

Inform's TMS News

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Editorial Comments

Sarfraz A Mian

The TMS Chair and other section officers have been very active during the past year, consolidating several new initiatives started earlier. The key initiatives include the merger of Management of Productivity and Technology Section with our Technology Management Section, continuation of the joint TMS-TIM doctoral dissertation award, fine-tuning and approval of the bylaws, and efforts to tap new talent to reinvigorate our section (see details, From the Chair, page 2). This year, I myself have endeavored to revive our distinguished speaker series by inviting Edward B. Roberts, a well known academic leader and a prominent intellectual in technological entrepreneurship (see page 3 for details).

The TMS program put together for the Miami Beach meeting features the latest research results covering several important topics in our field. The topics include: technology management education, new product development, technology business incubation, modularity management, and R&D management. We hope this fine program will serve our members needs and interests resulting in an active participation in the meeting. Like previous years, TMS sessions are scheduled primarily during the first three days of the meeting — Sunday, Monday, and Tuesday, the days considered most convenient by the majority of our presenters.

I would like to take this opportunity to thank our contributors who have made this meeting possible. I am also grateful to Glenn Dietrich for sharing the bulk of our program responsibilities, and as always to Jeff Liker for facilitating my task by providing prompt and excellent feedback. My thanks also go to Mike Radnor, Mike Badawy, and Dundar Kocaoglu for their continued support. ?

TMS OFFICERS

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(karlinj@umich.edu)

MIAMI BEACH BUSINESS MEETING

The newly merged Technology Management and Management of Productivity and Technology Sections' joint business meeting will be held on Monday, Nov 5, at 6:00 PM in Room Miramar South (Wyndham Hotel, level 3). A wine and cheese reception will follow and you will get to meet with the TMS officers and other distinguished colleagues. Please do not miss this networking opportunity !!!

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Message From the Chair

Hope to see you in Miami !

—Jeffrey K. Liker

Greetings and I hope you had a great year. I expect you have logged onto the internet or through more primitive means managed to register for the Miami conference. November is not a bad time to be in Miami if your weather is anything like here in Ann Arbor, Michigan. As you probably know, Miami Beach has gone through its own renaissance and is quite an exciting place to be.

As for the business of Technology Management, as usual we Glenn and Sarfraz have put together a great cluster. We will be recognizing the best dissertations in the field for 2001, have a highly distinguished speaker in Edward Roberts, and gather and drink wine at the business meeting. We are a half step from officially being a merged section between the Technology Management Section and the Management of Productivity and Technology. Us innovative folks came up with the dazzling new name—Technology Management Section.

We would like to say that the section is brand new and we are doing completely new and different things. The fact is that we exist for people interested in technology management to come together, network, and share interesting research and we will continue to do that. INFORMS is a great venue for meeting and picks some pretty nice places to meet. We hope to see you in Miami.

Second Joint TMS-TIM Dissertation Award

The second joint TMS-TIM best doctoral dissertation award was announced in August 2001. The winner of the award is Kwanghui Lim (PhD MIT Sloan School) and the runner-up is Michelle Gittelman (PhD Wharton School University of Pennsylvania).

Congratulations to the winners !!

We would like to thank the following members of the joint INFORMS/AoM dissertation award committee for reading all the dissertations and doing a careful evaluation and assessment:

•Glenn Dietrich, University of Texas, San Antonio

- Sarfraz Mian, SUNY School of Business @ Oswego
- Laura Cardinal, University of North Carolina
- Chris Tucci, New York University

In recognition of the award, the winners are invited to present a synopsis of their dissertations at the upcoming INFORMS meeting in Miami Beach. The conference is being held from Nov. 4-7, 2001. We have a full session devoted to the best dissertation award on Monday, November 5 (Session MC 20 at 14:30-16:00). INFORMS will cover \$500 of each winner's travel expenses and there will be a plaque. The dissertation advisors are also invited. Here are the papers for award winners who will be presenting in the best dissertation session at Miami Beach:

Kwanghui Lim, "Basic Research, Applied Research, and Innovation in the Semiconductor and Pharmaceutical Industries" (Winner of INFORMS TMS division and Academy of Management TIM division best dissertation award)

The thesis comprises three essays on the relationships among basic research, applied research, and innovation and explores various mechanisms through which absorptive capacity is developed. These include connectedness to the external scientific community, the provision of a science-oriented research environment, and investment in basic research. The chief contribution is to document the ways in which firms develop absorptive capacity, and how absorptive capacity varies across industry, stage of technology development, and scientific area.

Michelle Gittelman, "Mapping National Knowledge Networks: Scientists, Firms, and Institutions in Biotechnology in the United States and France" (Runner up of INFORMS TMS division and Academy of Management TIM division best dissertation award).

This study compares the emergence of a science-based industry in two very different institutional contexts, utilizing both qualitative and quantitative research methods. The findings shed light on organizational evolution and drivers of innovation performance in an emerging industry. The study considers both factors driving innovation specific to local context and those that appear to operate across contexts. Key findings show that innovation performance (measured by patent citations) is improved by the presence of entrepreneurial firms and by the inter-organizational mobility of scientists, both of which are mediated by national institutions governing the careers and incentives of academic researchers.

Edward B. Roberts

The TMS Distinguished Speaker

— Sarfraz A Mian

Professor Roberts will speak on the subject of “High-Technology Entrepreneurship: What’s happening to it and to the academic research about it?”. The lecture is based on his ongoing research on this subject.

According to Roberts, high-tech entrepreneurship has grown enormously in numbers and importance throughout the United States and in many other countries. It is the basis for formation and development of new industries, the key through alliances and acquisitions to the evolution of numerous existing firms, and a critical contributor to the economic takeoff of several countries.

The academic research on entrepreneurship has suddenly shifted from the backwater of few studies published in rather inelegant journals to become mainstream, sophisticated and multi-disciplinary. Many old ideas remain largely unchallenged albeit untested and novel questions are being examined. He will explore some of these trends during the presentation.

The lecture is scheduled for Monday, November 5, 2001 at 4:15-5:45 PM. After the lecture, there will be a wine and cheese reception prior to the TMS business meeting. All members and guests are invited to attend the business meeting to be held at 6-7 PM in Room Mira Mar South (Wyndham Hotel, level 3).



Edward B. Roberts is the David Sarnoff Professor of Management of Technology at the Massachusetts Institute of Technology, where he chairs the Sloan School's Management of Technological Innovation & Entrepreneurship Group. He co-founded, and until 1999 co-chaired, the MIT Management of Technology (MOT) Program, a Master's degree program for mid-career scientists and engineers. He also founded, and is chairman of, the MIT Center for Entrepreneurship. He has served as co-director of the MIT International Center for Research on the Management of Technology (ICRMOT).



Professor Edward B. Roberts

Professor Roberts has authored approximately 150 articles and eleven books, the most recent being *Entrepreneurs in High Technology* (Oxford University Press, 1991), winner of the Association of American Publishers' award as Outstanding Book of 1991 in Business and Management. Roberts has co-founded a venture capital group and several high-technology companies, and has served as a board member or advisor of many more emerging technology firms, including presently three public companies.

Roberts has four degrees from MIT in electrical engineering (B.S. and M.S.), management (M.S.), and economics (Ph.D.). The MIT Enterprise Forum has honored him by establishing "The Edward B. Roberts Young Entrepreneur Award for Distinguished Leadership", presented initially in 1998 to Michael Dell.



Upcoming Conferences and Call for Papers

Fax: (613)998-8768
E-mail: ExecOffice@imac-acgi.ca

‡ **INFORMS** — Sixth INFORMS Telecommunications Conference sponsored by INFORMS Technical Section on Telecommunication.

General Information:

Dates: March 10, 2002 - March 13, 2002
Days of Week: Sunday through Wednesday
Target Audience: Academic and Practice
Location: Boca Raton, Florida
Conference Web Site:
<http://www.informs.org/Conf/Telecom02/>

‡ **IAMOT 2002** — The 11th International Conference on Management of Technology is scheduled to be held at fabulous Fontainebleau Hilton Resort on Miami Beach, Florida, March 10 - 14, 2002. The conference theme is "Drive Towards the Internet Economy Opportunities and Challenges for Developed and Developing Regions of the World. The deadlines are as follows:

Submission of Abstract: October 31, 2001
Notification of acceptance: October 30, 2001
Submission of full paper: November 30, 2001
Notification of acceptance or revision December 31, 2001.
For more information contact:

Dr. Tarek M. Khalil,
Professor, University of Miami
Founder and President of IAMOT
1251 Memorial Drive
Coral Gables, Florida 33124 USA
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‡ **IMAC/ADRIQ Canada**—2001 Conference on Management of Intellectual Capital, November 20-21, 2001, Montreal, Quebec - The Witham Hotel.

A joint collaboration between the Innovation Management Association of Canada (IMAC) and the Association de la Recherche Industrielle du Québec (ADRIQ). For more information contact:

Innovation Management Association of Canada
c/o NRC, 1200 Montreal Road
Building M-55, Room 279L
Ottawa, Ontario K1A 0R6
Telephone: (613)741-5227

‡ **ISMOT'02, P.R.China** — The 3rd International Symposium on Management of Technology, Oct. 18-20, 2002, Zhejiang University, Yuquan Hotel, Hangzhou, China. Hosted by Research Center for Innovation & Development of Zhejiang University, P.R.China, the conference will be supported by NSFC, Chinese Ministry of Education, and Chinese Academy of Sciences. The conference theme is "Management of Technology and Technology-Based Innovation in the 21st Century. The topics for regular sessions include, but are not limited to the following:

Innovation Policy and New Economy
National /Regional innovation system
Globalization of R&D and Technology Transfer
Managing Technology Core Competence
Measurement of R&D Performance
Managing the Technology Talent
Strategic Project Management
Managing IT Innovation and E-Commerce
Managing Org. Culture in Technology Innovation
Strategic HRM for Technological Innovation
Managing Innovation Portfolio
Entrepreneurship, Venture Capital and Innovation
Application of advanced methodologies
Lead User Method, Empathic Design et al
Managing Interface between R&D, Marketing and Manufacturing, and others.

Contact Information:

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ISMOT'02 Conference Coordinator
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Zhejiang University,
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cj@sba.zju.edu.cn
Web Site: <http://www.som.zju.edu/Ismit-icmit'02>

Critical deadlines:

Submission of Paper: 31 Feb 2002
Notification of Acceptance: 15 May 2002
Camera-Ready Copy: 1 July 2002

‡ The 11th forum for the Management of Technology will take place in Bangalore, India on November 27 and 28, 2001. Its theme is: Managing innovation and new venture creation using information and communication technologies. For further information contact: Georges Haour at haour@imd.ch

† *JET-M (The Journal of Engineering and Technology Management)* is an international refereed quarterly outlet for scholarly research at the cutting edge of the interdisciplinary field of technology and innovation management. Published contributions range from conceptual, theoretical, empirical work and field research-based reports to case studies, research notes, and book reviews. Single topic special issues developed by guest-editors are occasionally published. The journal covers a broad spectrum of topics ranging from R&D management, project management, product technology management, to process technology management, information technology management, technological entrepreneurship, technological forecasting, human resource management, and technology strategy.

JET-M is abstracted/indexed in ABI/INFORM, CAD/CAM Abstracts, Cambridge Scientific Abstracts, Consultant's Reports, Current Contents, Engineering Index, INSPEC, Management Contents, Social Science Citation index, and Technical Education Abstracts.

Four copies of manuscripts should be submitted to: Dr. Michael K. Badawy, Editor-in-Chief, JET-M, Pamplin College of Business, Virginia Polytechnic Institute and State University, P.O.Box 3987, Merrifield, Virginia 22116, USA, Phone: 703/538-8418

JET-M is inviting papers for the following two special issues:

(1) Research Issues in Knowledge Management and Product Development. The deadline is January 31, 2002. For detail contact the following two Guest Editors:

Gerald I. Susman, Pennsylvania State University
(telephone: 814-863-2382; email: gis1@psu.edu),

and

Ann Majchrzak, University of Southern California
(telephone: 213-740-4023; email: majchrza@usc.edu)

(2) Research on the Human Connection in Technological Innovation.. The deadline is March 1, 2002. For further details contact the following guest editors:

Stephen G. Green, Krannert School of Management
(telephone: 765-494-6852; email: sggreen@purdue.edu)

and

Lynda Aiman-Smith, North Carolina State University
(telephone: 919-515-8699; email: Lynda_Aiman-Smith@ncsu.edu)

INFORMS-TMS Miami Beach '01 Program Summary (Nov 4-7, Sun-Wed)

SUNDAY SESSIONS

SC 20 Sunday 13:00-14:30: Technology Management Education & Experiential Learning

Chair: David Wilemon, Syracuse University, Innovation Mgmt. Program, Sch. of Mgmt., Ste. 400, Syracuse, NY 13244, dwilemon@som.syr.edu

SC20.1 Graduate Management of Technology Education Programs: Issues & Trends. Satish Nambisan; RPI, Lally Sch. of Mgmt., 110 & 8th St., Troy, NY 12180; David Wilemon; Syracuse University, Innovation Mgmt. Program, Sch. of Mgmt., Ste. 400, Syracuse, NY 13244; dwilemon@som.syr.edu

SC20.2 Corporate Venturing: Learning from Experience & Hard Knocks, David Wilemon; Syracuse University, Innovation Mgmt. Program, Sch. of Mgmt., Ste. 400, Syracuse, NY 13244; dwilemon@som.syr.edu

SC20.3 Strategic Implications of Technological Innovations that are Hard to Sell, Stephen Luxmore, SUNY, Sch. of Bus., Oswego, NY 13126; luxmore@oswego.edu; Kenneth Shaw; SUNY, Sch. of Bus., Oswego, NY 13126, shaw@oswego.edu

SD 20: Sunday 16:00-17:30: Information-Based Extended Product Development

Chair: Nitin Joglekar, Boston University, Sch. of Mgmt., 595 Commonwealth Ave., Boston, MA 02215, joglekar@bu.edu

SD20.1 Studying the Impact of Integration Technologies on Collaborative Product Development, Manuel Sosa; Oculus Technologies Corp., 16 Trowbridge St., # 44, Cambridge, MA 02138; msosa@alum.mit.edu

SD20.2 Software Product Development Decisions, Wenge Zhu; University of Texas, CBA 4.202, 21st & Speedway, Austin, TX 78712; zwenge@mail.utexas.edu; Vish V. Krishnan; University of Texas, CBA 4.202, 21st & Speedway, Austin, TX 78712; krishnan@mail.utexas.edu

SD20.3 Information Hiding during Product Development The Design Churn Effect, Ali A. Yassine; MIT, Cambridge, MA 02139; yassine@mit.edu; Nitin Joglekar; Boston University, Sch. of Mgmt., 595 Commonwealth Ave., Boston, MA 02215; joglekar@bu.edu

MONDAY SESSIONS

MB 20: Monday 10:00-11:30 Special Issues in Technology Business Incubation

Chair: Leonel Corona, National University of Mexico (UNAM), Mexico, leonel@servidor.unam.mx

MB20.1 The Recent Evolution of Technology Incubation in Canada, Jerome Doutriaux; University of Ottawa, doutriaux@admin.uottawa.ca

MB20.2 From Brick & Mortar Facilities to Dot.Com Factories: The State of the US Incubation Industry, Sarfraz A. Mian; SUNY, Sch. of Business, Swetman Hall, Oswego, NY 13126, mian@oswego.edu

MB20.3 Networking & Technology Incubation in Mexican Innovation Poles & Beyond, Leonel Corona; National University of Mexico, Mexico, leonel@servidor.unam.mx

MC 20: Monday 14:30-16:00 Best Dissertation Award Winners 2001

Chair: Jeffrey K. Liker, University of Michigan, Industrial and Operations Engineering, Japan Technology Management Program, liker@umich.edu

MC20.1 Dissertation Winner: Basic Research, Applied Research & Innovation in the Semiconductor & Pharmaceutical Industries, Kwanghui Lim; MIT, Sloan Sch. of Mgmt., 50 Memorial Dr., E52-545, Cambridge, MA 02139; k@kwanghui.net

MC20.2 Dissertation Runner-Up: Mapping National Knowledge Networks - Scientists, Firms & Institutions in Biotechnology in the US & France, Michelle Gittelman; NYU, Stern Sch. of Bus., 40 West 4th St., 711 Tisch, New York, NY 10012-1118, mgittelm@stern.nyu.edu

MC 21: Monday 14:30-16:00 Information-Based Extended Product Development II

Chair: Vish V. Krishnan, University of Texas, CBA 4.202, 21st & Speedway, Austin, TX 78712, krishnan@mail.utexas.edu

MC21.1 Electronic Measurement Systems in New Product Development, Adwait Ayare; Montana State University, Dept. of MIE, 220 roberts Hall, Bozeman, MT 59717-3800; Durward K. Sobek, II; Montana State University, Dept. of MIE, 220 Roberts Hall, Bozeman, MT59715-3800, dsobek@ie.montana.edu

MC21.2 Linking Information Technology & Development Performance: Evidence from Empirical Data, Stefan Thomke; Harvard Business School, Soldiers Field Rd., Boston, MA 02163; sthomke@hbs.edu

MC21.3 Preliminary Results from an Empirical Analysis of Integrating Outsourced Product Design Across Firm Boundaries, Edward G. Anderson; University of Texas, Mgmt. Dept., CBA 4.202, Austin, TX 78712; edward.anderson@bus.utexas.edu; Alison Davis-Blake; University of Texas, McCombs Sch. of Bus., CBA 4.202, Austin, TX 78712; alisondb@ccwf.cc.utexas.edu; Geoffrey G. Parker; Tulane University, Freeman Sch. of Bus., 7 McAlister Dr., New Orleans, LA 70118; gparker@tulane.edu

MC21.4 Architectural Stretching: The Changing Nature of Product & Processes in Information Driven Environments, Nitin Joglekar; Boston University, Sch. of Mgmt., 595 Commonwealth Ave., Boston, MA 02215; joglekar@bu.edu; Stephen Rosenthal; Boston University, Sch. of Mgmt., 595 Commonwealth Ave., Boston, MA 02215; srrosent@bu.edu

MD 20: Monday 16:15-17:45 Distinguished Speaker Session: High Technology Entrepreneurship – What’s Happening to It & to the Academic Research About It?

Chair: Sarfraz A. Mian, SUNY, Sch. of Business, Swetman Hall, Oswego, NY 13126, mian@oswego.edu

MD20.1 High Technology Entrepreneurship: What's Happening to It & to the Academic Research about It? Edward B. Roberts; MIT, Sloan Sch. of Mgmt, eroberts@mit.edu

TUESDAY SESSIONS

TA20: Tuesday 08:15-09:45 CTO: The Emerging Professional

Chair: George K. Chacko, (Incomplete information)

TB20 Tuesday 10:00-11:30 Modularity Management

Chair: Juliana Hsuan Mikkola, Copenhagen Business

School, Dept. of IE & Strategy, Howitzvej 60, Frederiksberg, DK-2000, Denmark, jh.ivs@cbs.dk

TB20.1 New Incentives for Interfirm Cooperation in Modular Architectures in the New Economy, Ron Sanchez; IMD, Chemin de Bellerive 23, Lausanne, CH-1001, Switzerland, ron.sanchez@imd.ch

TB20.2 Bridging the Disciplines: Modularity in Psychology, Biology, American Studies, Mathematics, Technology & Management, Melissa A. Schilling; Boston University, Strategy & Policy Dept., 595 Commonwealth Ave., Boston, MA 02215; bijoux88@earthlink.net

TB20.3 Trade-Offs between Modularity, Integrity & Upgradability, Raghu Garud; NYU, Stern Sch. of Bus., Dept. of Mgmt., New York, NY 10012; rgarud@stern.nyu.edu; Arun Kumaraswamy; Rutgers University, School of Bus., Camden, NJ 08102; akumaras@crab.rutgers.edu

TB20.4 Modularity Assessment of Product Architecture, Juliana Hsuan Mikkola; Copenhagen Business School, Dept. of IE & Strategy, Howitzvej 60, Frederiksberg, DK-2000, Denmark, jh.ivs@cbs.dk

TC20: Tuesday 14:15-15:45 Learning, Incentive & Knowledge: The Organization & Incentive System of the Firm

Chair: Juliana Hsuan Mikkola, Copenhagen Business School, Dept. of IE & Strategy, Howitzvej 60, Frederiksberg, DK-2000, Denmark, jh.ivs@cbs.dk

TC20.1 Organization, Learning & Entrepreneurship, Mans J. Molin; Copenhagen Business School, Dept. of IE & Strategy, Howitzvej 60, Frederiksberg, DK-2000, Denmark; mm.ivs@cbs.dk

TC20.2 Dynamics of Organizational Knowledge Transfer, Dana Minbaeva; Copenhagen Business School, International Econ. & Mgmt., Howitzvej 60, Frederiksberg, DK-2000, Denmark, dm.int.@cbs.dk

TC20.3 Organizational Learning in R&D Intensive Environments: Contributing Processes & Mechanisms, Bo Eriksen; University of Southern Denmark, Dept. of Mgmt., 55 Campusvej, Odense, DK-5230, Denmark, bo@sam.sdu.dk

TC20.4 The Importance of Sectoral Differences in the Application of (Complementary) HRM Practices for Innovation Performance, Keld Laursen; Copenhagen Business School, Indust. Economics & Strategy, Howitzvej 60,

Frederiksberg, DK-2000, Denmark, kl.ivs@cbs.dk

TD20: Tuesday 16:00-17:30 Managing R&D Organization: Localization & Internationalization

Chair: Juliana Hsuan Mikkola, Copenhagen Business School, Dept. of IE & Strategy, Howitzvej 60, Frederiksberg, DK-2000, Denmark, jh.ivs@cbs.dk

TD20.1 The Overlaying Structures of R&D Organizations, Maximilian von Zedtwitz; IMD International, PO Box 915, Lausanne, CH-1001, Switzerland; zedtwitz@imd.ch

TD20.2 Developing Organizational & Technological Capabilities in Cross-Border Strategic Alliances, Henrik Sornn-Friese; Copenhagen Business School, Indust. Economics & Strategy, Howitzvej 60, 5th Fl., Frederiksberg, DK-2000, Denmark; hsf@ivs.cbs.dk

TD20.3 How Late Mover MNCs Tap into Local R&D Clusters, Volker Mahnke; Copenhagen Business School, Indust. Economics & Strategy, Howitzvej 60, Frederiksberg, DK-2000, Denmark; vm.ivs@cbs.dk
Mark Lorenzen; Copenhagen Business School, Indust. Economics & Strategy, Howitzvej 60, Frederiksberg, DK-2000, Denmark; ml.ivs@cbs.dk

TD20.4 Entry Mode, Exit Mode & R&D Intensity, Lasse B. Lien; Norwegian School of Economics & Business Administration, Dept. of Strategy & Mgmt., Breiviken 40, Bergen-Sandviken, 5035, Norway; lasse.lien@nhh.no

TD20.5 The Evolution of Corporate Technology Diversification: In Search of a Paradigm Change, Elena Kosmopoulou; University of Reading, Dept. of Economics, Whiteknights PO Box 218, Reading, G6 6AA, UK; e.kosmopoulou@reading.ac.uk

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The Technology Management Section

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