

# Global Supply Chain Management/Transportation Building a Global Network of Scholars and Educators Phase II

Final report

By

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Prepared for The University of Toledo University Transportation Center and the U.S. Department of Transportation

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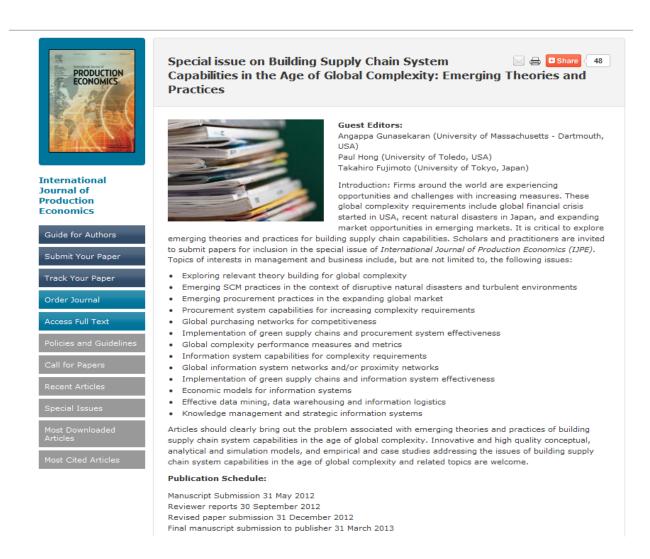
From March 8-10, The University of Toledo faculty (Mark Vonderembse, Paul Hong, Monideepa Tarafdar, Udayan Nandkelyor, Sachin Modi, David Dobrzykowski) and two doctoral students (Ryan Skiver and Vincent Whitelock) have attended the 5<sup>th</sup> Conference on International Supply Chain Management in Tokyo, Japan. Financial support of UT/UTC grants (\$12,000 +) made this conference quite successful in a number of ways. This conference has achieved the following objectives. For more details, please check the 5<sup>th</sup> International Supply Chain Management Symposium and Workshop.

First, initially there was a concern about the safety issues of having this international conference in Tokyo, Japan since serious natural disaster and nuclear reactor accidents in Fukushima took more than several months to resolve. However, with the cooperation of Japanese government and University of Tokyo, the issues were adequately addressed and thus this International conference in Tokyo occurred as planned. The University of Tokyo organizers headed by Prof. Takahiro Fujimoto took care of all the logistics and organizational aspects. The University of Toledo's team (headed by Prof. Paul Hong) worked primarily on getting all the manuscripts from the presenters and arranging special issues with four journals.

Second, institutional support from various universities. This conference with 300+ attendants (including seminars) required major support from institutions including University of Tokyo, University of Toledo, Zhejiang University, Kyungpook National University, Hanyang University, PSG Institute of Management of India. These institutions not only sent professors for attending this conference but also consistently supported annual symposium efforts by encouraging the participation of their faculty and doctoral students and other network of universities. Besides, researchers from more than 20 other institutional representations from Germany, USA, Korea, China, India, and Japan also participated in this conference.

Third, it brought together top notch speakers and international network researchers. Two key note speakers are: Prof. R.W. Grubbström (Editor-in-Chief of International Journal of Production Economics) and Prof. Gunasekaran (Editor-in-Chief of Benchmarking: An International Journal and seven other refereed journals). They spoke on the key trends of operations and global supply chain management in turbulent times. Researchers from USA, Japan, Korea, China, UK, Germany, and India attended the conference and made the conference both highly interactive and dynamic with key panel sessions, industry presentations by Toyota Motor Executive on supply chain disruptions with the 2011 natural disasters in Japan. Two Conference chairs (Dr. Takahiro Fujimoto of University of Tokyo and Dr. Paul Hong from University of Toledo) organized this conference with the fine support of University of Tokyo faculty and administrative staff.

Fourth, in addition to conference proceedings four special referred journal issues are in progress. Guest editors are appointed from this network of researchers and these journals will feature selected articles from this conference. These journals include *International Journal of Business Information Systems (IJBIS), International Journal of Business Innovation Research (IJBIR), International Journal of Productivity and Quality Management (IJPQM) and International Journal of Production Economics (IJPE)*. As guest-editor-in-chief, Prof. Paul Hong works with teams of guest editors for the three special issues (IJBIS, IJBIR, IJPQM). Three guest editors (Prof. Gunasekaran, Hong and Fujimoto) will work on IJPE special issue. The theme of IJPE special issue is "Building Supply Chain System Capabilities in the Age of Global Complexity: Emerging Theories and Practices" as below:



Fifth, the future conference plans. At the end of the conference the future conference plans were announced. University of Toledo (USA) and Zhejiang University (China) will host the sixth conference in 2013 and the seventh conference in 2014 respectively.

# The 5th International Supply Chain Management Symposium and Workshop

Building Dynamic Capabilities Across the Supply Chain: Challenges in the Age of Complexity and Globalization

March 8-10, 2012 Tokyo, Japan

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**Organizing Committee** 

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#### **Organizing Committee**

#### Conference Chair

Takahiro Fujimoto (University of Tokyo, Japan) Paul Hong (University of Toledo, USA)

#### Conference Co-Chairs

Anand Kunnathur (University of Toledo, USA)
Angappa Gunasekaran (University of Massachusetts- Dartmouth, USA)
Xiaobo Wu (Zhejiang University, China)
R. Nandagopal (PSG Institute of Management, India)
Gyewan Moon (Kyungpook National University, Korea)
Luis Solis (Institute de Empresa, Spain)
Hiroshi Katayama (Waseda University, Japan)

# Organizing Committee Chair

Junjiro Shintaku (University of Tokyo, Japan)

#### Organization Committee

Takashi Shimizu (University of Tokyo, Japan)
Takahiro Tomino (Meiji University, Japan)
Youngwon Park (University of Tokyo, Japan)
Tomofumi Amano (University of Tokyo, Japan)
Seungchul Kim (Hanyang University, Korea)
Jeongdong Lee (Seoul National University, Korea)

**Program Steering Committee** 

# **Program**

# PLANT VISIT, March 8, Thu.

# Asahi Breweries, Ltd., Ibaraki Brewery

12:30 Depart Gate of Akamon, the University of Tokyo by a chartered bus 17:30 Get back to the University of Tokyo

# March 8

# ADDRESS:1-1-1 Midori, Moriya, Ibaraki 302-0106

http://www.asahigroup-holdings.com/en/company/breweries/map/ibaraki.html Ibaraki Brewery is located in the northern district from Tokyo area and suffered seriously from the damages caused by the 3.11 Earthquake.

Get a glimpse of the on-site strength that enabled remarkable recovery of their renowned supply chain management system within few months.

#### March 9

# Kojima Hall, U of Tokyo. 1st Floor

# 8:30 - Registration

# Track 1 Logistics I - Chair: Dr. Yoshiaki Ishihara. 1F-1

- A Heuristics on Transportation Plan by Pure Car Carriers from Plural Ports (Presenter: Dr. Yoshiaki Ishihara)(Yoshiaki Ishihara, Shusaku Hiraki, Zhuqi Xu, Yuanming Su, Min Zhang)
- Effect of the sequence of passenger dispatching rules for a one-way trip car sharing system (Presenter: Dr. Daisuke Yamamoto) ( Daisuke Yamamoto,
  - Nobunori Aiura, Atsushi Inoie, Yutaka Karasawa, Kuninori Suzuki )
- Ship Scheduling by Pure Car Carriers with Time Windows and Split Loads in Changeable Speeds (Presenter: Dr. Shusaku Hiraki) (Min Zhang, Yoshiaki Ishihara, Shusaku Hiraki)
- Design of Effective Electronic Power Supply Chain for Smart Grid Management (Presenter: Dr. Koichi Murata) ( Koichi Murata, Hiroshi Katayama )

# Block 1: 9:00-10:30

### Track 2 Supply Chain Integration I - Chair: Dr. Tarafdar Monideepa. 1F-2

- Virtual or Vertical? Achieving Integrated Global Supply Chains: Comparison and Analysis of Virtual Integration and Vertical Integration in Japanese and Korean Steel Industry (Presenter: Mr. SungWoo Byun) (Sungwoo Byun, Changmin Lee)
- Information Processing View of Supply Chain Management Practices: Impact on Supply Chain Performance (Presenter: Dr. Tarafdar Monideepa) (Sufian Qrunfleh, Monideepa Tarafdar, T.S. Ragu-Nathan)
- Supply Chain Integration and Its Impact on Performance (Presenter: Dr. Chang Won Lee)(Chang Won Lee, Ik-Whan G. Kwon)
- Replication of Global Localization Strategy: A Case Study of Korean Firms (Presenter: Dr. YoungWon Park) (YoungWon Park, Junjiro

# Track 3 Research & Development I - Chair: Dr. SeungChul Kim. 2F

- Achieving Business Excellence Through Project Management Maturity: Case Of Korean Firms (Presenter: Dr. SeungChul Kim) (Seung-Chul Kim, Je-Man Boo, Paul Hong)
- Managing product complexity in turbulent times: an options based planning model (Presenter: Dr. David Dobrzykowski) (Fred Ahrens, David D. Dobrzykowski)
- The complementarity of global R&D and human resource management as transnational: A case of a production process machine company (Presenter: Mr. Hidetada Higashi) (Hidetada Higashi, Naoki Senda)
- Supply Chain Competence and Integrative Product Design: An Empirical Study for Small and Medium-Sized Enterprises (SMEs) (Presenter: Dr. Jon Marvel) (Paul Hong, Jon H. Marvel, James J. Roh)

# 10:30 - 10:45 Coffee Break - 2F(Kojima Hall)

# Track 4 Technology and Innovation Management I - Chair: Dr. ChangWon Lee. 1F-1

- Customized component transaction with insufficient trust: From the case study of LCD-panel industry (Presenter: Dr. Koichi Nakagawa) (Koichi Nakagawa, Won-Wook Song)
- Technology Management Implementation of Competitive Advantage: An Empirical Study of Manufacturing Firms (Presenter: Dr. Paul Hong) (Paul Hong, James Roh, Greg Rawski)
- Achieving Knowledge Management Excellence for Competitive Advantage: Research Model for Small and Medium Enterprises (SMEs) (Presenter: Dr. Sukbong Choi) (Paul Hong, Young Won Park, Suk Bong Choi)

Block 2: 10:45-12:15

 Modular Innovation For Competitiveness Advantage: Case For SMEs (Presenter: Dr. ChangWon Lee) (Ryan Skiver, Paul Hong, Chang Won Lee)

# Track 5 Healthcare and SCM - Chair: Dr. David Dobrzykowski. 1F-2

- Supply Chain research in healthcare: a literature review and research directions (Presenter: Dr. David Dobrzykowski) (David Dobrzykowski, Paul Hong, Seungchul Kim, Vafa Saboorideilami)
- Healthcare Supply Chain For Competitive Advantage: The Case For Korea (Presenter: Dr. SeungChul Kim) (Paul Hong, Seung-Chul Kim, David Dobrzykowski)
- Electronic Health Records, high quality information exchange, and physician performance in the healthcare delivery supply chain (Presenter: Dr. David Dobrzykowski) (David Dobrzykowski, Monideepa Tarafdar,

T.S. Ragu-Nathan)

Who wants automated external defibrillators in Japan? (Presenter: Mr. Seunghwan Leem) (Seunghwan Leem, James J. Roh)

# Track 6 Production and Operation Management I - Chair: Dr. Katsuki Aoki. 2F

- Monozukuri capability to address product variety: A comparison between Japanese and German automotive makers (Presenter: Dr. Katsuki Aoki)(Katsuki Aoki, Thomas Staeblein, Takahiro Tomino)
- Sourcing negotiation strategies based on portfolio (Presenter: Dr. Mingu Kang) (Mingu Kang, Xiaobo Wu, Paul Hong, Youngwon Park)
- A Survival Strategy of Medium-sized B2B Enterprises in Japanese Machinery Industry: Common Strategies in Many Quality Enterprises (Presenter: Dr. Yasuyuki Kishi) (Taichi Kishimoto, Yasuyuki Kishi, Shohei Hamamatsu)
- Emergency Recovery Production in the Japanese Automotive Industry: Long-term Lessons from the 1997 Aisin Seiki Kariya Factory Fire and Two other Cases of Factory Fires (Presenter: Ms. Carmen Perez)(M.Carmen Perez)

# 12:15 - 13:30 **Lunch - 2F (Kojima Hall)**

12:15 - 13:30 Meeting Organizational Committee. 5F (Kojima Hall)

# Track 7 Production and Operation Management II -Dr. Yongjiang Shi. 1F-1

- The Significance of Shortening Lead Time from a Business Perspective (Presenter: Dr. Shino Hiiragi)(Shino Hiiragi)
- Dynamic capabilities and emerging firm growth: Learning from Chinese commercial vehicle manufacturing companies (Presenter: Dr. Yongjiang Shi)(Xiaozheng Jin, Yongjiang Shi)
- An Empirical Examination of Action Programs and Operational Performance: A Comparative Study of Manufacturing Firms (Presenter: Dr. Sunhee Youn)(Paul Hong, Jinhwan Kim, Sunhee youn)

Block 3: 13:30-15:00

• A Study on Design Method For Mixed-Model Assembly Lines With Set Parts Supply System (Presenter: Dr. Zhuqi Xu) (Zhuqi Xu, Shusaku Hiraki, Yoshiaki Ishihara, Yuaming Su)

### Track 8 Supply Chain Integration II - Dr. Jon Marvel. 1F-2

- A Survey Of Business Network Flow Integration: Lessons And Implications For Future Research (Presenter: Dr. Jon Marvel)(Paul Hong, Sachin Modi, Jon H. Marvel)
- Gaining Competitive Advantage across the Supply Chain with Social Media: Antecedents, Practices, and Consequences (Presenter: Dr. Yingxia Cao) (Yingxia Cao, Thuong T. Le, Paul Hong)
- SCM Approach to the Automobile Manufacturing Systems (Presenter: Dr.

- Shusaku Hiraki)(Shusaku Hiraki)
- Effective Supply Chain Strategy in the Business Context of China (Presenter: Dr. YoungWon Park)(Youngwon Park, Junjiro Shintaku, Paul Hong)

### Track 9 Global SCM - Dr. Luis Solis. 2F

- Global Knowledge transfer Network: the Case of Global Production Support System of Toyota (Presenter: Mr. Youngkyo Suh)(Youngkyo Suh)
- Market Life-cycle and Products Strategies for Emerging Markets: Toward a New Age of Indian Automotive Market (Presenter: Dr. Zejian Li)(Zejian LI)
- Supply Chain Network of IT Industry in East Asia: From the viewpoint of Japan's Core competence (Presenter: Dr. Junjiro Shintaku)(Junjiro Shintaku, Youngwon Park)
- Building Global Competitiveness: A Case of Small and Medium Enterprises (SMEs) of Korea and Spain (Presenter: Dr. Luis Solis)

15:00-15:15	Coffee Break - 2F (Kojima Hall)
Special Block 15:15-17:45	<ol> <li>Keynote Speech (Economics Research Building, B1F)</li> <li>Moderator: Dr. Junjiro Shintaku (Organizing Committee Chair: University of Tokyo)</li> <li>Dr. R.W. Grubbstrom (Editor-in-Chief, International Journal of Production Economics; Dept. of Production Economics, Inst. of Technology, Linköping University, Sweden)</li> <li>Dr. Angappa Gunasekaran (Editor-in-Chief, Benchmarking: An International Journal; University of Massachusetts - Dartmouth, USA)</li> </ol>
18:00-20:00	<ul> <li>Dinner &amp; Reception (Economics Research Building, 1F) Opening Welcome: (Conference Chairs)</li> <li>Dr. Takahiro Fujimoto (University of Tokyo, Japan)</li> <li>Dr. Paul Hong (University of Toledo, USA)</li> </ul>
March 10	Kojima Hall, U of Tokyo
Block 4: 9:00-10:30	<ul> <li>Track 10 Supply Chain Disruption Risk &amp; Resilience - Chair: Dr. Udayan Nandkeolyar. 2F</li> <li>Supply Chain Disruption Risk and Recovery: Temporary Diversification and Its Limits (Presenter: Dr. Daniel Heller)(Daniel E. Whitney, Jianxi Luo, Daniel A. Heller)</li> <li>Project Manager and Risk Management: Comparative Study between Japanese and Korean Firms (Presenter: Dr. Takashi Shimizu)(Takashi</li> </ul>

- Shimizu, Youngwon Park, Paul Hong, SukBong Choi)
- Delivery Lead Time and Supply Chain Risk (Presenter: Dr. Udayan Nandkeolyar)(Udayan Nandkeolyar, Kathryn J. Chang)
- A Literature Review on Supply Chain Disruptions and Supply Chain Restructuring (Presenter: Dr. Erika Lillian Marsillac)(James Roh, Erika Marsillac)

# Track 11 Information, Communication, and Organization - Chair: Dr. Geon-Cheol Shin. 1F-2

- Information Systems and managerial control modes: a case study analysis (Presenter: Dr. David Dobrzykowski)(Fred Ahrens, David Dobrzykowski)
- The Interaction of Marketing, R&D and Critical Innovation Focusing on Korean and Japanese Firms (Presenter: Dr. Geon-Cheol Shin)(Geon-Cheol Shin, Young Won Park)
- A Study on Initial Trust and Repeat Trust in Online Transactions in E-Commerce: From Perspective of ELM (Eloboration Likelyhood Model) (Presenter: Dr. Myeonggil Choi)(Myeonggil Choi, Jae-Hun Jeong, Youngwon Park)
- The Case for ESG Supply Chain Collaboration: Theoretical Perspective (Presenter: Mr. Vincent Whitelock)(Vincent G. Whitelock)

# Track 12 Research & Development II - Chair: Dr. Anja Schulze. 2F

- The Impact of Product Design on Process and Supply Chain Decisions (Presenter: Dr. Erika Lillian Marsillac)(Erika Marsillac, James Roh)
- Product Architecture and Platform Strategy: Case Study of Japanese Firms (Presenter: Dr. Paul Hong)(Paul Hong, Youngwon Park, Woosang Hwang)
- A Systematic Product Development Procedure for B to B Supply Chain (Presenter: Mr. Toshihiro Ohkuma)(Toshihiro Ohkuma, Ryo Fujiura, Koichi Murata, Hokuto Uesugi, Yoshiaki Itoh, Yukihito Shimamura, Hiroshi Katayama)
- The effect of disseminative capacity on knowledge transfer: R&D alliances in the automotive industry (Presenter: Dr. Anja Schulze)(Anja Schulze, Gundula Brojerdi, Georg von Krogh)

### 10:30 - 10:45 Coffee Break - 2F (Kojima Hall)

# Track 13 Logistics II - Chair: Dr. Taho Yang. 1F-1

Block 5: 10:45-12:15

- Controlling the follower's profit decrease in dual channel supply chain (Presenter: Mr. Erwin Widodo)(Erwin Widodo, Katsuhiko Takahashi, Katsumi Morikawa, I Nyoman Pujawan, Budi Santosa)
- Logistics Operation Design for Efficient Sorting-Packaging Process in Distribution Centre ~ A Simulative Approach for Building Inhouse Supply Chain ~ (Presenter: Mr. Shota Ishikawa)(Shota Ishikawa, Tatsuya

- Kato, Koichi Murata, Tomo Sera, Nobuyuki Hayashi, Norio Ishiwatari, Mitsunobu Yoshino, Hiroshi Katayama)
- Design of Assembler-Supplier Logistics Network for Car Parts Industry ~ An Attempt for Sensitivity Analysis on Supply Chain Portfolio ~ (Presenter: Mr. Takashi Ishikawa) (Takashi Ishikawa, Koichi Murata, Tomo Sera, Nobuyuki Hayashi, Norio Ishiwatari, Mitsunobu Yoshino, Hiroshi Katayama)
- A Lean-pull Design to Solve Multistage Production System Variability by Using Multiple Criteria Decision-Making Method (Presenter: Dr. Taho Yang)(Taho Yang, Jiunn-Chenn Lu, Vincent Chi-Wei Li)

# Track 14 Green Supply Chain Management - Chair: Dr. Vivek Nagarajan. 1F-2

- A Vehicle Routing Design Procedure for Collect and Delivery to Transport Operations ~ An Attempt for Green Lean Supply Chain System ~ (Presenter: Mr. Tatsuki Nakayama) (Tatsuki Nakayama, Koichi Murata, Nobuyuki Hayashi, Tomo Sera, Norio Ishiwatari, Mitsunobu Yoshino, Hiroshi Katayama)
- The Causal Effects of Relationships between Eco-friendly Strategy, Green Supply Chain Coordination, and Environmental Performance (Presenter: Dr. Chulmo Koo) (Chulmo Koo, Namho Chung, Sung Yul Ryoo)
- Redesigning the Agricultural Supply Chain (Presenter: Dr. Vivek Nagarajan)(Thulasidas Sathiya Priya, Nagarajan Vivek)

# Track 15 Technology and Innovation Management (2) - Chair: Dr. Gyewan Moon, 1F-1

- Open Network Innovation in the Age of Complexity: Case for Small and Medium Enterprises (SMEs) (Presenter: Dr. Soon W. Hong)(Paul Hong, Stephen K. Callaway, Soon W. Hong)
- Achieving Strategic Change: Problem Framing Outside the Box (Presenter: Ms. Hyelim Kim)(Gyewan Moon, Hyelim Kim, Arlyn Melcher)
- Entrepreneurs and Decision Making Process (Presenter: Mr. YunJun Jung)(Maninderpal Singh Saini, YunJun Jung, Gyewan Moon)
- Translating Creativity into Innovative Outcomes: The Case for Creativity-Based Innovation in Korea (Presenter: Dr. Gyewan Moon)(Paul Hong, Chunghee Chung, Gyewan Moon)

# 12:15 - 13:00 Lunch - 2F (Kojima Hall)

**Keynote Speech (Economics Research Building, B1F)** 

Special Block Moderator: Dr. Takahiro Fujimoto ( Conference Chair: University of Tokyo )

# Title: "Manufacturing (Monozukuri) and Risk Management.

- 1. How we recovered from the Great Earthquake in a short time
- 2. History and Characteristics of Toyota Supply Chain and action towards Strengthening

# (1) Mr. Keiji Masui

(Managing Officer; Deputy Chief Officer, Purchasing Group, Toyota Motor Corporation)

# (2) Mr. Hiroaki Koda

(General Manager, Global Purchasing Engineering Department, Purchasing Project Management Division, Purchasing Group, Toyota Motor Corporation)

Panel: Emerging Issues in Global Supply Chain: Perspective and Direction Moderator:

Dr. Takahiro Fujimoto (Conference Chair: University of Tokyo) and

Dr. Paul Hong (Conference Chair: University of Toledo)

Panel Discussion 15:30-17:00 Japan: Dr. Hiroshi Katayama (Waseda University)

USA: Dr. Mark Vonderembse (University of Toledo)

5:30-1/:00 China: Dr. Xiaobo Wu (Zhejiang University)

Korea: Dr. SeungChul Kim (Hanyang University)

Europe: Dr. Luis Solis (IE Business School) / Dr. Yongjiang Shi (University

of Cambridge )

India: Dr. Vivek Nagarajan (PSG College of Technology)

17:00-17:30 Closing and Award Ceremony

#### **Profiles of Moderators and Panelists**

**Keynote Speech (Economics Research Building, B1F)** 

# **Speakers:**

(1) Dr. R.W. Grubbstrom (Editor-in-Chief, International Journal fo Production Economics; Dept. of Production Economics, Inst. of Technology, Linköping University, Sweden)

Robert W. Grubbström has been Professor of Production Economics at Linköping Institute of Technology, Sweden, since 1972, and is now Emeritus Professor. He is Licentiate of Technology and Doctor of Economics, and has received honorary doctoral degrees from Lappeenranta University of Technology, Finland, Corvinus University, Budapest, Hungary, and Leopold-Franzens-Universität, Innsbruck, Austria. He has Master's degrees from the Royal Institute

of Technology, Stockholm, and the Stockholm School of Economics. He is currently President of the Senate and Dean of the Faculty, Mediterranean Institute for Advanced Studies, Šempeter pri Gorici, Slovenia.

Among the recognitions awarded him are **Knight** (**First Class**) of the Order of the White Rose of Finland, **Commander** of the Order of the Lion of Finland, **Award of Recognition for Outstanding Contributions to the Development of the Faculty**, University of Ljubljana, Slovenia, (where he also is **Honorary Visiting Professor**) and **Honorary Corporal**, Kungl. Svea Trängregemente, Sweden. He is **Honorary Research Fellow**, Lancaster University, **Honorary Professor**, University of Nottingham Business School, United Kingdom, and **Honorary President** of the Economic Club of Linköping. He is **Past President** and **Fellow** of the International Society for Inventory Research (ISIR) and **Fellow** of the Royal Academy of Engineering Sciences.

He is **Editor-in-Chief** of the *International Journal of Production Economics* (Elsevier) and is author / coauthor / editor of some 15 books and has written about 300 articles and working papers, including publications in the *International Journal of Production Economics*, *Management Science*, *The Mathematical Scientist, International Journal of Production Research, Journal of Cybernetics, European Journal of Operational Research, Managerial and Decision Economics, Kybernetes, Omega, Economic Systems Research, Applied Energy, Annual Reviews in Control, and International Journal of Energy Optimization and Engineering*.

His current educational interests include modern information technology applied to interactive educational processes, such as designing the International Logistics Management Game (ILMG), used by several European universities and for vocational training. His scientific interests are focused on the development of a general theory for multi-level, multi-stage production-inventory systems applying Laplace transforms and input-output analysis (MRP Theory), and on the integration of economics and thermodynamics.

# (2) Dr. Angappa Gunasekaran (Editor-in-Chief, Benchmarking: An International Journal; University of Massachusetts - Dartmouth, USA)

**Dr. Angappa Gunasekaran** is a Professor and the Director of Business Innovation Research Center (BIRC) at the Charlton College of Business, University of Massachusetts, Dartmouth. Dr. Gunasekaran has held academic positions in UK, Australia, Finland, India and Canada. He has over 200 articles published in peer-reviewed journals. He has presented about 50 papers and published 50 articles in conferences and given a number of invited more talks in many countries. He is on the Editorial Board of several journals. He has organized several international workshops and conferences in the emerging areas of operations management and information systems. He is currently interested in researching logistics and supply chain management.

#### Title of the talk:

The Future of Operations Management: An Analysis and Outlook

# **Moderator:**

Dr. Junjiro Shintaku (Organizing Committee Chair: University of Tokyo)

# Title and Affiliation:

Associate Professor, Research Director, Manufacturing Management Research Center, Graduate School of Economics, University of Tokyo.

# **Education:**

1982 B. A. Faculty of Economics, University of Tokyo.

1986 M. A. Graduate School of Economics, University of Tokyo.

1993 Ph. D Graduate School of Economics, University of Tokyo.

# **Research Interests:**

Technological innovation and corporate strategies. Strategies for emerging market Production networks in Asia International Standardization and Business Models

# **Recent Publications:**

Book

- Global Business Strategy, Hakuto-shobo, 2011 (with Toshiya Watanabe, et. al).
- Business Model Innovation, Hakuto-shobo, 2011 (with Toshiya Watanabe, et. al).
- *Management Text: Introduction to Corporate Strategies*, Nihon Keizai Shimbun-sha,2011 (with Hisanaga Amikura).
- Global strategy of Manufacturing Management: Industrial Geography in Asia, Yuhikaku,2009 (with Tomofumi, Amano).
- Architecture-Based Analysis of Chinese Manufacturing Industries, Toyo Keizai Shimposha,2005 (with Takahiro Fujimoto).

# Articles

- Shintaku, J., and T. Amano (2012) How Some Japanese Firms Have Succeeded Against Low-Cost Competitors in Emerging Markets. In Anil K. Gupta, Toshiro Wakayama, and U. Srinivasa Rangan ed. *Global Strategies for Emerging Asia*, Jossey-Bass/Wiley (to be published).
- Wakayama, T., J. Shintaku,, T. Amano., and T. Kikuchi (2012) Co-Evolving Local Adaptation and Global Integration: The Case of Panasonic China. In Anil K. Gupta, Toshiro Wakayama, and U. Srinivasa Rangan ed. *Global Strategies for Emerging Asia*, Jossey-Bass/Wiley (to be published).
- Shintaku, J., and Y. Park (2012) Japan's position in East Asia's IT industrial networks, *SERI Quarterly*. 5(1).
- Shintaku, J., and H. Tatsumoto. (2010) New Business Model:? Empowering emerging market, *ISO Focus*+, *June*, *1*(6), 28-30.
- Shintaku, J. (2010). Changing production networks in Asia, *Japan Spotlight*, 172, *July-August*, 16-17.
- Shintaku, J., and K. Kuwada, (2008) Reorganizing Mature Industry through Technological Innovation: De-Maturity in Watchmaking Industry. In Takuji HARA, Norio Kambayashi and Noboru Matsushima ed. *Industrial Innovation in Japan*, Routledge.
- Shintaku, J., K. Ogawa., and T. Yoshimoto (2006) Architecture-based Approaches to International Standardization and Evolution of Business Models, *International Standardization as a Strategic Tool: Commended Papers from the IEC Century Challenge 2006*, IEC. (MMRC discussion paper 96)
- Shintaku, J., K. Ogawa., and T. Yoshimoto (2005) Architecture-based Advantage of Firms and Nations: New Global Alliance between Japan and Catch-up Countries. *Annals of Business Administrative Science*, 4(3), 21-38.
- Shintaku, J. (2005) Sustainability of Competitive Advantage: Accumulated Experience and Discontinuous Technological Change, *Annals of Business Administrative Science*, 4(1), 1-8.

# **Others:**

- Executive Director, the Academic Association for Organizational Science.
- Executive Director, the Japan Academy of International Business Studies.
- Executive Director, the Global business Research Center.

# **Keynote Speech (Economics Research Building, B1F)**

Title: "Manufacturing (Monozukuri) and Risk Management."

# **Speakers:**

# (1) Keiji Masui (Managing Officer; Deputy Chief Officer, Purchasing Group, Toyota Motor Corporation)



Managing Officer Toyota Motor Corporation

Date of birth: August 15, 1954

Home country: Japan

**Education:** Bachelor's degree in international law, Kyoto University, 1977

#### Career

Apr. 1977 Joined Toyota Motor Corporation (TMC)

Jan. 1999 Vice president, Toyota Motor Engineering & Manufacturing Europe NV/SA (now

Toyota Motor Europe NV/SA)

Jan. 2005 General manager, Production Control Div., TMC

Jun. 2007 Managing officer

# (2) Hiroaki Koda (General Manager, Global Purchasing Engineering Department, Purchasing Project Management Division, Purchasing Group, Toyota Motor Corporation)



**Date of birth:** September 23, 1965

**Education:** Bachelor's degree in international law, Tokyo University

### Career

Joined Toyota Motor Corporation Assigned to Purchasing Div. No.1 (Current Body Parts Purchasing Division)

Stationed in the UK for 4 years (TMUK, current TME Purchasing)

2005 Worked as a secretary to Toyoda Akio, Executive Vice President

2006 Operations Management Consulting Division (Instructed TPS in and out of the company)

General Manager, Parts Engineering Dept. Purchasing Planning Div.

2010 \*From October, General leader of company-wide RRCI "Monozukuri Innovation activities"

General Manager, Global Purchasing Engineering Dept. Purchasing Project Management Div. (Present post)

\*JAMA Joint Support Team Leader, The Great Tohoku Earthquake, Renesas Naka Plant

\*JAMA Joint Support Team Leader, Thai ROHM Support Team, Thai great flood

#### **Moderator:**

Dr. Takahiro Fujimoto (Conference Chair: University of Tokyo)

# **Executive Director, Manufacturing Management Research Center / Professor, Graduate** School of Economics, the University of Tokyo

Research Interests: technology and operations management

**Recent Publications:** *Nihon no Monodukuri Tetugaku*, Nihon Keizai Shinbunsya, 2004 (in Japanese); *Architecture-based Analysis of Chinese Manufacturing Industries*, TOYO KEIZAI INC., May.2005. (SHINTAKU, Junjiro, FUJIMOTO, Takahiro) (in Japanese); "Competing to be really, really good" Takahiro Fujimoto, translated by Brian Miller (LTCB International Library selection; no. 22), 2007; "Architecture-Based Comparative Advantage - A Design Information View of Manufacturing", Evolutionary and Institutional Economics Vol.4, No.1, pp.55-112 (2007).

Panel: Emerging Issues in Global Supply Chain: Perspective and Direction

#### **Moderator:**

Dr. Takahiro Fujimoto ( Conference Chair: University of Tokyo ) and Dr. Paul Hong ( Conference Chair: University of Toledo )

**Paul Hong** is Professor of Operations Management at the University of Toledo, USA. He is a graduate of Yonsei University, Korea with a BA in Economics. He also has an MBA and a MA from Bowling Green State University, and a Ph.D. in Manufacturing Management and Engineering from the University of Toledo, USA. He has presented and published more than 150 articles in conferences and journals including *Journal of Operational Management*, *International Journal of* 

Production Economics, International Journal of Production Research, Journal of Supply Chain Management, International Journal of Operations and Production Management, Corporate Governance: An International Review, Journal of Business Research, International Journal of Technology Management, International Journal of Information Management, Management Decision, Journal of Cleaner Production, Benchmarking: An International Journal, Strategic Outsourcing: An International Journal and European Journal of Innovation Management.

His recent book (co-authored with Prof. Youngwon Park), "Building Network Capabilities in Turbulent Competitive Environments: Practices of Global Firms from Korea and Japan" is released (CRC Press, 2012). He is the recipient of Journal of Operations Management Best Paper Finalist Award (2006) for the paper, "Role Change of Design Engineers in Integrated Product Development), Emerald Literati Network 2011 Awards for Excellence for the paper, "Integration of supply chain IT and lean practices for mass customization: benchmarking of product and service focused manufacturers" and Best Paper Award on "Flexible and Redundant Supply

Chain Practices to Build Strategic Supply Chain Resilience: Contingent and Resource-Based Perspectives" at Annual North American Research Symposium in Tempe, Ariz. 2012.

He is an editorial review board member of several journals including Journal of Operations Management. Journal of Humanitarian Logistics and Supply Chain Management (JHSCM), and Journal of Enterprise Information Management (JEIM). Since 2006 he has been special issue editor for journals such as Benchmarking: An International Journal (BIJ), International Journal of Business Excellence (IJBEX), International Journal of Services and Operations Management (IJSOM), International Journal of Procurement Management (IJPM), and International Journal of Production Economics (IJPE). He is International Network Coordinator/Conference Chair of annual International Supply Chain Management Symposium and Workshop and USA Coordinator for International Manufacturing Strategy Survey (IMSS). His research interests are in innovation strategy and global supply chain management.

# **Panelists:**

Japan: Dr. Hiroshi Katayama (Waseda University)

**Title and Affiliation:** Professor, Waseda University Dr. Hiroshi Katayama is on the academic staff of the Faculty of Science & Engineering, Waseda University in Tokyo. He is the third generation professor of the

Operations & Production Management Laboratory (OPM Lab.) of Department of Industrial and Management Systems Engineering (IMSE), which has the oldest

history in this area in Japan. He was the former Senior Associate Dean here for the past four years. He was visiting at the Institute for Manufacturing and Churchill College of University of Cambridge, Technology and Operation Management Unit of Harvard Business School etc. for his sabbatical leave and, in 2009, he became the Chairperson of International Federation for Logistics and SCM Systems (IFLS).

#### **Education:**

March, 1970 Bachelor Course Graduation, Department of IMSE, Waseda University March, 1972 Master Course Graduation, Department of IMSE, Waseda University March, 1975 Doctor Course Graduation, Department of IMSE, Waseda University

### **Research Interests:**

His academic majors in Operations & Production Management include manufacturing strategy, global manufacturing & logistics, supply chain portfolio, reverse logistics, KPI/KAI measurement, bottleneck management, Kaizen/Lean technology, TPM (Total Productive Maintenance and Management), line production systems, innovation processes, skill management, application of genetic algorithms to optimisation problem solving. Especially, his current interests are in the reinforcement of continuous improvement schemes and its global transfer for empowerment of industries worldwide, which aim to refine green lean management in the domain of international manufacturing and supply chain.

#### **Recent Publications:**

"A study of the performance evaluation of the visual management case-base: development of an integrated model by quantification theory category III and AHP", *International Journal of Production Research (Forthcoming)*, DOI: 10.1080/00207543.2011.638944, 2012, ISSN: 1366-588X (electronic) "Offshoring Process: A Comparative Investigation of Danish and Japanese Manufacturing Companies", *Managing Global Supply Chain Relationships: Operations, Strategies and Practices*, pp. 220-243, IG Global, 2011, DOI: 10.4018/978-1-61692-862-9.ch010, ISBN13: 9781616928629.

"The Sense of Lean Management and Contribution to Customer Satisfaction", *Industrial Engineeri ng Magazine*, Vol. 17, No. 1 (47th Issue), pp. 22-27, March, 2010, Institute of Industrial Engineers, Korea.

"A Study on Construction of Kaizen Case-base and Its Utilisation: A Case of Visual Management in Fabrication and Assembly Shop-floors", *International Journal of Production Research*, Vol. 48, No. 24, pp. 7265-7287, 2010, ISSN: 1366-588X (electronic) 0020-7543 (paper).

"Integrated Procedure of Balancing and Sequencing for Mixed-model Assembly Lines: A Multi-objective Evolutionary Approach", *International Journal of Production Research*, Vol. 48, No. 21, pp. 6417-6441, 2010, ISSN: 1366-588X (electronic) 0020-7543 (paper).

"Development of Kaizen case-base for effective technology transfer - A case of Visual Management technology", *International Journal of Production Research*, Vol. 48, No. 16, pp. 4901-4917, 2010, ISSN: 1366-588X (electronic) 0020-7543 (paper).

"Uniform Workload Assignments for Assembly Line by GA-based Amelioration Approach", *International Journal of Production Research*, Vol. 48, No. 7, pp. 1857-1871, 2010, ISSN: 1366-588X (electronic) 0020-7543 (paper).

Management of Technology: The Key for Success Eighty-Two Critical Elements (in Japanese), JIPM Solution, 2009.

"A Multi-decision Genetic Approach for Workload Balancing with Mixed-Model U-shaped Assembly Line Systems", *International Journal of Production Research*, Vol. 47, No. 14, pp. 3797-3822, 2009.

Understanding Lean: Principle, Practice and Implementation ?For mapping its concept, elements and way of transmission-, [Proceedings of The Workshop on Lean Management], Eds. Katayama, H. and Gregory, M. J., Institute for Manufacturing, Department of Engineering, University of Cambridge, UK, 12th, September, 2008.

"U-shaped Assembly Line Balancing Problem with Genetic Algorithm", *International Journal of Production Research*, Vol. 46, No. 16, pp. 4637-4649, January, 2008, ISSN: 1366-588X (electronic) 0020-7543 (paper).

**USA**: Dr. Mark Vonderembse (University of Toledo)

Mark A. Vonderembse is a Professor of Information Operations and Technology Management, and Interim Chair of the John B. and Lillian E. Neff Department of Finance at The University of Toledo (UT). He earned a Bachelors of Science in Civil Engineering from The University of Toledo in 1971 and an MBA from The University of Pennsylvania in 1973. He earned a Ph.D. from The

University of Michigan in 1979. He has held many administrative positions including founding Director of UT's Intermodal Transportation Institute. He has been PI on more than four million

dollars in research grants and contracts. He has published in academic and professional journals including Management Science, Journal of Operations Management, Decision Sciences, International Journal of Production Research, and Industrial Engineering Transactions. His research interests are manufacturing strategy, supply chain management and healthcare delivery.

China: Dr. Xiaobo Wu (Zhejiang University)

PhD, Qiushi Chair Professor, Executive Dean, School of Management, Zhejiang University

Professor Xiaobo WU is Qiushi Chair Professor of Strategy and Innovation Management, Executive Dean of School of Management, and Director of National Institute for Innovation Management, at Zhejiang University. He is also the director of the Zhejiang University? Cambridge University Joint Research Center for Global Manufacturing and Innovation Management.

He got his BA of EE in 1982, MSc of Mgt in 1989, and PhD of Mgt in 1992, from Zhejiang University. He'd his post-doctorial program at Asian Institute of Technology, Thailand, 1996, and as a visiting scholar, at Institute for Manufacturing, Cambridge University, UK, 1996-1997, as a Fulbright Visiting Scholar, Sloan School of Management, MIT, USA, 2000 -2001. From 1982 to 1986, he used to work for government agencies and industrial organizations as an assistant engineer. His research interests include Managing Technological innovation, Global manufacturing and competitive strategy. He led more than ten national agents sponsored and internationally joint sponsored research projects. He has published more than one hundred academic papers and seven books in the related research areas.

He is the member of China Scholarship Council under the State Council, and the member of the Steering Committee for Management Science and Engineering Management, Ministry of Education, China, and the found member of Institute for Manufacturing, Cambridge University, UK.

Korea: Dr. SeungChul Kim (Hanyang University)

Title and Affiliation:

Professor, Hanyang University, Korea

**Education:** 

Ph.D., University of Oregon, USA

MBA, University of Hawaii, US

A BA, Seoul National University, Korea

**Research Interests:** 

Operations strategy, Supply chain management, Service and Healthcare management, Project management practices,

# **Recent Publications:**

Hong, P. and Kim, S. C., "Business network excellence for competitive advantage: case of Korean firms, International Journal of Business Excellence, Vol. x, No. x, (forthcoming).

Kim, S. C., Hong, J. B., and Hwang, S. Y., 2011, "Analyzing the Impacts of Supply Chain Partnership on the Firm Performance", Journal of the Korean Society of Supply Chain Managemet, Vol. 11, No. 2, pp.157-170.

Kim, S. C., 2011, "Adopting Systematic Project Management Method for Productivity Improvement: Comparison of Project Management Maturity Levels Between SMEs and Large Firms", The Korean Small Business Review, Vol. 33, No. 2, pp.1-17.

Kim, S. C., Choi, S. H., Kim, D. C., and Kim, H. B., 2011, "Analyzing Play Times for Better Golf Course Management", Journal of Tourism & Leisure Research, Vol. 23, No. 4, pp.447-466.

#### Others:

Academic society participation Korean Society of Supply Chain Management (KSCM) Korean Society of Project Management (KSPM) Korea Operations Management Society (KOPMS) Project Management Institute (PMI), USA

Europe: Dr. Luis Solis (IE Business School)

Associate Dean and Professor of Operations Management

It comes as no surprise that Luis Solis has gained a number of teaching awards and is welcomed as a visiting professor at universities in countries such as Lithuania, Mexico, Portugal, Belgium, France, China, Colombia, Guatemala, El

Salvador, Costa Rica, Nicaragua, Spain and the US. For when he teaches his courses in strategic operations management, lean & response service operations, supply chain management, project management and quality management, Prof Solis is drawing upon a vast pool of knowledge and experience gained by working with work a wide range of companies in USA, Europe and Latin America. "So I'm not working only on theoretical research and models but I'm also working with top industry executives in the real world," he says.

He also leads and participates in research initiatives such as Success Factors in Strategic Alliances in Supply Chains in European Industry, An Empirical Study of Techno-Stress and its Impact on Business Performance and Knowledge Management and New Product Development in the Supply Chain. He has published his work in journals such as Total Quality Management, the International Journal of Technology Management, and the Service Management Journal among others.

But while his research is impressive in itself, it also informs his teaching. "I always use my research findings in my class," he says and explains that he uses selected cases, exercises, simulations, and videos to create an environment where students have to think about the implications of the concepts they are studying.

Prof Solis also invites industry executives as guest speakers to present real situations to which tools covered in the course can be applied. "So I'm helping students think holistically. And I always challenge their thinking to find new way to approach complex and difficult business issues."

# Dr. Yongjiang Shi (University of Cambridge)

**Dr Yongjiang Shi** is the University Lecture of Industrial Systems in Engineering Department, and research director of the Centre for International Manufacturing in the Institute for Manufacturing, Cambridge University. He has been studying management of international manufacturing network and supply chain for over fifteen years. His recent research interests have covered global manufacturing

strategy, network system design, technology transfer in the contexts of intra-company coordination and inter-company collaboration, and emerging Chinese manufacturing companies including the Shangzhai Phenomenon, indigenous innovation, industrial upgrading, and Chinese outward FDI. He is working on several research projects? Global manufacturing virtual network (GMVN) to develop new manufacturing architecture for collaborative manufacturing network between companies; and Post Mergers and Acquisitions (M&As) Integration to help company achieve synergy; emerging nations' multinational corporations development; and different countries' culture characteristics and their impacts on global supply network development.

India: Dr. Vivek Nagarajan (PSG College of Technology)

Designation : Asst. Professor (Selection Grade)

Qualification: BE, MBA, Ph.D

Research Interests: Supply Chain Management

Mr. N. Vivek, Associate Professor at PSG College of Technology. He has a teaching experience of 15 years and industry experience of 2 years. He has completed his Ph.D. in Supply Chain Management. He has specialized in Quantitative Methods, Research Methods, Business Statistics, Supply Chain Management and Operations Management.. His current research areas are supply chain maturity, simulation of supply chains and cost management in supply chains. His other interests include Stock Market Investment and Valuations, Online Education, Value Based Management, Quality Control, Indian Ethos Development, Sustainable Rural Development, Student Counseling and Permaculture. Blog: <a href="http://viswadatta.blogspot.com">http://viswadatta.blogspot.com</a>

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The following is the featured article in UT News as of March 23, 2012. (Used with Permission)

# <u>Professor chairs International Supply Chain Management Symposium in</u> Tokyo

By Feliza Casano: March 23rd, 2012

Dr. Paul Hong, UT professor of information operations and technology management, served as conference chair of the Fifth Annual International Supply Chain Management Symposium and Workshop, which took place Thursday through Saturday, March 8-10, at the University of Tokyo.



Posing for a photo at the Fifth Annual International Supply Chain Management Symposium and Workshop at the University of Tokyo were, front row, from left, panel members Xiaobo Wu of Zhejiang University, China; Yongjiang Shi of Cambridge University, United Kingdom; Paul Hong, conference chair, University of Toledo; Takahiro Fujimoto, conference chair, University of Tokyo; Mark Vonderembse of UT; Seungchul Kim of Hanyang University, Korea; and Hiroshi Katayama of Waseda University, Japan; and back row, from left, conference organizers GS Shin of Kyunghee University, Korea; Youngwon Park of the University of Tokyo; Junjiro Shintaku of the University of Tokyo; Takashi Shimizu of the University of Tokyo; David Dobrzykowki of UT; and Erika Marsillac of Old Dominion University.

The conference was founded and planned in part by UT faculty and brought together researchers from around the globe from more than 20 institutions, including MIT, the University of Cambridge in the United Kingdom, Seoul National University in Korea and Zhejiang University in China.

The symposium was organized by The University of Toledo, the University of Tokyo, Instituto de Empresa Business School in Spain, PSG Institute of Management in India and Kyungpook National University in South Korea.

"UT is the founding institution of this annual symposium," Hong said. "Our faculty have a long history of leadership in the field of supply chain management, and many have been participating in leadership roles in this symposium."

This year, six faculty members and two doctoral students from the UT College of Business and Innovation organized, attended and presented their research.

UT business faculty who participated in the conference were Dr. Mark Vonderembse, who was a special session panel member; Dr. Sachin Modi and Dr. Udayan Nandkeolyar, who served as session chairs; and Dr. Monideepa Tarafdar and Dr. David Dobrzykowski, who were special journal issue editors.

In addition to the faculty members, doctoral students Ryan Skiver and Vincent Whitelock presented research. This year's symposium focused on the complexity and risk in global supply chain management, with a particular emphasis on the 2011 earthquake and tsunami in Japan and the experiences of companies during and after the natural disasters. One speaker, a top executive at Toyota, talked about the way the automaker handled supply chain disasters in the wake of the tsunami.

The first International Supply Chain Management Symposium and Workshop took place at The University of Toledo in 2007 under the leadership of Dr. Subba Rao, UT professor emeritus of information operations technology management, and Vonderembse. Since that time, a consistent vision has persisted to develop an international research network of leading scholars in the supply chain management field.

Thanks to the support of the UT Transportation Center as well as Dr. William McMillen, UT provost and executive vice president for academic affairs, and Dr. Thomas Gutteridge, dean of the College of Business and Innovation, the symposium has since rotated through South Korea, India, Spain and Japan.

"The symposium will return to the United States in 2013 with a focus on cutting-edge issues in supply chain management in emerging contexts," Hong said. "Key topics that are being considered include global automotive supply chain management, financing global supply chains, green supply chain management, and health-care supply chain management. These are important issues facing topic researchers and executives alike."

Each annual conference is accompanied by special issues of high-quality scholarly journals. The 2012 symposium includes special issues of several journals, including International Journal of Production Economics, International Journal of Productivity and Quality Management, International Journal of Business Innovation and Research, and International Journal of Business Information Systems, for which Hong, Tarafdar and Dobrzykowski worked as guest editors with teams of scholars from America, Japan, Korea and Spain.

"The goal of the symposium is to bring together researchers and leading institutions," Hong said. "Each year, the participating researchers have used the symposium to make significant strides in research productivity, so it provides value in terms of networking and positively impacting supply chain management theory and practices."