

Hosted by | KSCM The Korean Society of Supply Chain Management (KSCM)

Korea Sanhak Foundation, International Federation of Logistics and SCM Systems (IFLS),

The Asia Pacific Federation of Logistics and SCM Systems (APFLS), SAP Korea, SFR, MATWORTH, GO HANJIN,

International Journal of Logistics and SCM Systems, International Journal of Industrial Engineering: Theory, Applications and Practice,

International Journal of Maritime Economics & Logistics, Emerald



# Welcome Address

We would like to offer a very warm welcome to all participants at the 7th International Congress on Logistics and Supply Chain Management Systems (ICLS 2012).

As all of you are aware, the entire world is experiencing an unprecedented and very complex and chaotic economic situation. To cope with this economic situation country and industry is introducing various remedies. Therefore, we organized this conference ICLS 2012 with theme as Unfolding the New Era of Business Collaboration°± to discuss and exchange ideas for find out what is the best strategy to overcome this unprecedented economic situation.

We wish that all participating scholars, business people, government personnel and students can reach broad consensus on what are the changes in the global economic and management environment, and actively engage in exchanging ideas so that you can leverage the information that you obtain in this conference to formulate your SCM strategies. Finally, we would like to thanks for your contribution to this conference and wish that you could enjoy this conference and the beautiful and dynamic city of Seoul.



Lee, Young Hae
Conference Chair
Chairman of the Korean Society of SCM
Hanyang Univ., Korea



**Katayama, Hiroshi** Conference Co-Chair Waseda Univ., Japan



**Kwon, Ik-Whan G.**Conference Co-Chair
Saint Louis Univ., USA



**Gen, Mitsuo**Conference Co-Chair
Fuzzy Logic Systems
Institute, Japan



**Rim, Suk-Chul** General Chair Ajou Univ., Korea

Organizing Committee Chair: Kim, Seung-Chul, Hanyang Univ., Korea Program Committee Chair: Ko, Chang-Seong, Kyungsung Univ., Korea Technical Committee Chair: Han, Hyun-Soo, Hanyang Univ., Korea

## Registration Fee

Attendance	Pre-Registration	Normal Registration
Regular(including presenting author, co-author)	US\$350	US\$390
Full time student	US\$150	US\$175
Guest/ Spouse US\$100		5100

- Regular or Full time student registration fee covers attendance of all conference sessions, a CD of the proceedings, souvenir, refreshments, welcome dinner, lunches and banquet.
- Guest or Spouse registration fee covers souvenir, refreshments, welcome dinner, lunches and banquet.

#### **♦** Contact Information

ICLS 2012 Office / The Korean Society of Supply Chain Management (KSCM)

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+82-11-246-3138(Conference General Chair, Prof. Suk Chul Rim)

## **♦ KOFST International Convention Center (Gangnam Station of subway line 2, exit 12)**



### Room



	June 6(Wed.), 2012							
15:00-18:00	F	Registration Desk Open (coffee shop at the entrance of KOFST, 1st floor)						
			June 7 <i>(</i> 1	Гhu.), 2012				
08:00-09:00				egistration (Lob	bv)			
				Session A	-			
	Room 1	Room 2	Room 3	Room 4	Room 5	Room	6	Room 7
09:00-10:30	[IT and SCM] A1-1: #236 A1-2: #298 A1-3: #155	[Performance Evaluation] A2-1: #108 A2-2: #209 A2-3: #227	[Global SCM] A3-1: #176 A3-2: #199 A3-3: #259	[Modeling and Optimization] A4-1: #142 A4-2: #153 A4-3: #156	[Production and Inventory] A5-1: #102 A5-2: #244 A5-3: #114	[SC Plan and Schedul A6-1: #2 A6-2: #2 A6-3: #1	ing] 230 217	[SCM Performance] A7-1: #103 A7-2: #104 A7-3: #289
				Room 1				
10:30-11:00	[Opening Ceremony] Opening Address  Prof. Young Hae Lee(Chair of ICLS 2012, Hanyang University, Korea) Welcome Address  Prof. Suk Chul Rim(General Chair of ICLS 2012, Ajou University, Korea) Congratulatory Address  Dr. Jae Gyun Lee(Member of the Korean National Assembly, Former Vice Minister of Ministry of Land, Transport and Maritime Affairs), Prof. Hiroshi Katayama(Chairman of IFLS, Waseda University, Japan)							
11:00-11:30	[Invited Speech 1] SCM trends and activities in Korea President. Won Joon Hyoung(SAP Korea)							
11:30-13:00				Lunch (Room 1	)			
				Session B				
	Room 1	Ro	oom 2	Room 3	Roor	n 4		Room 5
13:00-15:00	B1-1: #106 B2-1: #124 <b>Techn</b> B1-2: #126 B2-2: #130 <b>S</b> B1-3: #223 B2-3: #135 B3-3 B1-4: #141 B2-4: #245 B3-3 B1-5: #165 B3-3		[Computer Technology for SCM] B3-1: #235 B3-2: #254 B3-3: #256 B3-4: #240	[Invento Logistics F B4-1: ; B4-2: ; B4-3: ; B4-5: ;	Planning] #116 #133 #127 #282	- E E	Performance] 35-1: #111 35-2: #112 35-3: #140 35-4: #147	
15:00-15:30	Coffee Break							
	Session C							
	Room 1	Ro	oom 2	Room 3	Roor	n 4		Room 5
15:30-18:00	[Reverse Logi C1-1: #17- C1-2: #11: C1-3: #18 C1-4: #19 C1-5: #21 C1-6: #24	4 C2- 9 C2- 2 C2- 8 C2- 6 C2-	Strategy] 1: #180 2: #190 3: #267 4: #280 5: #296 6: #166	[Transportation Planning] C3-1: #287 C3-2: #152 C3-3: #170 C3-4: #194 C3-5: #211	[Logistics   C4-1:   C4-2:   C4-3:   C4-4:   C4-5:	#128 #122 #173 #175	Ma C C C	Varehouse Inagement] 15-1: #144 15-2: #145 15-3: #273 15-4: #274 15-5: #105
18:30-21:00	Welcome Dinner(Anais Hall, KOFST, 12th floor)							

June 8(Fri.), 2012									
08:00-09:00	Registration (Lobby)								
	Session D								
	Room 1	Room 2	Room 3	Room 4	Room 5	Room	n 6	Room 7	
09:00-10:20	[Logistics Planning]] D1-1: #139 D1-2: #232 D1-3: #231	[Performance Evaluation] D2-1: #272 D2-2: #291 D2-3: #243	[Business Process for Logistics] D3-1: #101 D3-2: #234 D3-3: #295	[Modeling and Optimization] D4-1: #158 D4-2: #228 D4-3: #249	[SC Planning and Scheduling] D5-1: #189 D5-2: #169 D5-3: #205	[SCI Strate D6-1: # D6-2: # D6-3: #	<b>gy]</b> 117 154	[Production and Inventory] D7-1: #179 D7-2: #281 D7-3: #299	
				Room 1					
10:20-10:50	[Invited			ces and activiti				Japan	
10:50-11:20				roblems in Log nairman of APIEM					
11:30-13:00		Lur	ch (Room 1)	/ I.F.L.S Board	Meeting (Roor	n 4)			
	Session E								
	Room 1		oom 2	Room 3		Room 4		Room 5	
13:00-15:00	E1-1: #163 E2 E1-2: #247 E2 E1-3: #263 E2		ritime] 1: #149 2: #213 3: #129 4: #183	[Modeling and Optimization] E3-1: #279 E3-2: #157 E3-3: #218 E3-4: #300 E3-5: #278	Schedu E4-1: # E4-2: # E4-3: # E4-4: #	Scheduling]       E5         E4-1: #264       E5         E4-2: #277       E5         E4-3: #188       E5		[SCM Performance] E5-1: #283 E5-2: #203 E5-3: #204 E5-4: #193 E5-5: #290	
15:00-15:30				Coffee Break					
				Session F					
	Room 1 Ro		Room 2 Roo		Room	Room 4		Room 5	
15:30-18:00	[Productio Inventory a Warehous Managemen F1-1: #13 F1-2: #12 F1-3: #140 F1-4: #109 F1-5: #246 F1-6: #164	nd School F2- nt] F2- 1 F2- 3 F2- 9 F2- 6	anning and eduling] 1: #181 2: #210 3: #226 4: #242 5: #253 6: #146	[Vehicle Routing and Scheduling F3-1: #115 F3-2: #171 F3-3: #206 F3-4: #237 F3-5: #284 F3-6: #184		107 123 192 248 275	F F F F	and Green ogistics] 5-1: #178 5-2: #167 5-3: #186 5-4: #187 5-5: #221 5-6: #297	
18:15		'	Mee	ting in front of K	OFST				
	KOFST, Gangnam→Han River, Yeouido								
18:15-19:15			itor or, da		,				
18:15-19:15 19:30-21:00	В	anquet (Cruise		lan River), Awar		for Best	Paper	S	

	June 9(Sat.), 2012
	[Industry Tour]
09:00-12:00	HANJIN Logistics Center, Guro, Seoul
12:00-13:00	Lunch
	[Seoul City Tour]
13:00-18:00	Gyeongbok-gung, Insa-dong Street, Namsangol Hanok Village, Namdaemun Market
18:00-19:00	Dinner

June 6(Wed.), 2012		
15:00-18:00	Registration Desk Open (coffee shop at the entrance of KOFST, 1st floor)	
	June 7(Thu.), 2012	
08:00-09:00	Registration (Lobby)	
	Consider A	

09:00-10:30

**Session A** 

#### Room 1 [IT and SCM]

A1-1: #236

Session Chair: Seung Chul Kim (Hanyang Univ., Korea)

#### A Cost Effective Virtual Reality System for Simulating Logistics Operations

Leith K. Y. Chan, Henry Y. K. Lau(University of Hong Kong, Hong Kong)

A1-2: #298

# A Study on the Effect of the Characteristics of Cloud Computing Services on Perceived Expectancy Performance: Focusing on the Innovation Diffusion Theory

Jaesu Lim, Byungsup Cho, Sooyoung Yoon, Jay In OH(Dankook University, Korea)

A1-3: #155

#### E-COMMERCE IN DEVELOPING COUNTRIES READINESS FOR SMEs (CASE STUDY OF TABRIZ)

Kamaleddin Rahamni, Samira Rahmani(Islamic Azad University, Iran)

## **Room 2 [Performance Evaluation]**

Session Chair: Koichi Murata (Waseda Univ., Japan)

A2-1: #108

#### Assessment of technical necessities in rail services part of Iran

Hamid Gharzi, Younos Vakil Alroaia, Mohammad Khajeh(Islamic Azad University, Iran)

A2-2: #209

#### The Estimation of Hotel Management Efficiency in Thailand by using DEA

Yosapol Singhavollakul, Chien-Ta Bruce Ho(National Chung Hsing University, Taiwan)

A2-3: #227

## DEA-based stepwise benchmarking for efficiency improvement of container terminals

Jaehun Park, Hyerim Bae(Pusan National University, Korea), Sungmook Lim(Korea University, Korea)

#### Room 3 [Global SCM]

Session Chair: Islam El-Nakib(College of International Transport and Logistics, Egypt)

A3-1: #176

#### Free Trade and Global Supply Chain Management: From Information Flow Perspective of Korean Firms

Young Won Park (Waseda University, Japan), Paul Hong, Shuting Li (University of Toledo, USA)

A3-2: #199

#### Integrating Global Supply Chain Infrastructure for Emerging Markets: Theoretical and Managerial Issues

Paul Hong(The University of Toledo, USA), YoungWon Park(Waseda University, Japan)

A3-3: #259

# The Impact of RFID Utilization and Supply Chain Information Sharing on Supply Chain Performance: Focused on the Moderating Role of Supply Chain Structure and Culture

Moon Gyu Kim, Yoon Min Hwang, Jae Jeung Rho(Korea Advanced Institute of Science and Technology, Korea)

## **Room 4 [Modeling and Optimization]**

Session Chair: Muhammad Abbas Choudhary (Univ. of Engineering and Technology, Pakistan)

A4-1: #142

#### Control of lead time for retailer-supplier contract with stochastic demand and order cancellation

 $Si\ Young\ Lim, Sun\ Hur(Hanyang\ University, Korea),\ You\ Jin\ Park(Chung-Ang\ University,\ Korea)$ 

A4-2: #153

#### Cross-channel coalition in dual-channel supply-chain

Erwin Widodo, Katsuhiko Takahashi, Katsumi Morikawa(Hiroshima University, Japan), I Nyoman Pujawan, Budi Santosa(Institut Teknologi Sepuluh Nopember, Indonesia)

A4-3: #156

#### Pricing strategies for managing new and remanufactured products in a closed-loop supply chain

Jen Ming Chen, Chia I Chang(Institute of Industrial Management National Central University, Taiwan)

#### Room 5 [Production and Inventory]

Session Chair: Jae Dong Hong (South Carolina State Univ., USA)

A5-1: #102

## An optimization model for a two-stage perishable inventory problem

Kin Keung Lai, Ming Wang(City University of Hong Kong, Hong Kong)

A5-2: #244

#### Optimal multi-period planning for purchase and storage of rubber latex with perishability constraints

Sutthinee Klomsae(Uttaradit Rajabhat University, Thailand), Tuanjai Somboonwiwat(King Mongkut's University of

Technology Thonburi, Thailand), Walailak Atthirawong(King Mongkut's Institute of Technology Ladkrabang, Thailand)
A5-3: #114

A Classification of (s, S) Inventory Policy for Seasonal Demand: a Case Study of a Thai Restaurant

Pornthipa Ongkunaruk, Worakarn Sribuathong(Kasetsart University, Thailand)

## Room 6 [SC Planning and Scheduling]

Session Chair: Jose Tongzon (Inha Univ., Korea)

A6-1: #230

A Novel Model to Measure Supplier Performance in the Supplier Selection Process

Alptekin Ulutas, Senevi Kiridena, Peter Gibson(University of Wollongong, Australia) A6-2: #217

Enhancing supply chain operations through effective classification of supplier management

Yee Ming Chen(Yuan Ze University, Taiwan), Meng Jong Goan, Chang Hung Chen(Kainan University, Taiwan) A6-3: #172

Supply Chain Contract Based on Revenue Sharing and Quantity Discount Considering Price and Service Level Dong Won Cho, Young Hae Lee, Se Ho Park(Hanyang University, Korea)

## **Room 7 [SCM Performance]**

Session Chair: Hyun Soo Han (Hanyang Univ., Korea)

A7-1: #103

Considering the Influence of Mass Media and Safety Peformance in Logistics Sustainability: A Pilot Study Huinee AuYong, Suhaiza Zailani, Lilis Surienty(University Sains Malaysia, Malaysia)

A comparative investigation of entrepreneurship in Iran and countries of Global Entrepreneurship Monitor Younos Vakil Alroaia, Sareh Hematian, Zahra Arab(Islamic Azad University, Iran)
A7-3: #289

Effects of supplier-buyer relationship on performance using structural equation modeling: Evidence from Jordan Abbas Al-Refaie, Belal Gharaibeh, Mohammed Shurrab(University of Jordan, Jordan)

Room 1			
	[Opening Ceremony] Session Chair: Hyun Soo Kim (Kyonggi Univ., Korea)		
	Opening Address Prof. Young Hae Lee(Chair of ICLS 2012, Hanyang University, Korea)		
10:30-11:00	Welcome Address Prof. Suk Chul Rim(General Chair of ICLS 2012, Ajou University, Korea)		
	Congratulatory Address Dr. Jae Gyun Lee(Member of the Korean National Assembly,		
	Former Vice Minister of Ministry of Land, Transport and Maritime Affairs),		
•	Prof. Hiroshi Katayama(Chairman of IFLS, Waseda University, Japan)		
11:00-11:30	[Invited Speech 1] SCM trends and activities in Korea President. Won Joon Hyoung(SAP Korea)		

13:00-15:00

**Session B** 

**Room 1 [Green Logistics]** 

Session Chair: Sharon M. Ordoobadi (Univ. of Massachusetts-Dartmouth, USA)

B1-1: #106

Optimization of Logistics and Energy for Collection and Transportation Waste using Integrated Statistical Analysis Behzad Nadi, Ibrahim Komoo, Elmira Shamshiry, Reza Naghizadeh Majid(University Kebangsaan Malaysia, Malaysia) B1-2: #126

**Green Effects in International Supply Chains** 

Joachim Kuhn(Daimler AG & Anglia Ruskin University, Germany)

Innovative green transportation system-The On-Line Electirc Vehicle system

Young Dae Ko, Young Jae Jang, Hark Hwang(Korea Advanced Institute of Science and Technology, Korea) B1-4: #141

A study of implementing green logistics performance for logistics industry in Taiwan

Bai Sheng Chen, Yu Ying Wu(Takming University of Science and Technology, Taiwan)

**Green Logistics in Homeplus** 

HK Yoon(Homeplus Co. LTD, Korea)

#### Room 2 [Maritime]

Session Chair: Farhad Azadivar (Univ. of Massachusetts Dartmouth, USA)

B2-1: #124

#### The rise of Chinese ports and its impact on major ports in East Asia

Jose TONGZON(Inha University, Korea), Dong Yang(National University of Singapore, Singapore)

#### The integrated berth allocation and quay crane scheduling

Meilong Le, Fei Liu, Congcong Wu(Shanghai Maritime University, China)

B2-3: #135

# Building A Sustainable Development Management System for Seaport-A Case of Taiwan International Ports Corporation

Shiou-Yu Chen(National Taiwan Ocean University, Taiwan)

B2-4: #245

#### Modeling Inter-Port Competition Based on Network Flow Optimization: The East African Perspective

Jovin J. Mwemezi, Youfang Huang(Shanghai Maritime University, China)

## Room 3 [Computer Technology for SCM]

Session Chair: Suk Chul Rim (Ajou Univ., Korea)

B3-1: #235

#### The impact of RFID implementation on Pharmaceutical supply chain management

Yong ho Lee(Gachon University of Medicine and Science, Korea), Hun wu Choi, Youn jung Kim, Kang dae Lee(Yonsei University, Korea)

B3-2: #254

#### To RFID or not To RIFD: Are the Egyptian FMCGs ready for it?

Islam El-Nakib(College of International Transport and Logistics, Egypt), Ahmed Sobhi(FMCG Kabaa, Egypt)

#### Strategic Use of RFID in Apparel Retailing through Estimating Sales Possiblity Indicator of Each Product

Jihye Kim, Yoon Min Hwang, Min Jae Park, Jae Jeung Rho(Korea Advanced Institute of Science and Technology, Korea) B3-4: #240

#### ASEAN+6: AN OVERVIEW OF THE LOGISTICS COMPONENTS

Wapee Manopiniwes, Sakgasem Ramingwong, Vimolboon Cherapanukorn, Preda Pitchayapan(Chiang Mai University, Thailand)

#### Room 4 [Inventory and Logistics Planning]

Session Chair: Jei Zheng Wu (Soochow Univ., Taiwan)

B4-1: #116

#### A Model For Minimizing Production Costs In A Sustainable Manufacturing Environment

Farhad Azadivar(University of Massachusetts Dartmouth, USA), Neda Masoud(University of California Irvine, USA) B4-2: #133

#### The Development of a Counting System for Buddha Amulet Lockets

Nitipan Chuenchob, Nutpol Sirisawang(Silpakorn University, Thailand)

B4-3: #127

#### An EOQ models for deteriorating items with a two-level market and stock dependent selling rate

S. Paul, Mohamed Wahab Mohamed Ismail(Ryerson University, Canada), Pornthipa Ongkunaruk(Kasetsart University, Thailand)

B4-4: #282

#### Local infrastructure as a component of CSR policies of logistic service providers

Danuta Kisperska-Moron(University of Economics in Katowice, Poland)

B4-5: #257

#### The Integration of Social Media into Supply-Chain Management

Corinthias Pamatang Morgana Sianipar(Institute of Technology Bandung (ITB), Indonesia)

## Room 5 [SCM Performance]

B5-1: #111

Session Chair: YoungSu Yun (Chosun Univ., Korea)

A Survey of the Effective Factors on the Entrepreneurial Success and Its Impact on the Development of Industrial Section by use of Fuzzy Dematel

Seyed Razi Nabavi, Younos Vakil Alroaia, S. Kazem.Shahmirzadi, Mojtaba Javidnia(Islamic Azad University, Iran) B5-2: #112

#### Extended logistical factors for setting up the optimal international distribution strategy

Michael Dircksen, Mario Winkelhaus(University of Applied Science Muenster, Germany)

B5-3: #140

# Information Technology Capability and Corporate Performance: The moderating effect of Buyer-Supplier Relationship on the IT Capability in relation to Firm Performance

Soo Jung Oh, Ji Young Park, Soo Wook Kim(Seoul National University, Korea) B5-4: #147

#### Effect of Customer Demand and Information Quality Level on Performance Measures in a Supply Chain

Kyoung Jong Park(Gwangju University, Korea)

15:30-18:00

## **Session C**

#### Room 1 [Reverse Logistics]

Session Chair: Behzad Nadi (Univ. Kebangsaan Malaysia, Malaysia)

C1-1: #174

# An Examination on the Transfer Center and the Transportation Mode for the Reverse Logistics System: As for Recycled Goods Supply

Nobunori Aiura(Hokkai School of Commerce, Japan), Kuninori Suzuki(Bunka Fashion Graduate University, Japan), Yutaka Karasawa(Kanagawa University, Japan), Keizou Wakabayashi(Nihon University, Japan), Atsushi Inoie(Kanagawa Institute of Technology, Japan)

C1-2: #119

#### Application of ANP Methodology in Reverse Supply Chain

Sharon M. Ordoobadi(University of Massachusetts-Dartmouth, USA)

C1-3: #182

#### Recycling and Disposal Policies of Industrial Waste with Nonlinear Recycling Rate

Chi Yang Tsai, Hui Min Tang(Yuan Ze University, Taiwan)

C1-4. #198

#### A Multi-objective Reverse Logistics Network Design to Optimize the Total Costs and Delivery Tardiness

Jeong Eun Lee, Kang Dae Lee(Yonsei University, Korea), Mitsuo Gen(Fuzzy Logic Systems Institute, Japan)

C1-5. #216

#### Enhanced Genetic Algorithm to Multi-stage Reverse Logistics Network Design for Product Reuse

YoungSu Yun(Chosun University, Korea), Mitsuo Gen(Fuzzy Logic Systems Institute, Japan), ReaKook Hwang(Samsung Economic Research Institute, Korea), Jungbok Jo(Dongseo University, Korea)

#### Integrated Evaluation of Product Design and Forward Supply Chain and Reverse Supply Chain Using FANP

Yuan Jye Tseng, Yen Jung Wang, Pei Ju Lee, Feng Yi Huang(Yuan Ze University, Taiwan)

#### Room 2 [SCM Strategy]

Session Chair: Sun Hur (Hanyang Univ., Korea)

C2-1: #180

#### Critical Success Factors for Successful SCM adoption in China Business Environment

Myung Moo Lee(Hanyang Cyber University, Korea), Yun Ho Kim(Woosong University, Korea)

# Strategic Policy for Logistics Human Resources Development: A Case Study of Truck Drivers' Skill Standardization in Thailand

Taweesak Kritjaroen(King Mongkut's University of Technology Thonburi, Thailand)

# Improving Supply Chain Performance of Fast Moving Consumer Goods (FMCG) A Case Study of Nestle (Pakistan) Limited

Muhammad Abbas Choudhary(University of Engineering and Technology, Pakistan), Amjad Saleem(Nestle (Pakistan) Limited, Pakistan)

C2-4: #280

# On Integrals of Module Lean Technologies and Their Synergistic Impacts on Management Performance -The Cases of Visual Management, POKA-YOKE and KARAKURI Technologies-

Koichi Murata, Hiroshi Katayama(Waseda University, Japan)

C2-5: #296

#### The Exit Management Model for Manpower of Thai Government

Tanad Kaewjaroenpisan(Srinakharinwirote University, Thailand)

C2-6: #166

#### Effective Innovation Strategy of Korean SMEs for Emerging Markets: A Supply Chain Management Perspective

Paul Hong(University of Toledo, USA), Youngwon Park(Waseda University, Japan), Sukbong Choi(University of Ulsan, Korea), Seung Chul Kim(Hanyang University, Korea)

#### **Room 3** [Transportation Planning]

Session Chair: Mitsuyoshi Horikawa (Iwate Prefectural Univ., Japan)

C3-1: #287

#### **Designing of Chiang Mai Tourist Hop-On Hop-Off Bus**

Vimolboon Cherapanukorn, Sakgasem Ramingwong, Jutamat Jintana(Chiang Mai University, Thailand) C3-2: #152

#### Dynamic two-route transportation problem for a target service level

Suk Chul Rim, Ik Ju Jang, Jin Young Choi(Ajou University, Korea)

C3-3: #170

#### An Inventory routing problem considering patient safety in healthcare supply chain

Sang Won Lee, Young Hae Lee, Dong Won Cho(Hanyang University, Korea)

C3-4: #194

#### Design of Hybrid Genetic Algorithm and AHP for PT XYZ Distribution Route Planning

Tanika D Sofianti, Aditya T Pratama, Indra C Tanjaya (Swiss German University, Indonesia)

# Schedule of ICLS 2012

C3-5: #211

#### Transportation models for industrial logistics complex

Jae Young Shin(National Korea Maritime University, Korea), Woong Seop Kim, Jongwon Park(Graduation School of Korea Maritime University, Korea)

#### Room 4 [Logistics Planning]

Session Chair: Seock Jin Hong (Bordeaux Management School, France)

C4-1: #128

A Robust Facility Location and Transportation Model for the Integrated Biomass and Bio-Energy Logistics Network Jae Dong Hong(South Carolina State University, USA), Yuanchang Xie(University of Massachusetts Lowell, USA)

#### Restructuring the Global Supply Chain Logistics Network-The Case of a Wood Board Trader

Shong Iee Ivan Su, Jei Zheng Wu(Soochow University, Taiwan)

C4-3· #173

#### Logistics Network Optimization Considering Balanced Allocation and Vehicle Routing

Su Yeon Cho, Young Hae Lee, Dong Won Cho(Hanyang University, Korea), Mitsuo Gen(Fuzzy Logic Systems Institute, Japan) C4-4: #175

#### Logistics Infrastructure Development Review: Chiang Rai as Thailand's Gateway to Greater Mekong Sub-region

Pree Thiengburanathum, Preda Pitchayapan, Poon Thiengburanathum, Apichat Sopadang, Sakgasem Ramingwong(Chiang Mai University, Thailand), Katayut Kamano(Rajamangala University of Technology Lanna Chiang Mai, Thailand)
C4-5: #222

#### Airlines' strategies at competitive air transport market

Young Dae Ko, Hark Hwang(Korea Advanced Institute of Science and Technology, Korea)

# Room 5 [Warehouse Management] Session Chair: Danuta Kisperska-Moron (Univ. of Economics in Katowice, Poland)

C5-1: #144

#### Design and Management of Finished goods Warehouse in an Automobile Spring Manufacturing Plant

Pongsawat Aiemsam-aung, Natcha Thawesaengskulthai(Chulalongkorn University, Thailand)

#### The Proper Key Performance Indicators for Warehouse Operator

Punnarat Chanasit, Taweesak Kritjaroen(Graduate School of Management and Innovation King Mongkut's University of Technology Thonburi, Thailand)

C5-3: #273

# Performance Improvement of Distribution Centre based on the TCM-driven Bottleneck Management -An Attempt of Leanization by Heijunka Method-

Shota Ishikawa, Koichi Murata, Hiroshi Katayama(Waseda University, Japan), Nobuyuki Hayashi, Tomo Sera, Norio Ishiwatari, Mitsunobu Yoshino(Sankyu Inc., Japan)

C5-4: #274

## A Study on The Efficiency of Sorting Operation by Multi-functional Automatic Warehouse System

Tatsuya Kato, Koichi Murata, Hiroshi Katayama(Waseda University, Japan), Nobuyuki Hayashi, Tomo Sera, Norio Ishiwatari, Mitsunobu Yoshino(Sankyu Inc., Japan)

C5-5: #105

#### Design of Intermodal Freight Flows to the Hinterland in Bundling Networks

Arnost Bartosek, Ondrej Marek (Czech Technical University, Czech)

18:30-21:00	Welcome Dinner(Anais Hall, KOFST, 12th floor)	
	June 8(Fri.), 2012	
08:00-09:00	Registration (Lobby)	
09:00-10:30	Session D	

## Room 1 [Logistics Planning]

Session Chair: Michael Dircksen (Univ. of Applied Science Muenster, Germany)

D1-1: #139

#### The Establishment of an Improvement Model for Pharmaceutical Logistics Services using Kano-IPA

Bai-Sheng Chen, Po-Han Chen(Takming University of Science and Technology, Taiwan)

# Simultaneous Decision on Berth Planning and Quay Crane Assignments in Port Container Terminals

Pyung Hoi Koo(Pukyong National University, Korea) D1-3: #231

#### A Compromised Decision Making Model for Implementing Strategic Alliances in Express Courier Services

Friska Natalia Ferdinand(Pusan National University, Korea), Ki Ho Chung(Kyungsung University, Korea), Hyun Jeung Ko, Chang Seong Ko(Kunsan National University, Korea)

Room 2 [Performance Evaluation] Session Chair: Joachim Kuhn (Daimler AG & Anglia Ruskin Univ., Germany)

D2-1: #272

# A Study on Capability Evaluation of Business Units based on KAI and KPI -Focusing on the Automotive Parts Suppliers-

Takeshi Sato, Hiroshi Katayama(Waseda University, Japan)

D2-2: #291

Simulation and ABC technique to improve the performance of emergency department with cellular assignments

Abbas Al-Refaie, Mohammed Shurrab (University of Jordan, Jordan)

D2-3: #243

#### An Approach for Availability Assessment of Reconfigurable Manufacturing System

Ashutosh Gupta, Pramod Kumar Jain, Dinesh Kumar (Department of Mechanical & Industrial Engineering Indian Institute of Technology Roorkee, India)

#### Room 3 [Business Process for Logistics]

Session Chair: Henry Y. K. Lau (Univ. of Hong Kong, Hong Kong)

D3-1: #101

#### PROCESS IMPROVEMENT: A CASE STUDY OF LEAN HEALTHCARE

Mohammad Asif Salam(Ryerson University, Canada)

D3-2: #234

#### Control-flow detection in creating Process Reference Model

Bernardo N. Yahya, Hyerim Bae(Pusan National University, Korea), Jei Zheng Wu(Soochow University, Taiwan) D3-3: #295

Tourist Satisfaction Towards the Public Transport Service System at Suwannabhumi International Airport

Suwicha Komaladat(Srinakharinwirot University, Thailand)

## **Room 4 [Modeling and Optimization]**

Session Chair: Young Dae Ko (KAIST, Korea)

D4-1: #158

#### A Study of Improvement and Analysis Points for HRP using Bayesian Networks

Takayuki Kataoka, Masakazu Kanezashi(Faculty of Engineering, Kinki University, Japan), Katsumi Morikawa, Katsuhiko Takahashi(Graduate School of Engineering, Hiroshima University, Japan)
D4-2: #228

#### **Nesting Problem Using an Immune-inspired Optimization Algorithm**

Rocky H.K. Wong, Nicole M. Y. Lee, Leith K.Y. Chan, Henry Y. K. Lau(The University of Hong Kong, Hong Kong) D4-3: #249

#### The Beginning: Approach to Design a Flexible Material Flow System in Intralogistics

Lydia Margareta(TU Dortmund University, Germany), Guido Follert, Michael ten Hompel(Fraunhofer Institute for Material Flow and Logistics, Germany)

#### Room 5 [SC Planning and Scheduling]

Session Chair: Madhavendra Saxena (Singhaniya Univ., India)

D5-1: #189

# A multi-criteria decision making approach for the comparison of hybrid production planning and control strategies for supply chain management

Naoufel Cheikhrouhou(Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland)

D5-2: #169

#### **Analysis of Supply Chain Dynamics Using Seasonal ARIMA Process**

Dong Won Cho, Young Hae Lee(Hanyang University, Korea)

D5-3: #205

#### **Supply Chain Management Model for Fish Products Distribution**

Kentarou ASHINO, Mitsuyoshi HORIKAWA, Mitsumasa SUGAWARA(Iwate Prefectural University, Japan)

#### Room 6 [SCM Strategy]

Session Chair: Artur Swierczek (Univ. of Economics, Poland)

D6-1: #117

# Purchasing Practices of Small and Medium Sized Enterprises (SMEs)

Seung Kuk Paik(California State University, USA)

D6-2: #154

# Towards the firm value maximization considering the long-term sustainability of enterprise-wise supply chain management

Suk jae Jeong, Jae hyun Han(Kwangwoon Unversity, Korea)

D6-3: #161

#### The Readiness of Thai State Enterprises to Utilize Supply Chain Management Concepts

Thananya Wasusri, Nivapat Uthaisangpaisan(King Mongkut's University of Technology Thonburi, Thailand)

## Room 7 [Production and Inventory]

Session Chair: Hyun Soo Han (Hanyang Univ., Korea)

D7-1: #179

# A Methodology for Determining Batch Sizes for Quality Assurance Products with Material- and Process-Induced Variability under An Open Supply Chain Environment

Namhun Kim(Ulsan National Institute of Science and Technology, Korea), Dongmin Shin, Sun Hur(Hanyang University, Korea)

D7-2: #281

# On Derivation of Optimal Order Quantity in Periodic Reordering System -Exploiting the Similarity to Newsboy Problem-

Keisuke Noda, Hiroshi Katayama(Waseda University, Japan), Shiro Masuda(Tokyo Metropolitan University, Japan) D7-3: #299

#### ECRS's principles for a Drinking Water Production Plant

Klorklear Wajanawichakon, Chet Srimitee(Ubon Ratchathani Rajabhat University, Thailand)

# 10:20-10:50 [Invited Speech 2] Recent advances and activities in Logistics and SCM in Japan Prof. Hiroshi Katayama(Chairman of IFLS, Waseda University, Japan) [Invited Speech 3] Solving Problems in Logistics and SCM in Hong Kong Prof. Kin Keung Lai(Former Chairman of APIEMS, City University of Hong Kong)

13:00-15:00

#### **Session E**

#### **Room 1 [Green Logistics]**

E1-1: #163

Session Chair: Snehamay Banerjee (State Univ. of New Jersey, USA)

Yenming J. Chen, Tienhua Wu(National Kaohsiung First University of Science & Technology, Taiwan), Yen Chun Jim Wu(National Sun Yat-Sen University, Taiwan)

E1-2: #247

# A Study on Expansion of Green Logistics in the Supply Chain of Manufacturing Companies through Integration of Supply-chain Areas

Jang hyuk Lim(Myongji University, Korea)

E1-3: #263

# A Study on Performance Evaluation of Carbon Dioxide Emission in Logistics Operations -An attempt for Green Lean Supply Chain System-

Tatsuki Nakayama, Hiroshi Katayama(Waseda University, Japan), Nobuyuki Hayashi, Tomo Sera, Norio Ishiwatari, Mitsunobu Yoshino(Sankyu Inc., Japan), Reakook Hwang(Samsung Economic Research Institute, Korea) E1-4: #292

## A Study of Corporate Carbon Strategy of a Leading Express Parcel Delivery Company

The Effects of EcoDesign Strategies on Financial Performance: An Empirical Investigation

Danny Chi Kuen Ho(Hang Seng Management College, Hong Kong), Eddie W. L. Cheng(Hong Kong Institute of Education, Hong Kong)

E1-5: #168

#### Effects of supply chain position on the motivation and practices of firms going green

Sonia Ming-Shiow Lo(National Chengchi University, Taiwan)

## Room 2 [Maritime]

Session Chair: Farhad Azadivar (Univ. of Massachusetts Dartmouth, USA)

E2-1: #149

## Repositioning Empty Containers using both Standacrd and Foldable Containers

Il kyeong Moon, Hwa jin Hong(Pusan National University, Korea)

E2-2: #213

#### Immune-inspired Framework for Dynamic Vehicle Dispatching Problems in Port Container Terminal

Nicole M. Y. Lee, Henry Y. K. Lau(The University of Hong Kong, Hong Kong)

E2-3: #129

# A computer program for identifying the maximum number of containers travelled between Thailand's deep-sea port and industrial estate

Kittipong Mungsraklang, Sorawit Yaoyuenyong(King Mongkut's University of Technology Thonburi, Thailand) E2-4: #183

#### **Estimating the Cycle Time of Container Handling in Terminals**

Mai Ha Phan, Kap Hwan Kim(Pusan National University, Korea)

#### **Room 3** [Modeling and Optimization]

Session Chair: Suk jae Jeong (Kwangwoon Unv., Korea)

E3-1: #279

#### Winnowing Variables in Data Envelopment Analysis

Mithun J. Sharma(Dibrugarh University, India), Song Jin Yu(Korea Maritime University, Korea) E3-2: #157

#### Two Stage Approach to a Production and Transportation Problem of Automobile Manufactures

Shusaku HIRAKI(Hiroshima Shudo University, Japan)

E3-3: #218

#### Imperfect Predictive Maintenance with Virtual Age Model

Alfonsus Julanto Endharta, Won Young Yun(Pusan National University, Korea)

E3-4: #300

#### Modeling and Optimization of Cost-effective Charging Scheduling for the Battery Switch Stations of Electric Vehicles

Donghyun Kim, Joon Yung Moon, Chiho Moon, Young-woo Kim, Jinwoo Park(Seoul National University, Korea)

E3-5: #278

#### **Identifying Priority Attributes for Supply Chain Coordination**

Mithun J. Sharma(Dibrugarh University, India), Song Jin Yu(Korea Maritime University, Korea)

## Room 4 [SC Planning and Scheduling]

Session Chair: Byung In Kim (Pohang Univ. of Science and Technology, Korea)

E4-1: #264

#### On a New Product Development Procedure with TRIZ-assisted Approach in B to B Supply Chain Environment

Toshihiro Ohkuma, Hiroshi Katayama(Waseda University, Japan)

E4-2: #277

# Long-Term Orientation (LTO) in Supply Chain Relationships: Its Mediating Role in the Effect of Justice on Relationship Outcomes

Jeong seob Kim, Mahn hee Yoon, Dong bog Kim(Daegu University, Korea)

E4-3: #188

#### Supply chain formation planning using agent-based simulation

Derek Wan Hin Chau, Henry Ying Kei Lau(University of Hong Kong, Hong Kong)

E4-4: #293

#### Inventory Management Practice of Apparel Wholesale Entrepreneurs in Thailand

Petcharat Mesomboonpoonsuk(Srinakharinwirot University, Thailand), Akhilesh Trivedi(Faculty of Hospitality Industry Dusit Thani College, Thailand)

E4-5: #233

#### General model of Cross-docking distribution planning problem

Parida Jewpanya, Voratas Kachitvichyanukul (Asian Institute of Technology (AIT), Thailand)

## Room 5 [SCM Performance]

Session Chair: Prachuab Klomjit (Silpakorn Univ., Thailand)

E5-1: #283

#### An Effect of Social Capital and Supply Chain Management on Firm Performance in Supply Chain Network

Byunghak Leem(Busan University of Foreign Studies, Korea), Heuiju Chun(Dongduk Women's University, Korea), Byungjin Yim(Yungnam University, Korea)

E5-2: #203

## A Novel Approach for Assessing Lead-Time Performance in Supply Chain Management

Lin Ying Hsu, Ming Hung Shu, Wen Hsiung Wu(National Kaohsiung University of Applied Sciences, Taiwan), Bi Min Hsu(Cheng Shiu University, Taiwan)

F5-3: #204

#### Roles of Senior Executive Leadership for Innovation: Case of Competitive Japanese Firms

Hideaki Miyajima, YoungWon Park(Waseda University, Japan), Paul Hong(University of Toledo, USA)

#### AHP and Factor Analysis for Determining Rank of Car Workshop Service Performance

Aditya Tirta Pratama, Tanika Dewi Sofianti, Reinardus Aliwarga(Swiss German University, Indonesia) E5-5: #290

#### Examining effect of CCMS on overall customer satisfaction: A case of Jordanian banks

Abbas Al-Refaie, Belal Gharaibeh, Mohammed Shurrab(University of Jordan, Jordan)

15:30-18:00

**Session F** 

#### Room 1 [Production, Inventory and Warehouse Management]

Session Chair: Naoufel Cheikhrouhou (Ecole Polytechnique Fédérale de Lausanne, Switzerland)

F1-1: #131

#### Productivity Improvement in Motorcycle Belt Production Process with Simulation Technique and Lean Concepts

Krungsiam Piri, Prachuab Klomjit(Silpakorn University, Thailand)

F1-2: #121

## Optimizing Spare Part Inventory at PT XYZ using Spare Part Quantity Determination Technique (An Indonesian Case)

Jonny, Fajriyan(BINUS Universty, Indonesia)

F1-3: #143

# Determination of production level in a make-to-stock system with stochastic demands and returns

Si Young Lim, Sun Hur(Hanyang University, Korea)

F1-4: #109

Apply Quadratic Models for Optimization of Logistics and Supply Chain Management in IKCO

# Schedule of ICLS 2012

Saeid G. Jafarzadeh, Mohd Nizam Ab Rahman, Dzuraidah Abd. Wahab (Universiti Kebangsaan Malaysia, Malaysia) F1-5: #246

# Optimal order allocation decision with multiple quantity discount schemes and minimum monetary value penalty by artificial bee colony algorithm

Chiranya Chotyakul(Valaya Alongkorn Rajabhat University, Thailand), Charoenchai Khompatraporn, Tuanjai Somboonwiwat, Chorkaew Jaturanon(King Mongkut's University of Technology Thonburi, Thailand) F1-6: #164

#### A Study on a "SaaS" - Based Warehouse Management System in the Fashion and Apparel Industry

Akihiro Watanabe, Keizou Wakabayashi(Nihon University, Japan), Kuninori Suzuki(Bunka Fashion Graduate University, Japan), Yutaka Karasawa(Kanagawa University, Japan)

#### Room 2 [SC Planning and Scheduling]

Session Chair: Seung Kuk Paik (California State Univ., USA)

F2-1: #181

#### Application of Genetic Algorithm in Production Scheuling, A Case Study on the Food Processing Business

Yu Chuan Liu(Tainan University of Technology, Taiwan), Shu Huang Sun(Kun Shan University, Taiwan), Shih Ming Yang, Chung Yung Chuang(National Cheng Kung University, Taiwan)

F2-2· #210

# Multi-stage SCM Network Design considering Production Control and Inventory Problem using Hybrid Priority-based Genetic Algorithm

Hisaki Inoue(Miyazaki Sangyo-keie University, Japan), Mitsuo Gen(Fuzzy Logic Systems Institute, Japan) F2-3: #226

# Establishing a Win-Win Partnership with Vendors and SCM (Supply Chain Management) Strategy for Maximizing Competitiveness through Collaboration in Shipbuilding Industry

Seung Uk So, Seong Hwan Han(DSME, Korea)

F2-4: #242

# A Design for Supply Chain Model for Supplier Selection in a Closed-Loop Supply Chain Using a Mathematical Model Yuan Jye Tseng, Yen Jung Wang, Chia Chi Chen, Feng Yi Huang(Yuan Ze University, Taiwan)

An Examination of the Criteria used in Selecting Overseas Distributors: The Case of the Firefighting Protection Industry

Sara Elzarka, Islam El-Nakib(College of International Transport and Logistics, Egypt), Ahmed El-tabaee (Wataneya Group, Egypt)

F2-6: #146

#### The Implementation of Online Order & Forecast System for Asia Markets

Jong hoon Park(AGFA, Korea), Pal seon Jang(FLOWBIZ, Korea), Jong bae Kim(Inha University, Korea)

#### Room 3 [Vehicle Routing and Scheduling]

Session Chair: Jeong seob Kim (Daegu Univ., Korea)

F3-1: #115

#### Vehicle Routing Problem Targeting CO2 Reduction under Cost Minimization Strategy

Yoshiaki Shimizu, Min Kyoung Gu(Toyohashi University of Technology, Japan)

F3-2: #171

#### Dynamic rescheduling strategies for vehicle routing problem with pickups

Dong Sik Kim, Young Hae Lee, Dong Won Cho(Hanyang University, Korea)

F3-3: #206

## A Novel Probabilistic Savings Algorithm and Its Application to optimize the Capacitated Vehicle Routing Problem

Tantikorn Pichpibul, Ruengsak Kawtummachai(Panyapiwat Institute of Management, Thailand)

F3-4: #237

#### On Mathematical Models of Multiple-Supplier Vehicle Routing Problems

Sorawit Yaoyuenyong(King Mongkut's University of Technology Thonburi, Thailand), Suebsak Nanthavanij (Thammasat University, Thailand)

F3-5: #284

#### Improved Artificial Immune System for Capacitated Vehicle Routing Problem

Siwaporn Kunnapapdeelert, Voratas Kachitvichyanukul(Industrial Engineering and Management Asian Institute of Technology, Thailand)

F3-6: #184

#### A large neighborhood search method with improvement algorithms for the team orienteering problem

Byung In Kim(Pohang University of Science and Technology (POSTECH), Korea)

#### **Room 4 [Risk Management]**

Session Chair: Takayuki Kataoka (Kinki Univ., Japan)

F4-1: #107

#### CHALLENGES OF SUPPLY CHAIN -UNCERTANITY IN INVENTORY FUEL MANAGEMENT

Madhavendra Saxena(Singhaniya university, India), Bhavana Mathur(Global Institute of Technology, India) F4-2: #123

#### Independent third party managed supply chain: A risk mitigation strategy for consumer products industry

Snehamay Banerjee(The State University of New Jersey, USA), Damodar Y. Golhar(Western Michigan University, USA)

F4-3: #192

# The role of supply chain integration in the transmission of amplified disruptions. Conceptual framework and preliminary empirical evidence

Artur Swierczek (Department of Business Logistics University of Economics, Poland)

F4-4: #248

#### How to Perceive a Risk within Supply Chain Management?

Seock Jin Hong(Bordeaux Management School, France), Ik Whwan Kwon(Saint Louis University, USA), Jian LI(Ocean University of China, China)

F4-5: #275

# Sensitivity Analysis on Supply Chain Portfolio for Car Parts Industry -An Attempt for Construction of Disaster Management Procedure-

Takashi Ishikawa, Hiroshi Katayama(Waseda University, Japan)

F4-6: #269

#### Linking Supply Chain with Logistic Attributes for Supply chain Risk Management

Chang Won Lee(Hanyang University School of Business, Korea)

#### Room 5 [IT and Green Logistics]

Session Chair: Il kyeong Moon (Pusan National Univ., Korea)

F5-1: #178

#### An Integrated E-Commerce System Value Creation Method: Taiwan Online Tourism Companies as Examples

Liu, Yao Chen, Chien-Ta Ho(National Chung Hsing University, Taiwan)

F5-2: #167

## Managing suppliers when going green: How a firm's greening approach and its relative power to suppliers affect

Sonia Ming-Shiow Lo(National Chengchi University, Taiwan)

F5-3: #186

#### Resource-Efficient Maintenance Logistics-an approach to a greener planet

Thomas Heller, Thomas Anlahr(Fraunhofer Institute for Material Flow and Logistics IML, Germany)

F5-4: #187

#### Greening the Supply Chain: toward an integrated conceptual framework

Ji Young Park, Soo Wook Kim(Seoul National University, Korea)

F5-5: #221

## Carbon Dioxide Emission in Green Supply Chain: Problems and Solving Methods

Napsiah Ismail, Abdol hossein Sadrnia, M.K.A. Ariffin, Norzima Zulkifli, Mehrdad Nikbakht(The University Putra Malaysia, Malaysia)

F5-6: #297

#### Implementation of ELV Directive in Poland-challenges for reverse logistics

Paulina Golinska(Poznan University of Technology, Poland)

18:15	Meeting in front of KOFST
18:15-19:15	KOFST, Gangnam→Han River, Yeouido
19:30-21:00	Banquet (Cruise Dinner on Han River), Awards Ceremony for Best Papers
21:00-22:00	Back to KOFST, Gangnam

June 9(Sat.), 2012			
	Session Chair: Dr. Young Ho Ji (DHL Supply Chain Korea), Cel. 011-667-0122 Prof. Hyun Soo Kim (Kyonggi University), Cel. 010-3792-1331		
	[Industry Tour]		
09:00	Meeting in front of KOFST		
09:00-10:00	KOFST, Gangnam → HANJIN Logistics Center, Guro, Seoul (by bus)		
10:00-11:00	Visiting HANJIN Logistics Center (HANJIN is a family company of Korean Air Line Group)		
11:00-12:00	Back to KOFST, Gangnam		
12:00-13:00	Lunch		
	[Seoul City Tour]		
13:00	Meeting in front of KOFST		
13:00-18:00	Gyeongbok-gung, Insa-dong Street, Namsangol Hanok Village, Namdaemun Market		
18:00-19:00	Dinner		
19:00-20:00	Back to KOFST, Gangnam		