be reviewed and authors will be notified of acceptance by December 15, 2005.

## Proceedings

Papers are invited on the topics listed and others within the general theme of the conference. All papers will be refereed, and at least one author must register in order to include the paper in the proceedings. The length of each paper is limited to 10 pages, formatted according to the guidelines available on the website [www.bdk.rug.nl/gcm2006/](http://www.bdk.rug.nl/gcm2006/). The copyright of the papers remains with the authors. A number of papers will be selected to be asked to submit extensions in order to be refereed for special issues of scientific journals.

## Time Schedule

The calendar of events is as follows:

- November 30, 2005: Deadline for receiving extended paper abstract (400 words)
- December 15, 2005: Notification of acceptance to authors submitting abstracts
- February 15, 2006: Deadline for receiving full papers in specified format (10 pages)
- April 15, 2006: Final acceptance
- June 1, 2006: Last day of registration
- July 3-5, 2006: Conference

# GTCM 2006 July 3-5, 2006 Groningen The Netherlands

## Tentative Program

	Sunday July 2 <sup>nd</sup>	Monday July 3 <sup>rd</sup>	Tuesday July 4 <sup>th</sup>	Wednesday July 5 <sup>th</sup>
Morning		Plenary sessions panel discussion	Sessions, plenary discussions tutorials	Sessions plenary discussion
Afternoon		Visit to firms, sessions at firms	Sessions plenary discussions tutorials	
Evening	Welcome reception		Conference dinner	

## Organizing Committee

Jan Riezebos, University of Groningen  
Jannes Slomp, University of Groningen  
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Nallan Suresh, State University of New York – Buffalo

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## Program Committee

See the website [www.bdk.rug.nl/gtc2006/](http://www.bdk.rug.nl/gtc2006/) for the long list of outstanding researchers in the field of GT/CM that are member of the program committee.

## Timing of the conference

The conference is organized from Monday 3<sup>rd</sup> to Wednesday 5<sup>th</sup> of July 2006. Firm visits are planned for Monday afternoon, 3<sup>rd</sup> of July. This supports the focus of the conference: bringing research and practice together. The visits are also meant to create common references.

## Registration

The basic fee for the conference is € 375, which includes all sessions of the conference, firm visits, CD-rom and hard copy of the proceedings, refreshments, lunches, conference dinner and welcome reception. Research students can register for a special fee of € 200. The research student registration fee will cover all sessions of the conference and a CD-rom of the proceedings. The fee is to be paid before June 1, 2006. Details can be found on the website. Cancellations after this date will result in a publication fee of € 200.

## Location

The conference will be held in Groningen, The Netherlands. The conference meetings will take place in 'Het Kasteel', in the centre of Groningen. Groningen is a pleasant town and offers a broad spectrum of activities. There are many tourist attractions located in and near Groningen. Groningen is located about 2½ hours from the main airport Schiphol, Amsterdam. The University of Groningen is the second oldest university in The Netherlands.

