

# IEMC 2004 PROGRAM OVERVIEW

## Monday, 18 October

08:00-09:00	<b>Tutorial Registration</b>
09:00-12:30	<b>Tutorials</b>
12:30-13:30	
13:30-17:00	
17:30-19:00	<b>Welcome Reception</b>

## Tuesday, 19 October

08:00-09:00	<b>Registration</b>					
09:00-09:45	<b>Opening Ceremony</b>					
09:45-10:30	<b>Keynote Address 1</b>					
10:30-11:00	<b>Coffee/Tea Break</b>					
11:00-12:30	<b>Keynote Address 2 &amp; 3</b>					
12:30-13:30	<b>Lunch</b>					
13:30-15:00	<b>Technical Sessions</b>					
	Session A	Session B	Session C	Session D	Session E	Session F
	A1-1	B1-1	C1-1	D1-1	E1-1	F1-1
	Business Strategies I	Technology Management I	Knowledge Management I	Entrepreneurship I	Design for Environment	Manufacturing Systems
15:00-15:30	<b>Coffee Tea Break</b>					
15:30-17:30	<b>Technical Sessions</b>					
	A1-2	B1-2	C1-2	D1-2	E2-1	F2-1
	Business Strategies II	Technology Management II	Knowledge Management II	Entrepreneurship II	Product Innovation	Supply Chain Management I
17:30-19:00						
19:00-22:00	<b>Banquet</b>					

# IEMC 2004 PROGRAM OVERVIEW

## Wednesday, 20 October

08:00-09:00	<b>Registration</b>					
09:00-10:30	<b>Keynote Address 4 &amp; 5</b>					
10:30-11:00	<b>Coffee/Tea Break</b>					
11:00-12:30	<b>Technical Sessions</b>					
	Session A	Session B	Session C	Session D	Session E	Session F
	A1-3	B1-3	C1-3	D2-1	E3-1	F2-2
	Business Strategies III	Technology Management III	Knowledge Management III	Project Management I	New Product Development I	Supply Chain Management II
12:30-13:30	<b>Lunch</b>					
13:30-15:00	<b>Technical Sessions</b>					
	A2-1	B1-4	CP	D2-2	E3-2	F2-3
	Sustainable Development I	Technology Management IV	Panel: Dynamic Capabilities	Project Management II	New Product Development II	Supply Chain Management III
15:00-15:30	<b>Coffee / Tea Break</b>					
15:30-17:30	<b>Technical Sessions</b>					
	A2-2	B2-1	C2-1	D2-3	E3-3	F2-4
	Sustainable Development II	Technological Competence	R & D Management I	Project Management III	New Product Development III	Supply Chain Management IV
17:30-19:00	<b>Optional Local Tours (not included in the registration fees)</b>					
19:00-22:00						

## Thursday, 21 October

8:00-08:30	<b>Registration</b>					
8:30-10:30	<b>Technical Sessions</b>					
	A3-1	B3-1	C2-2	D3-1	E4-1	F3-1
	Sustainable Competitive Advantage	Technological Innovation I	R & D Management II	Information Systems I	Quality Management I	Decision Analysis I
10:30-11:00	<b>Coffee / Tea Break</b>					
11:00-12:30	<b>Technical Sessions</b>					
	A4-1	B3-2	C2-3	D3-2	E4-2	F3-2
	Sustainable Growth	Technological Innovation II	R & D Management III	Information Systems II	Quality Management II	Decision Analysis I

**End of conference**

# PROGRAM

**Date:** Tuesday, 19 October 2004  
**Time:** 13:30 - 15:30

**Session A1-1 Business Strategies I**  
**Session Chair:** T. S. Durrani, K. Lim

**A1-1-01**  
Managing Agility for Profitability  
*A. N. Hayman* (United Kingdom)

**A1-1-02**  
International R&D by Chinese Companies  
*M. von Zedtwitz* (P.R.China)

**A1-1-03**  
Using Sport Analogy in High-Tech Management to Improve Productivity by Improving Personal and Team Performance  
*K. Houshmand, S. Goli, R. Esmaili, C. H. Pham* (United States)

**A1-1-04**  
Sustainable Innovation Planning from Successful Practice: Competence and Business Excellence Considerations  
*V. Raurich, F. Fahrni* (Switzerland)

**A1-1-05**  
Snakes and Ladders: A Patent Analysis of Ericsson, Motorola and Nokia in the Wireless Communications Industry, 1980-2000.  
*Z. L. He, K. Lim, P. K. Wong* (New Zealand)

**A1-1-06**  
In Search of New Risk Management Strategies Using a Comparative Evaluation of Environmental Laws for Soil Contamination in the United States, Germany and Japan  
*M. W. Hall, K. Miyaji* (Japan)

**Session B1-1 Technology Management I**  
**Session Chair:** I. Engelson, G. H. Wan

**B1-1-01**  
TRIZ-aided Technology Mapping for Information System Implementation  
*J. W. K. Chan, K. M. Yu* (Hong Kong)

**B1-1-02**  
Is Software Requirements a Corporate Asset?  
*I. Nath, S. Kundu* (Japan)

**B1-1-03**  
Analysis of Japanese MOT Education Requirements by a Needs-Seeds Matrix  
*S. Okutsu, Y. Ikawa, A. Kameoka* (Japan)

**B1-1-04**  
A Project Interface Buffering Model for Application Engineer Management  
*P. H. Cheng, T. N. Chien, C. H. Chien, S. J. Chen, J. S. Lai* (Taiwan)

**B1-1-05**  
Evaluating Development Strategies for Taiwan's iB3G Industry: a Fuzzy MCDM Approach  
*K. H. C. K. Sha, C. Y. Hung, B. S. P. Lin* (Taiwan)

**B1-1-06**  
Product Competitive Advantage and Product Architecture - Value Creation and Value Capture in the Digital Camera Industry  
*M. Itoh* (Japan)

**Session C1-1 Knowledge Management I**  
**Session Chair:** K. H. Chai, J. Wei

**C1-1-01**  
Knowledge Management in University R&D in Thailand  
*B. Igel, S. Numprasertchai* (Thailand)

**C1-1-02**  
A New Tool for Analyzing Market for Strategic R&D : The Improvement of Product Portfolio Browser  
*M. Yamamoto* (Japan)

**C1-1-03**  
Mutual Choices of Knowledge Sharing in Social Networks  
*J. D. Wang, T. H. Yim-Teo, K. T. Yeo* (Singapore)

**C1-1-04**  
A Preliminary Model for Interorganizational Learning under Network Context  
*X. Y. Wang, K. H. Chai, C. M. Yap* (Singapore)

**C1-1-05**  
How to Manage Knowledge More Efficiently in Manufacturing Enterprise  
*X. Y. Liu, Z. P. Fan, C. Q. Zhang* (P.R.China)

**C1-1-06**

Using Fuzzy MCDM to Evaluate Index and Benefit Preference on Communities of Practice

*M. T. Chu, J. Z. Shyu* (Taiwan)

**Session D1-1 Entrepreneurship I**

**Session Chair:** A. Bainbridge, M. Meyer

**D1-1-01**

Academic Inventiveness and Entrepreneurship: Is there a Relationship between Science and Technology Fields and the Utilization of Academic Inventions in Start-up Companies?

*M. Meyer, E. Autio* (Belgium)

**D1-1-02**

Corporate Entrepreneurship : An Insight from Indian Electrical and Electronics Sector

*V. Jauhari* (India)

**D1-1-03**

Technology Entrepreneurial Styles: A Comparison of UMC and TSMC

*T. H. Liu, S. C. Hung, S. Y. Wu, Y. Y. Chu* (Taiwan)

**D1-1-04**

Mobilizing Social Capital to Pursue Entrepreneurship

*S.C. Hung, Y. C. Hsiao* (Taiwan)

**D1-1-05**

Corporate Entrepreneurial Behavior of Latecomer Technology Firms

*C. J. T. Chao, T. H. Yim-Teo* (Singapore)

**D1-1-06**

Resource Deployment for Radical Projects within Established Firms

*E. Van de Velde, B. Clarysse* (Belgium)

**Session E1-1 Design for Environment**

**Session Chair:** A. Demaid, M. Lindahl

**E1-1-01**

Knowledge Cartography in the Sustainable Environment

*A. Demaid, P. Quintas* (United Kingdom)

**E1-1-02**

Improving Design Quality and Value in the Built Environment through Knowledge of Intangibles

*Z. Abdul-Samad, S.G. Macmillan* (United Kingdom)

**E1-1-03**

Designers' Experiences of Design Methods and Tools

*M. Lindahl* (Sweden)

**E1-1-04**

Sustainability Engineering as Diploma / Graduate Programme in Engineering and Management Education

*C. Sanjay* (Malaysia)

**E1-1-05**

Making an Ecodesign Choice in Project Portfolio Selection

*G. Ölundh, S. Ritzén* (Sweden)

**E1-1-06**

The Method of Determining the Index Weight in the Synthetic Evaluation On Environmental Impact Affected by Highway

*S. B. Ma, L. Y. Wei, L. Sun* (P.R.China)

**Session F1-1 Manufacturing Systems**

**Session Chair:** A. C. Spowage, V. Divate

**F1-1-01**

Application of Fuzzy Linear Regression in Modeling Epoxy Dispensing Process

*H. Bai, C. K. Kwong* (P.R.China)

**F1-1-02**

Macro-approach of Cell Formation Problem with Consideration of Machining Sequence

*F. T. S. Chan, K. W. Lau, P. L. Y. Chan, K. C. Au* (Hong Kong)

**F1-1-03**

Customer Induced Innovations

*K. B. Chung* (Singapore)

**F1-1-04**

Liquid Nitrogen (Ln<sub>2</sub>) Loss Reduction at Testing Operation

*V. Divate, P. Saengpongpaew* (Thailand)

**F1-1-05**

Development Path and Dynamic Capability of EMS Company in Far East Region

*E. Zhai, Y. J. Shi, M. Gregory* (United Kingdom)

**F1-1-06**

Workflow-driven Collaborative Session Management in Product Lifecycle Management via Internet

*D. W. Sun, X. H. Xiong, L. W. Ruan, Z. J. Liu, J. M. Zhao, Y. S. Wong* (Singapore)

**Date:** Tuesday, 19 October 2004

**Time:** 15:30 - 17:30

**Session A1-2 Business Strategies II**

**Session Chair:** M. von Zedtwitz, M. Crowne

**A1-2-01**

How Incremental Innovation Becomes Disruptive: The Case of Technology Convergence

*F. Hacklin, V. Raurich, C. Marxt* (Switzerland)

**A1-2-02**

Regional Airports – Sustainability, Survival or Success  
A Case Study  
*T. S. Durrani, S. M. Forbes* (United Kingdom)

**A1-2-03**

The Intellectual Property Policy of Taiwan:  
A Strategic Viewpoint  
*Y. J. Liu, S. J. Liu* (Taiwan)

**A1-2-04**

Flexible Competence for Sustainable Competitive  
Advantage: Strategies Enlightenment Derived from  
a Case Study of China Unicom  
*Y. Zeng, H. Z. Xin, K. OuYang* (P.R.China)

**A1-2-05**

An Analysis of Post-Block Exemption Competitive and  
Strategic Options in the UK Auto Industry  
*D. Adebajo* (United Kingdom)

**A1-2-06**

The Seven Habits of Highly Effective Programs -  
Practices You Need to Change Your Organization with  
Information Technology  
*M. Crowne* (United Kingdom)

**A1-2-07**

The Hard Structure and Soft Structure of Enterprises  
Network  
*J. M. Yang, F. B. Ma, Y. Y. Mo* (P.R.China)

**A1-2-08**

An Entrepreneur's Dilemma: To SWOT or  
Not to SWOT  
*A. D. Chaanakya, A. D. Narasimhalu* (Singapore)

**Session B1-2 Technology Management II**

**Session Chair: G. Frizelle, J. W. K. Chan**

**B1-2-01**

Chinese Air Travelers' Acceptance towards Electronic  
Ticketing  
*G. H. Wan, P. Che* (P.R.China)

**B1-2-02**

Marrying Knowledge Discovery in Databases (KDD)  
with Technology Intelligence (TI) - Avenue to Paradise  
or Blind Alley?  
*H. Schröder* (Germany)

**B1-2-03**

Research on the Total Synergy Process of All the  
Innovation Elements: A Five-stage Model  
*G. Zheng, X. R. Liang, L. Zhu* (P.R.China)

**B1-2-04**

Determining Factors of ERP Adoption:  
An Indicative Study in the Greek Market  
*K. C. Kostopoulos, D. A. Brachos, G. P. Prastacos* (Greece)

**B1-2-05**

Reasons for Roadmapping: A Study of the Singaporean  
SME Manufacturing Sector  
*C. J. Holmes, M. B. A. Ferrill, R. Phaal* (Singapore)

**B1-2-06**

A New Engineering Management System of the Three  
Gorges Project Based on Community Intelligence  
*H. T. Zeng, Z. H. Li, Y. X. Bi* (P.R.China)

**B1-2-07**

The Selection of Technological Sources in Chinese SMEs  
*G. M. Bao, M. L. Zheng, J. Yang, Z. R. Yang* (P.R.China)

**Session C1-2 Knowledge Management II**

**Session Chair: J. Chen, Y. S. Wong**

**C1-2-01**

A Self-Evaluation Method of Seci Process in Knowledge  
Management  
*Y. Suzuki, R. Toyama* (Japan)

**C1-2-02**

Motivationalizing Organizational Learning  
*A. H. W. Foong, C. M. Yap, K. H. Chai* (Singapore)

**C1-2-03**

Conceiving a Learning Organization Model for  
Sustainable Development: The IS Manager's  
Perspective Based on Soft Systems Methodology  
*K. H. VAT* (Macau S.A.R.)

**C1-2-04**

Enhancing Creativity and Imagination in Process  
Management - Combinative Use of Systems Methods  
and Knowledge Management Tools  
*M. Li, F. Gao, A. Kameoka* (Japan)

**C1-2-05**

Knowledge Spillovers and Culture-Embeddedness:  
Geographic Clusters in Transitional China  
*J. Wei* (P.R.China)

**C1-2-06**

Empirical Study on the Linkage of Intellectual Capital  
and Firm Performance  
*D. Q. Li, X. B. Wu* (P.R.China)

**C1-2-07**

Management of Innovation Project in University  
Education  
*Z. Klos, H. Sawicka* (Poland)

**C1-2-08**

Domain-specific Concept-based Information Retrieval  
System  
*L. Shen, Y. K. Lim, H. T. Loh* (Singapore)

**Session D1-2 Entrepreneurship II**

**Session Chair:** V. Jauhari, D.Y. Choi

**D1-2-01**

Corporate Entrepreneurship: Exploiting Technologies for Innovation Discovery and Breakthrough  
*S. L. See* (Singapore)

**D1-2-02**

Dynamics of New Firm Formation: Impacts of Economic and Technology Policy  
*Y.R. Choi, P. H. Phan* (Singapore)

**D1-2-03**

Understanding the Sustainable Entrepreneur  
*D. Y. Choi, E. R. Gray* (United States)

**D1-2-04**

The Dynamic Accumulation of Strategic Resources in Technology Venturing Processes: An Empirical Study of Incubators in Taiwan  
*Y. C. Chen, Y. R. Li* (Taiwan)

**D1-2-05**

The Path-dependence and the SOE's Executive Compensation Incentive in China  
*Y. J. Wang, H. X. Xue* (P.R.China)

**D1-2-06**

Successful Collaboration Model of Japan and Russia  
*H. Yashiro* (Japan)

**D1-2-07**

Wealth Constraint Effect Based Cooperation in Venture Business  
*Y. Zhao, W. Zhou, X. J. Chen* (P.R.China)

**D1-2-08**

Fostering Innovation and Enterprise Creating Enterprising Originals  
*P. K. S. Tang, K. F. Tang* (Singapore)

**Session E2-1 Product Innovation**

**Session Chair:** D. J. Hancock, Y. Lu

**E2-1-01**

Balancing Centripetal and Centrifugal Forces in a Lifecycle Model of Innovation: A Meta-Analysis  
*M. W. Werwath* (United States)

**E2-1-02**

Launching the First Mass Product of a High-tech Start-up Company  
*D. R. Popovic, F. Fahrni* (Switzerland)

**E2-1-03**

Handling Innovations Which Do Not Fit  
*P. Jönsson, H. Anderson* (Sweden)

**E2-1-04**

Strategy of Mass Customization-based Service Product Innovation  
*J. H. Li* (P.R.China)

**E2-1-05**

What New Skills must Project Managers Master to Deliver Successful Project Outcomes for the Future?  
*D. J. Hancock* (United Kingdom)

**E2-1-06**

The Innovation Paradox: Reconciling Creativity & Discipline. How Winning Organizations Combine Inspiration With Perspiration  
*F. Chu, A. Kolodny, S. Maital, D. Perlmutter* (Singapore)

**E2-1-07**

Using 3D-CAD Systems for Mechanical Design Innovation  
*T. Kondoh, T. Suzuki* (Japan)

**E2-1-08**

International Growth Dynamics of Technology Adoption: A Cross-national Study of Growth Rate of Subsequent Technological Generations  
*S. J. Mäkinen, H. Suur-Inkeroinen* (Finland)

**Session F2-1 Supply Chain Management I**

**Session Chair:** Y. J. Shi, L. Al-Hakim

**F2-1-01**

A Real Option Theoretic Approach to Flexible Manufacturing Systems Planning under Uncertainty in Product Demand  
*Y.Y. Jiao, J. X. Jiao* (Singapore)

**F2-1-02**

Managing Physical Assets is a Paradigm Shift from Maintenance  
*J. E. Amadi-Echendu* (South Africa)

**F2-1-03**

A Numerical Approximation Method for the Valuation of Multivariate Contingent Claims  
*J. Du, J. X. Jiao* (P.R.China)

**F2-1-04**

Exploring How to Develop Customer-Oriented Business Strategies in a Clothing Supply Chain: a Study in Southern China  
*V. H. Y. Lo, D. Sculli, A. H. W. Yeung* (Hong Kong)

**F2-1-05**

Managing Supply Chain at High Technology Companies  
*S. Soin, L. Al-Hakim* (United States)

**F2-1-06**

Perceptual Influences on Firms' Adoption of Innovation  
*B. H. Y. Ong, K. H. Chai* (United Kingdom)

**F2-1-07**

Complexity in the Supply Chain  
*G. D. M. Frizelle* (United Kingdom)

**F2-1-08**

Supply Chain Management for Indian Scenario  
 and Conditions  
*D. G. Kulkarni, P. G. Ramdasi* (India)

**Date:** Wednesday, 20 October 2004

**Time:** 11:00 - 12:30

**Session A1-3 Business Strategies III**

**Session Chair:** M. Crowne, S. C. Cook

**A1-3-01**

Extend the Meaning of "R" to "R4" in ART (Automated  
 Software Regression Technology) to Improve Quality  
 and Reduce R&D and Production Costs  
*K. Houshmand, S. Goli, R. Esmaili, C. H. Pham*  
 (United States)

**A1-3-02**

The Rise of Systems Engineering within the Australian  
 Defence Organisation  
*S. C. Cook* (Australia)

**A1-3-03**

Developing Capabilities for Integration in Multinational  
 R&D. Approaches and Models  
*S. Guercini* (Italy)

**A1-3-04**

Empirical Study of Supplier Selection Strategies across  
 the Supply Chain Management in Manufacturing  
 Companies  
*D. Wang, Y. Z. Tian, Y. Q. Hu* (P.R.China)

**A1-3-05**

Competitive Advantage in Food Retail Strategy and  
 Supply Chain – An Analysis of the UK and Chinese  
 Markets  
*H. Yan, D. Adebajo, F. Mahoney* (United Kingdom)

**A1-3-06**

Searching for the Firm's Sustainable Competitive  
 Advantage by a New Approach: the Resource and  
 Integration-Based View (RIBV) of the Firm  
*X. B. Wu, J. Z. Zheng* (P.R.China)

**Session B1-3 Technology Management III**

**Session Chair:** A. Pilkington,  
 Noordin TMH Shehabuddeen

**B1-3-01**

A Cost Modeling of Future Wireless Technologies In  
 Developing Countries: The Case of Thailand  
*P. Krairit, V. Avatchanakorn* (Thailand)

**B1-3-02**

Estimating Efforts Required Upgrading Technical  
 Infrastructure of a Global Project using Randomized  
 Response Techniques  
*S. Ghosh* (United States)

**B1-3-03**

The Bottom-Up/Top-Down Pattern: An Organizational  
 Pattern for a Balanced Management System  
*M. Heiss, S. Stoeckl, C. Hausknotz* (Austria)

**B1-3-04**

A Supplier Perspective on Rapid New Product Volume  
 Ramp Up Manufacturing Strategy  
*H. H. J. K. Li, Y.J. Shi, M. J. Gregory* (United Kingdom)

**B1-3-05**

The Optimal Decision for Expanding the Production  
 Scale  
*F. Dai, P. Chen, J. Sun* (P.R.China)

**B1-3-06**

Excavating the Technology Landscape: Deploying  
 Technology Intelligence to Detect Early Warning  
 Signals  
*Noordin TMH Shehabuddeen, D. R. Probert*  
 (United Kingdom)

**Session C1-3 Knowledge Management III**

**Session Chair:** M. J. F. Wouters, H. T. Loh

**C1-3-01**

Measuring Innovativeness – Challenges and  
 Possibilities for Knowledge-Based Firms  
*K. Blomqvist, E. Harkink, I. Kerssens-van Drongelen,  
 O. Kuittinen, V. Ojanen* (Finland)

**C1-3-02**

Knowledge Transfer as Sustainable Competitive  
 Advantage  
*K. Bisalyaputra* (Thailand)

**C1-3-03**

Knowledge Management Issues in Outsourcing  
*L. Zhao, T. H. Yim-Teo, K. T. Yeo* (Singapore)

**C1-3-04**

On the Effectiveness of Latent Semantic Analysis for  
 the Categorization of Call Centre Records  
*R. Menon, S. S. Keerthi, H. T. Loh, A. C. Brombacher*  
 (Singapore)

**C1-3-05**

International Production in Developing Economies,  
 Changes  
 in Key Factors for Management  
*H. J. Steenhuis, E. J. de Bruijn* (United States)

**C1-3-06**

Knowledge-based Decision Making in Virtual Team Environment

*Y. F. Qiu, Y. P. Chui, M. G. Helander* (Singapore)**Session D2-1 Project Management I****Session Chair: K. T. Yeo, R. Lau****D2-1-01**

Delivering Projects with Virtual Teams

*R. Lau* (Australia)**D2-1-02**

Is there REALLY a Difference between Women and Men as Project Managers?

*T. Mui, G. M. Mulenburg* (United States)**D2-1-03**

The Integrated Process of Project Risk Management Based on Influence Diagrams

*Y. Q. Liu, Y. P. Shen, Y. W. Chen, F. Gao* (P.R.China)**D2-1-04**

Actualities Analysis and Countermeasures Research of Software Project Risk Management in Chinese Software Industry

*Y. W. Chen, G. P. Jiang* (P.R.China)**D2-1-05**

Coordinating Dependencies in Global System Development Projects - The Use of Dependency Diagrams

*J. Lilliesköld, L. Taxén* (Sweden)**D2-1-06**

Competence Building in Micro-Satellite Projects among University Laboratories

*R. C. Hsu, H. J. Lin, Z. C. Hong* (Taiwan)**Session E3-1 New Product Development I****Session Chair: A. C. Brombacher, S. Sangwan****E3-1-01**

End-to-End Innovation: Extending the Stage-Gate Model into a Sustainable Collaboration Framework

*C. Marxt, F. Hacklin, C. Röthlisberger, T. Schaffner* (Switzerland)**E3-1-02**

The Application of New Product Development Tools in Industry

*Y. Xin, K. H. Chai, J. A. Baully* (Singapore)**E3-1-03**

Analyzing Quality Information Flows in Cross-company Distributed Product Development Processes

*J. Lin, A. C. Brombacher, Y. S. Wong, K. H. Chai* (Singapore)**E3-1-04**

Opportunities for Creativity in Project Work - Importance of Goals and Problem Solving

*P. Sundström* (Sweden)**E3-1-05**

Speedup New Technology Development Process (NTDP) Through a Diamond Model of Development Collaboration (DCDM)

*A. P. Chen, A. Liao* (Taiwan)**E3-1-06**

Team-Oriented Optimisation of Costs, Quality and Environmental Impact for the Complete Life Cycle

*S. Schmidt* (Germany)**Session F2-2 Supply Chain Management II****Session Chair: L. Al-Hakim, B. A. Vojak****F2-2-01**

Technology Planning "Bullwhip" in the Electronics Industry Supply Chain

*B. A. Vojak, C. A. Suarez* (United States)**F2-2-02**

Franchising the Supply Chain

*M. Chiang, I. Ilovici* (United States)**F2-2-03**

Skill Requirements for Logistics Licenses

*Y. C. Wu, Y. J. Chen, J. S. Wang* (Taiwan)**F2-2-04**

The Supportive Infrastructures Enhancing the Supply Chain Performance

*P. Udomleartprasert, C. Jungthirapanich* (Thailand)**F2-2-05**

The Need for World Class Supply Chains

*S. Savino* (United States)**F2-2-06**

Dynamic Bi-objective Pareto-Schedule Generation and Control in Semiconductor Supply Chain

*A. K. Gupta, V. K. Ganesan, A. I. Sivakumar* (Singapore)**Date: Wednesday, 20 October 2004****Time: 13:30 - 15:00****Session A2-1 Sustainable Development I****Session Chair: Y. Cheung, J. E. Kasser****A2-1-01**

Sustainable Life Cycle Management: Indicators to Assess the Sustainability of Engineering Projects and Technologies

*A. C. Brent, C. Labuschagne* (South Africa)

**A2-1-02**

Conceptual Framework for a Value-Based Corporate Management in the Sustainable Development Society  
*I. Koshijima, A. Shindo, T. Umeda* (Japan)

**A2-1-03**

Environment and the Territory: Implementation of Environmental Management Systems based on EMAS Regulation at Regional Level  
*A. Scipioni, L. Fornasiero, A. Mazzi, A. Schiavon* (Italy)

**A2-1-04**

Study on the Enterprise Sustainable Development Based on Habitual Domains Theory  
*L. Ma, J. Chen, X. Y. Wang* (P.R.China)

**A2-1-05**

Research on the Rigidity of Enterprise Organization Habitual Domains  
*L. Ma, J. Chen, H. Yang* (P.R.China)

**A2-1-06**

Studies on the Enterprise Integration after Mergence and Acquisition based on Enterprise Organization Habitual Domains  
*L. Yan, Y. Q. Han, L. H. Xu* (P.R.China)

**Session B1-4 Technology Management IV**

**Session Chair:** S. Ghosh, F. Dai

**B1-4-01**

Defining Technology Management: A Citation/ Co-citation Study  
*A. Pilkington* (United Kingdom)

**B1-4-02**

New Direction and Strategy of MOT Practice in Japan - from "Just-in-Time Production" to "Just-in-Time Innovation"  
*A. Kameoka, M. Li* (Japan)

**B1-4-03**

Establishing Major Successful Factors of New Technology-based Firm from the Perspective of Dynamic Firm Capability (DFC) - The Case of IDIS and KODICOM  
*W. K. Choi, J. Y. Choung* (Korea)

**B1-4-04**

Quantitative Evaluating Model for the Actual Effect of DSS in Enterprise Management  
*F. Dai, Y. J. Zhuang, B. H. Sun* (P.R.China)

**B1-4-05**

Technology Strategy – A Powerful Instrument to Generate and Sustain Competitive Advantage in Power Microelectronics  
*D. E. Coconete, N. A. Moguilnaia, R. B. M. Cross, E. M. S. Narayanan* (United Kingdom)

**Panel: Dynamic Capabilities**

**Session Chair:** T. Tschang,

**CP1**

Dynamic Capabilities:  
New Sources of Industrial Competitiveness?  
*T. Fan, N. Jones, A. Kumaraswamy, D. Narasimhalu, P. Phan, T. Tschang* (Singapore)

**Session D2-2 Project Management II**

**Session Chair:** J. R. Harrald, S. Shrestha

**D2-2-01**

A Methodology for Integrated Risk Management of Multi-Disciplinary Programs  
*M. K. Vemuri, A. R. Chavala, R. Anil, T. Sethunarayanan, V. Seshadri* (India)

**D2-2-02**

Incorporated Framework for Incremental Prototyping with Object-Orientation  
*A. S. H. Teo, M. Chan, C. Y. Miao* (Singapore)

**D2-2-03**

A Communication-based Management Model for Project's Capability  
*N. Hanakawa* (Japan)

**D2-2-04**

The Effect of Computer Virus Occurrence and Virus Threat Level on Anti-virus Companies' Financial Performance  
*J. R. Harrald, S. A. Schmitt, S. Shrestha* (United States)

**D2-2-05**

A Methodology for Managing Multi-Disciplinary Programs with Six Sigma Approach  
*R. Anil, V. Seshadri, A. Chavala, M. Vemuri* (India)

**D2-2-06**

Risk Analysis in Software Development Project with Owners and Contractors  
*X. N. Lu, Q. G. Ma* (P.R.China)

**Session E3-2 New Product Development II**

**Session Chair:** C. Marxt, T. L. J. Ferris

**E3-2-01**

NPD in Manufacturing Companies – Use of Surveys to Determine Overall Status in a Country or Region, and Changes over Time.  
*J. A. Baully* (Singapore)

**E3-2-02**

Challenges Faced in Adopting a Supplier Performance Measurement Framework to Support the NPD Process  
*S. J. Passey, R. P. Nagarajan, G. Nagappan, K. H. Chai, A. C. Brombacher* (Singapore)

**E3-2-03**  
The Interplay of Modernism, Postmodernism and  
Systems Engineering  
*T. L. J. Ferris* (Australia)

**E3-2-04**  
Product Development Strategies for Innovative  
Product  
*M. Ishioka, K. Yasuda* (Japan)

**E3-2-05**  
Portfolio Management for Projects  
*J. Le* (Switzerland)

**E3-2-06**  
Mapping Product Innovation Profile to Product  
Development Activities - The I-DSM Tool  
*N. Bilalis, E. Maravelakis, A. Antoniadis, V. Moustakis*  
(Greece)

**Session F2-3 Supply Chain Management III**  
**Session Chair:** *B. A. Vojak, S. L. Ho*

**F2-3-01**  
Hot Lot Management: Minimizing Cycle Time  
in Batch Processes  
*A. K. Gupta, V. K. Ganesan, A. I. Sivakumar*  
(Singapore)

**F2-3-02**  
An Improved Consignment Stock Policy under  
Stochastic Lead Times for Effective Inventory  
Management In Supply Chains  
*C. Srinivas, C. S. P. Rao* (India)

**F2-3-03**  
Sustainable Development of the Supply of Grain  
*J. L. Corner, L. R. Foulds* (New Zealand)

**F2-3-04**  
Yield Management Application to Capacity  
Rationing  
*W. F. Zhang, R. Piplani* (Singapore)

**F2-3-05**  
Business Process Redesign Based on "One Piece Flow":  
Concept, Methodology and Application  
*X. B. Wu, J. Huang* (P.R.China)

**F2-3-06**  
An Approach to Design Reverse Logistics Networks  
for Product Recovery  
*R. D. Kusumastuti, R. Piplani, G. H. Lim* (Singapore)

**Date:** Wednesday, 20 October 2004  
**Time:** 15:30 - 17:30

**Session A2-2 Sustainable Development II**  
**Session Chair:** *S. C. Cook, M. C. Chang*

**A2-2-01**  
Crafting a Postgraduate Degree for Industry and  
Government  
*J. E. Kasser, S. C. Cook, D. R. Larden, M. Daley, P. Sullivan*  
(Australia)

**A2-2-02**  
US Educational Programs Integrating Technology  
Management and Entrepreneurship  
*R. N. McGrath, S. Fedorovich, A. W. Bonney*  
(United States)

**A2-2-03**  
The Quality of Life in Padova Municipality and the  
ISO 14031 Model. An Experience to Measuring Urban  
Sustainability by Context Indicators and Performance  
Indicators  
*A. Scipioni, A. Mazzi, L. Fornasiero, A. Schiavon* (Italy)

**A2-2-04**  
Human Resources and the Growth of New Technology  
Based Firms  
*F. Blumetti, E. Cacciatori, A. Grandori, L. Solari* (Italy)

**A2-2-05**  
Measuring Participants' Contribution in Collaborative  
Enterprises  
*J. Parung, Umit S. Bititci, J. MacBryde* (United Kingdom)

**A2-2-06**  
Sun Tzu and Sustainable Competitive Advantage  
*M. C. Chang* (Taiwan)

**A2-2-07**  
Corporate Reform and Restructuring of China Largest  
Hydro Power Enterprise  
*Y. X. Bi, Z. H. Li* (P.R.China)

**A2-2-08**  
On the Measurement of Labor Flexibility  
*A. Y. Chang* (Taiwan)

**Session B2-1 Technological Competence**  
**Session Chair:** *C. Peeters, P. F. Tiako*

**B2-1-01**  
Narrowing Competency Gaps to Enable  
Manufacturability of New Mobile Communication  
Products - A Technical Training Methodology  
*R. C. H. Ng* (Malaysia)

**B2-1-02**

Economic-Financial of AMT - A Model of Rationale, using the Resource-based View

*L. A. Borges, S. E. Gouvea da Costa, E. Pinheiro de Lima* (Brazil)

**B2-1-03**

Innovation Competencies and Returns to Scale

*C. Peeters, B. van Pottelsberghe de la Potterie* (Belgium)

**B2-1-04**

Measuring the Impact of Science

*M. Meyer* (Belgium)

**B2-1-05**

Conceptual Software Infrastructure for Sustainable Development

*P. F. Tiako* (United States)

**B2-1-06**

Building Technological Capability by Latecomer Firms in Developing Countries: A Process Perspective

*J. Yu, Y. J. Shi, X. Fang* (United Kingdom)

**B2-1-07**

Innovation and Technological Management of the Japanese e-Health and Telehealth Industries

*M. Tsuji* (Japan)

**Session C2-1 R & D Management I**

**Session Chair:** C. M. Yap, M. J. F. Wouters

**C2-1-01**

Improving Cross-Functional Communication About Product Architecture

*M. J. F. Wouters, I. C. Kerssens-van Drongelen* (Netherlands)

**C2-1-02**

Morphology Analysis Approach for Technology Forecasting

*B.G. Yoon, Y. T. Park* (Korea)

**C2-1-03**

From Creativity to Success: The Evolutionary Mechanism of Innovation — Case Study of Siemens

*Q. R. Xu, X. R. Liang* (P.R.China)

**C2-1-04**

On the Linkage between Industries and Technologies: Patent Citation Analysis

*C. W. Choi, J. S. Shin, B. G. Yoon, Y. T. Park, W. Y. Lee* (Korea)

**C2-1-05**

Technology Roadmapping with Structuring Knowledge and its Advantages in R&D Management

*Y. Yasunaga, T. Yoon* (Japan)

**C2-1-06**

The Evolution of Three Generations Innovation Management - From Event View, Process View to Capability View

*Q. R. Xu, X. R. Liang, L. Zhu* (P.R.China)

**C2-1-07**

The Human Side of Managing Risks in R&D Projects

*H. J. Thamhain* (United States)

**C2-1-08**

The Fundamental Problems Related to R&D Management Literacy

*H. Yamasaki, T. Matsubara, S. Otsuki* (Japan)

**Session D2-3 Project Management III**

**Session Chair:** R. Lau, K. T. Yeo

**D2-3-01**

Risk Management Strategies for SME Investing in China - A Singaporean Perspective

*K. T. Yeo, W.C. Lai* (Singapore)

**D2-3-02**

A Lexicographic Approach for Selecting R&D Projects with Resource Constraints

*Y. Y. Shou, B. Guo* (P.R.China)

**D2-3-03**

Global Submarine Cable Systems – Sustainable Growth or Stagnation

*R. K. T. Fong* (Singapore)

**D2-3-04**

Risk Management Capability Maturity Model for Complex Product Systems (CoPS) Projects

*Y. T. Ren, K. T. Yeo* (Singapore)

**D2-3-05**

Research on Forecast Model of Schedule Risk for Project of Uncertain Network

*P. Li, B. Xu, X. Y. Gu* (P.R.China)

**D2-3-06**

Managing Risks in Modular Product Development

*Q. Wang, K. H. Chai, A. C. Brombacher, J. I. M. Halman* (Singapore)

**D2-3-07**

New Fuzzy GERT Method for Research Projects Scheduling

*M. H. Karimi Gavareshki* (Iran)

**D2-3-08**

Trust Dimensions in E-Retailing: A Strategic Exploration

*K. K. Bhattacharya, S. Saha* (India)

**Session E3-3 New Product Development III****Session Chair:** J. A. Baulys, S. Schmidt**E3-3-01**

The Impact of Inter-/Intra-functional Technological Learning on New Product Development Outcomes  
*J. Ignatius, M. Jantan, T. Ramayah* (Malaysia)

**E3-3-02**

Cost Optimization Mode of BOM Based on Simulated Annealing  
*Z. X. Liu, Y. L. Liu, Z. He* (P.R.China)

**E3-3-03**

Needs, Demands and Requirements in The Vehicle Safety Product Realization Process  
*B. Zhu, C. Grundström* (Sweden)

**E3-3-04**

Combating the Erosion of Manufacturing - A Partnership Product Design, Development and Deployment Strategy (P2D3)  
*A. C. Spowage, S. J. Passey, B. Song, M. S. Jian, M. Chandrasekaran* (Singapore)

**E3-3-05**

User-centered Design: Implications from User Initial Experience with Technology Mediated Products  
*S. Sangwan, H. C. Koh* (Singapore)

**E3-3-06**

Using Strategy Maps in the Design Initiatives for the Environment  
*P. Sahu* (India)

**E3-3-07**

The Winning New Product Strategy: Market or Technology Driven?  
*M. N. Abd Rahaman, M. R. Muhamad* (Malaysia)

**Session F2-4 Supply Chain Management IV****Session Chair:** J. E. Amadi-Echendu, Z. X. Chen**F2-4-01**

System Dynamics Application to Supply Chain Management: A Review  
*U. M. Bhushi, C. M. Javalagi* (India)

**F2-4-02**

Winning a Faster Global Business Growth on a New Entrepreneurial Collaborative Network  
*Y. J. Shi, M. J. Gregory* (United Kingdom)

**F2-4-03**

The Causes of Distribution Channel Conflict in Chinese Telecommunication industry  
*W. Zhou, J. H. Lv, Y. Zhao* (P.R.China)

**F2-4-04**

Attitudes of Gemstone Distributors to Value Adding Strategies of Ruby Production  
*L. Tiangsoongnern, T. Vuori* (Australia)

**F2-4-05**

Supplier-buyer Coordination Management in Chinese Enterprise  
*Z. X. Chen* (P.R.China)

**F2-4-06**

Factors Influencing the Design of Build-to-Order Supply Chains  
*A. C. Lyons, A. E. Coronado-Mondragon, D. F. Kehoe* (United Kingdom)

**F2-4-07**

The Effects of Transportation Variance and Batch Sizes on the Performance of a Supply Chain  
*N. A. Mohd Lair, M. R. Ayob, M. S. Nabi Baksh, A. M. Shaharoun* (Malaysia)

**Date:** Thursday, 21 October 2004**Time:** 08:30 - 10:30**Session A3-1 Sustainable Competitive Advantage****Session Chair:** B. Kayis, M. B. Brown**A3-1-01**

Sustainable Competitive Advantage and the Management of Technology and Innovation  
*R. N. McGrath* (United States)

**A3-1-02**

Corporate Adaptability: A Route to Sustainable Competitive Advantage  
*M. B. Brown* (United Kingdom)

**A3-1-03**

Trends in Undergraduate Mechanical, Manufacturing, Aerospace and Mechatronics Programs Worldwide: In-depth Study of 55 Universities' Programs  
*B. Kayis* (Australia)

**A3-1-04**

Sustaining Competitive Advantages in Mergers and Acquisitions  
*Y. Cheung, I. Martin, M. Chan* (Australia)

**A3-1-05**

The Analysis on Competitive Advantage of Firms in the Context of Synergic Development: Based on the Perspective of Social Capital  
*X. B. Wu, Y. Wei* (P.R.China)

**A3-1-06**

Innovation and Intrapreneurship Through Re-Invention for Sustainable Competitive Advantage: The Case of Tata Steel  
*T. Mukherjee, B. Jha, D. V. R. Seshadri, A. Tripathy* (India)

**A3-1-07**

After-Sales Management of Product Warranty  
*Z. Vintr, M. Vintr* (Czech Republic)

**A3-1-08**

Organizational Innovation for a Sustainable National Competitive Advantage: ITRI and Taiwan's National Innovation System  
*J. C. S. Hsu, M. Nystrom* (Taiwan)

**Session B3-1 Technological Innovation I**

**Session Chair:** *M. Ogembo-Kachieng'a, S. Karani*

**B3-1-01**

Building the Organization's Long-Term Success through Strategic Values  
*S. Karani* (United States)

**B3-1-02**

Feeder-Switch Relocation for Value-Based Distribution Reliability Assessment  
*W. Kurutach, Y. Tuppadung* (Thailand)

**B3-1-03**

Management of Technological Changes and Innovations as a Core Competence  
*G. A. Sazonova, A. N. Kolishchak* (Russia)

**B3-1-04**

The Dilemma of Trust and Commitment in the Construction of Innovative Team in Chinese Private Enterprises  
*G. M. Bao, Z. R. Yang, Z. S. Xie, M. J. Zhou* (P.R.China)

**B3-1-05**

Acquiring Late Mover Advantage through Secondary Innovation\*  
*X. B. Wu, G. N. Xu, S. L. Zheng* (P.R.China)

**B3-1-06**

Architectural Capacity for Attaining Innovation  
*N. Taji* (Japan)

**B3-1-07**

Project Risk Analysis for the Scale-Up of Innovative Technological Processes  
*E. Cagno, F. Caron* (Italy)

**B3-1-08**

Environmental Technology Transfer in the Galvanic Industry: Beyond Implementation of the IPPC Directive  
*E. Cagno, L. Tardini, P. Trucco* (Italy)

**Session :** **C2-2 R & D Management II**

**Session Chair:** *P. H. Soh, B. Donnellan*

**C2-2-01**

International R&D Activities in Emerging Markets - The Case of China  
*O. Gassmann, Z. Han* (Switzerland)

**C2-2-02**

Strategic Outsourcing of R&D: An Exploratory Study of Human Resources Management Practices of Indian Outsourcee Firms  
*P. A. Barbonis, C. van den Dam, M. Thiessen, B. Scholtalbers* (Netherlands)

**C2-2-03**

Firm Size, R&D, and Performance: An Empirical Analysis on Software Industry in China  
*B. Guo, Q. Z. Wang, Y. Y. Shou* (P.R.China)

**C2-2-04**

Commercialization of Technologies Developed in Public Research and Development Institute: The Case of Thailand  
*U. Swadiao, N. Islam, D. Krairit* (Thailand)

**C2-2-05**

The Measurement of Total Innovation Capacity - Case Study of Several Chinese Firms  
*Q. R. Xu, L. Zhu, G. Zhen* (P.R.China)

**C2-2-06**

Industry-University R&D Collaboration: Expectation and Reality  
*C. M. Tan, Y. H. Sng, H. K. Tang* (Singapore)

**C2-2-07**

Towards a Knowledge Typology for New Product Development Engineering Processes  
*B. Donnellan, B. Fitzgerald* (Ireland)

**C2-2-08**

Evolving Business Models for the Mobile Cellular and Related Semiconductor Industry  
*K. Das* (Singapore)

**Session D3-1 Information Systems I**

**Session Chair:** *J. McManus, G. Chattopadhyay*

**D3-1-01**

Using Artificial Neural Networks to Develop a Mechanism for Functional Feature-based Reference Design Retrieval  
*Y. J. Chen, Y. M. Chen, C. B. Wang, T. Chen* (Taiwan)

**D3-1-02**

Determinants of Technological Frames: A Study of E-learning Technology  
*M. S. Annapoornima, P. H. Soh* (Singapore)

**D3-1-03**

University-Industry Collaboration Networks in the Information Security Field in Japan: Problems and a Particular Success  
*K. Matsuura, K. Ebato* (Japan)

**D3-1-04**

Emotions and Technology Acceptance: Development and Validation of a Technology Affect Scale

*S. Perlusz* (Singapore)

**D3-1-05**

Development of a Learning Package for Interactive Learning in Enterprise Resources Planning (ERP)

*G. Chattopadhyay* (Australia)

**D3-1-06**

Critical Factors for Enterprise Resources Planning System Selection and Implementation Projects within Small to Medium Enterprises

*D. Reuther, G. Chattopadhyay* (Australia)

**D3-1-07**

Development of a Postgraduate Engineering Management Program for the Asia-Pacific Region

*J. Wang, G. Chattopadhyay, D. J. Hargreaves* (Australia)

**D3-1-08**

Leapfrogging Ways of Manufacturing Industry in China Driving by IT

*X. B. Wu, J. Du, S. J. Wei* (P.R.China)

**Session E4-1 Quality Management I**

**Session Chair:** *K. C. Tan, C. Seow*

**E4-1-01**

The Catapult Project: An Innovative Approach for Learning Statistical Design of Experiments

*S. L. Ho, W. L. Nge, K. H. Chua* (Singapore)

**E4-1-02**

Time-between-events Charts for On-line Process Monitoring System

*J. Y. Liu, M. Xie, T. N. Goh, P. Ranjan* (Singapore)

**E4-1-03**

Fuzzy Membership Function in Determining Statistical Process Control Position

*E. B. Nababan, M. K. Hasan, H. Mohamed, A. R. Hamdan* (Malaysia)

**E4-1-04**

Some Control Charts for the Process Mean and Variance based on Downton's Estimator

*B. C. Khoo* (Malaysia)

**E4-1-05**

Minimization of Expected Total SPC Cost by Optimizing Deployed Manpower

*M. Shamsuzzaman, W. Zhang* (Singapore)

**E4-1-06**

Determining the Optimum Process Mean Based on symmetric Quality Loss Function and Rectifying Inspection Plan

*C. H. Chen* (Taiwan)

**E4-1-07**

Optimizing Product Design through the Kano Model and QFD

*X. Lai, M. Xie, K. C. Tan* (Singapore)

**E4-1-08**

Building Empirical Model Through Simulation - A Case Study

*C. M. Tan, Z. H. Gan* (Singapore)

**Session F3-1 Decision Analysis I**

**Session Chair:** *D. J. Hancock, E. Y. T. Adesta*

**F3-1-01**

Value Based Decision Models of Management for Complex Systems

*D. Watt, K. Willey* (Australia)

**F3-1-02**

Getting Back to Basics: Productivity Revisited

*P.J. Pretorius* (South Africa)

**F3-1-03**

A Q-Learning Based Approach to Design of Intelligent Stock Trading Agents

*J. W. Lee, E. Hong, J. Park* (Korea)

**F3-1-04**

Using Signal Processing Techniques to Characterise Change in the Dynamics of Foreign Exchange Markets Following Political and Economic Events

*T. Holden, K. Xu, S. L. Ho* (United Kingdom)

**F3-1-05**

The Evolution of Supply-Chain Management into Extended Enterprise

*E. Y. T. Adesta, D. Agusman* (Indonesia)

**F3-1-06**

A Model to Manage Electronic Component Obsolescence for Complex or Long Life Systems

*A. Meyer, L. Pretorius, J. H. C. Pretorius* (South Africa)

**F3-1-07**

A Model using an Obsolescence Mitigation Timeline for Managing Component Obsolescence of Complex or Long Life Systems

*A. Meyer, L. Pretorius, J. H. C. Pretorius* (South Africa)

**F3-1-08**

Research of Influence of Traditional and Modern Agricultural Methods and Technology on a Level of Pollution of the Rivers Both Agricultural Areas

*K. J. Kachiashvili, D. V. Nakani* (Georgia)

**Date:** Thursday, 21 October 2004

**Time:** 11:00 - 12:30

**Session A4-1 Sustainable Growth**

**Session Chair:** Y. Cheung, M. Meyer

**A4-1-01**

Smart and Sustainable Inhabitation in Residential-Industrial Neighbourhood

*R. Zakaria, J. Yang* (Australia)

**A4-1-02**

Achieving Sustainable Performance in Natural Monopolies. The Role of Strategic Planning in the European Air Navigation Services

*T. C. Papavramides, P. Aupée* (Belgium)

**A4-1-03**

Individual Inventors, Entrepreneurial Activity and Public Support Measures

*M. Meyer* (Belgium)

**A4-1-04**

Technology Nourished Development

*A. S. C. Fernandes* (Portugal)

**A4-1-05**

From Innovation to Enterprise – The Role of Technology Commercialization in Sustaining Economic Growth

*P. L. Gardner, A. Y. Fong, L. S. Graham* (Canada)

**A4-1-06**

Some Perspectives in Handloom and Powerloom Textile Industry - A Case Study

*U. M. Bhushi, S. M. Pharsiyawar* (India)

**Session B3-2 Technological Innovation II**

**Session Chair:** S. Karani, M. Ogembo-Kachieng'a

**B3-2-01**

Framework for Innovation in Business Practice Unit

*C. Sato, S. Kumagai, J. Tsukuda, J. Numata* (Japan)

**B3-2-02**

Sustainable Path to Growth: Technological Capability and Innovation Strategy for China's Private Enterprise

*X. B. Wu, S. L. Zheng* (P.R.China)

**B3-2-03**

Firm Innovation Synergy and Its System Dynamic Model: A Case Study from a Top Chinese Firm

*Q. R. Xu, Z. S. Xie, Z. R. Yang* (P.R.China)

**B3-2-04**

Technological Entrepreneurship in South Africa: The Case Study of Eskom and Sasol

*M. Ogembo-Kachieng'a* (South Africa)

**B3-2-05**

Dynamic Competences and Technological Innovation in Chinese Enterprises

*G. M. Bao, J. Yang* (P.R.China)

**B3-2-06**

Modularization and Strategy of Technology Innovation in China

*L. F. Gu, Q. R. Xu* (P.R.China)

**Session : C2-3 R & D Management III**

**Session Chair:** P. A. Barbonis, K. K. Chan

**C2-3-01**

Application of PACS in Fighting Against SARS in a Local Hospital

*K. K. Chan, K. S. Tong, H. Huang* (Hong Kong)

**C2-3-02**

Intellectual Property Issues for R&D Management of Global-Industry Academic Links

*L. Boulter* (United Kingdom)

**C2-3-03**

Technology Alliances and Networks: An External Link to Research Capability

*P. H. Soh, E. B. Roberts* (Singapore)

**C2-3-04**

The Knowledge Management Mechanism In CoPS Innovation

*J. Chen, L. Tong* (P.R.China)

**C2-3-05**

Linking Biopharmaceuticals Process Development to Business Model

*L. P. L. Lim, M. J. Gregory* (United Kingdom)

**C2-3-06**

A Web-based Support for HDD Design Chain Collaboration

*J. M. Zhao, Z. J. Liu, Y. S. Wong, Z. Q. Shen,*

*Q. H. Liu* (Singapore)

**Session D3-2 Information Systems II**

**Session Chair:** G. Chattopadhyay, J. McManus

**D3-2-01**

Coordinate Metrics and Process Model to Manage Software project Risk

*G. P. Jiang, Y. W. Chen* (P.R.China)

**D3-2-02**

Management Information System for Energy and Environmental Aspects of Small and Medium Scale Industries

*V. S. Puranik, G. S. Yaranal, S. D. Kulkarni (India)*

**D3-2-03**

An Information Exchange System for Supporting Product Development

*C. K. M. Lee, H. C. W. Lau, K.M. Yu (Hong Kong)*

**D3-2-04**

A Stakeholder Perspective within Software Engineering Projects

*J. McManus (United Kingdom)*

**D3-2-05**

Framework for Pinpointing the Point of Compromise of E-mail Addresses

*J. R. Harrald, C. Hekimian, S. Shrestha (United States)*

**D3-2-06**

Protecting Cyber Critical Infrastructure (CCI): Integrating Information Security Risk Analysis and Environmental Vulnerability Analysis

*T. Feglar, J. K. Levy (Czech Republic)*

**Session E4-2 Quality Management II**

**Session Chair:** C. M. Tan, Y. Lu

**E4-2-01**

Quality Management System Development in the Automotive Sector

*J. D. van Iwaarden, A. V. D. Wiele, A. R. T. Williams, B. G. Dale (Netherlands)*

**E4-2-02**

Balancing the Quality and Price of Service - A Case Study

*C. L. Cao, T. N. Goh (Singapore)*

**E4-2-03**

Reliability-Focused Parts Selection in Derivative Product-Development-Processes

*Y. Lu, M. G. Fernández, G. Nagappan, E. den Ouden, F. Mistree, A. C. Brombacher (Netherlands)*

**E4-2-04**

SHAININ Method: Edge over Other DOE Techniques

*A. K. Verma, A. Srividya, A. V. Mannikar, V. A. Pankhawala, K. J. Rathanraj (India)*

**E4-2-05**

Managing Engineering Improvement by Six Sigma

*T. Bendell (United Kingdom)*

**E4-2-06**

Six Sigma as a Process Enabler and Strategic Facilitator for Knowledge in Sustainable Development - A SME Case Study

*C. Seow, D. Hall (United Kingdom)*

**Session F3-2 Decision Analysis II**

**Session Chair:** K. J. Kachiashvili, J. Kipinä

**F3-2-01**

Optimization of Machine Flexibility in an Ion Plating Cell

*F. T. S. Chan, K. C. Au, P. L. Y. Chan (Hong Kong)*

**F3-2-02**

Solving Truck Allocation Problem in Sugar Cane Industry

by Genetic Algorithms  
*C. Chamnanhlaw, B. Arnonkijpanich, S. Pathumnakul (Thailand)*

**F3-2-03**

An Improved Method of Real Estate Evaluation Based on Hedonic Price Model

*H. Z. Wen, J. F. Lu, L. Lin (P.R.China)*

**F3-2-04**

A New Fuzzy Graph Model for QAP Problem

*M. R. Gholamian, S. M. T. Fatemi Ghomi (Iran)*

**F3-2-05**

Preferences Based Decision-Making Model (PDM) for Faculty Course Assignment Problem.

*P. Parthiban, K. Ganesh, S. Narayanan, R. Dhanalakshmi (India)*

**F3-2-06**

Transparent Information Flow in Business Networks by using Agents

*P. Iskanius, H. Helaakoski, A. M. Alaruikka, J. Kipinä (Finland)*