LOGMS2015

The International Conference on Logistics and Maritime Systems

August 27 - 29 2015
Hong Kong

Ocean Transport Logistics:
Making Global Supply Chain Effective

THE HONG KONG UNIVERSITY OF
SCIENCE AND TECHNOLOGY

LOGMS

Conference Schedule

Day 1: Thursday, August 27, 2015				
08:15	Shuttle Bus from **Crowne Plaza Hong Kong Kowloon East** to **HKUST**			
08:15 - 17:00	Registration	G/F—LSK Business Building Lobby		
09:00 - 09:30	Welcome & Opening Ceremony	G/F—Lecture Theater G012, LSK Business Building		
09:30 - 10:30	Keynote Speech: Prof. Hau L. Lee			
10:30 - 11:00	Refreshment Break & Networking	G/F—LSK Business Building Lobby		
11:00 - 12:30	Industry Panel Discussion	G/F—Lecture Theater G012, LSK Business Building		
12:30 - 13:30	Lunch	7/F—LSK Sea View Lounge **(via Lift 3&4)**		
	SESSION 1			
13:30 - 15:00	Session 1-1	Session 1-2	Session 1-3	Session 1-4
	1/F - LSK1009	1/F - LSK1010	1/F - LSK1011	1/F - LSK1014
15:00 - 15:30	Refreshment Break & Networking	1/F—Common Area		
	SESSION 2			
15:30 - 17:00	Session 2-1	Session 2-2	Session 2-3	Session 2-4
	1/F - LSK1009	1/F - LSK1010	1/F - LSK1011	1/F - LSK1014
17:15	Shuttle Bus from **HKUST** to **Banquet Venue** or to **Crowne Plaza Hong Kong Kowloon East**			
18:00 - 20:00	Banquet at **Serenade Chinese Restaurant** Address: 4/F, Hong Kong Cultural Centre, Restaurant Block, Tsim Sha Tsui Tel: 852-27220932			
20:15	Shuttle Bus from **Tsim Sha Tsui** to **Crowne Plaza Hong Kong Kowloon East**			

Day 2: Friday, August 28, 2015				
08:15	Shuttle Bus from **Crowne Plaza Hong Kong Kowloon East** to **HKUST**			
08:15 - 17:00	Registration		G/F—LSK Business Building Lobby	
09:00 - 10:30	SESSION 3			
	Session 3-1	**Session 3-2**	**Session 3-3**	
	1/F - LSK1009	1/F - LSK1010	1/F --LSK1011	
10:30 - 11:00	Refreshment Break & Networking		G/F—LSK Business Building Lobby	
11:00 - 12:00	Keynote Speech: Prof. Jan Fransoo		G/F—Lecture Theater G012, LSK Business Building	
12:00 - 13:30	Lunch		7/F—LSK Sea View Lounge **(via Lift 3&4)**	
13:30 - 15:00	SESSION 4			
	Session 4-1	**Session 4-2**	**Session 4-3**	**Session 4-4**
	1/F - LSK1009	1/F - LSK1010	1/F - LSK1011	1/F - LSK1014
15:00 - 15:30	Refreshment Break & Networking		1/F—Common Area	
15:30 - 17:00	SESSION 5			
	Session 5-1	**Session 5-2**	**Session 5-3**	**Session 5-4**
	1/F - LSK1009	1/F - LSK1010	1/F - LSK1011	1/F - LSK1014
17:15 - 17:45	Closing Ceremony		G/F—Lecture Theater G012, LSK Business Building	
18:00 - 20:00	Dinner		Chinese Restaurant @ HKUST (near Red Bird Piazza)	
20:15	Shuttle Bus from **HKUST** to **Crowne Plaza Hong Kong Kowloon East**			

Day 3: Saturday, August 29, 2015	
09:00	Shuttle Bus from **Crowne Plaza Hong Kong Kowloon East** to **Hongkong International Terminals** (HIT)
10:00 - 11:30	Site Visit at HIT
11:30	Shuttle Bus from **HIT** to **Tsim Sha Tsui** and **Crowne Plaza Hong Kong Kowloon East**

OPENING CEREMONY

Day 1, 27 August 2015 (08:15-09:30)

LSK Business Building, Lecture Theatre G012, HKUST

08:15 - 09:00	Registration

09:00 - 09:30   WELOCOME ADDRESS by

Prof. Chung-Yee Lee
Conference Chair

Prof. Wei Shyy
Provost
The Hong Kong University of Science and Technology

Hon. Frankie Yick Chi-Ming
Legislative Councillor, Functional Constituency- Transport
The Government of the Hong Kong Special Administrative Region

CLOSEING CEREMONY

Day 2, 28 August 2015 (17:15-17:45)

LSK Business Building, Lecture Theatre G012, HKUST

Presentation Sessions

Day 1

SESSION 1-1 Industry Application

Day 1: 13:30-15:00

Chair: Prof. Kap Hwan Kim		Classroom LSK 1009
LOGMS 0036	An Efficient Loading Condition Detection System to Improve the Safety of Loading/Unloading Freight in the Logistics Center **Hwa-ryong Kim (Presenter)** WaveM Co., Ltd, Seoul, Korea	
LOGMS 0041	New Trends of Transportation Containers in a Unit Load System **Yang-Jai Shin,**Young-Tae Lim LogisALL R&D Institute, Korea Korea Research Institute for Human Settlements, Korea	
LOGMS 0040	Conceptual Designs of Reconfigurable Mobile Rack for Flat Glass Transportation **Eon-Kyung Lee** Korea Maritime Institute, Korea	
LOGMS 0023	A Model for Production Resource Allocation and Storage Logistics Decision for Car Connector Manufacturers **Hua-An Lu**, Chen-Pang Wang, Ching-Wu Chu National Taiwan Ocean University, Taiwan	

SESSION 1-2 Strategic Decisions

Day 1: 13:30-15:00

Chair: Michael Bell		Classroom LSK1010
LOGMS 0051	Port Investment on Seaport Resilience **Xiao Xiao**, Nan Liu Zhejiang University, Hangzhou, China	
LOGMS 0004	Two-level Game-theoretic Models for Regional Port Competition **Mingzhu Yu** , Chung-Yee Lee, James Jixian Wang Shenzhen University, China	
LOGMS 0059	Modeling Market Concentration on Intermodal Freight Transport Networks Hamid Saeedi , Bart Wiegmans, **Rob Zuidwijk** Rotterdam School of Management (RSM), Erasmus University Rotterdam	
LOGMS 0065	Urban Intermodal Container Terminals: The Entropy Maximizing Facility Location Problem **Michael Bell**, Collins Teye University of Sydney Business School, Sydney, Australia	

SESSION 1-3 Bunkering Decisions

Day 1: 13:30-15:00

Chair: Ek Peng Chew	Classroom LSK 1011
LOGMS 0025	Optimal Hedging for Liner Bunker Procurement **Yadong Wang**, Qiang Meng National University of Singapore, Singapore
LOGMS 0027	A Dynamic Programming Approach for the Bunkering with Contract Problem Renrong Weng, Giulia Pedrielli, **Szu Hui Ng**, Loo Hay Lee National University of Singapore, Singapore
LOGMS 0076	Fuel Hedging Strategies in the Competitive Shipping Industry **Le Yu**, Jeff Hong, Chung-Yee Lee Hong Kong University of Science and Technology, Hong Kong
LOGMS 0028	Models for Bunkering Price Forecast Wei Huang, Giulia Pedrielli, Renrong Weng, **Ek Peng Chew**, Loo Hay Lee National University of Singapore, Singapore

SESSION 1-4 Yard Operations

Day 1: 13:30-15:00

Chair: Ceyda Oguz	Classroom LSK1014
LOGMS 0007	Traffic Rule Design for GRID System **Chenhao Zhou**, Chew Ek Peng, Loo Hay Lee National University of Singapore, Singapore
LOGMS 0045	Reducing the Search Space of the Blocks Relocation Problem using the Abstraction Method **Dusan Ku**, Tiru S. Arthanari University of Auckland, New Zealand
LOGMS 0055	Yard Assignment in Bulk Port Terminals **Ceyda Oguz**, Isil Koyuncu Koç University, İstanbul, Turkey

SESSION 2-1 Industry Application

Day 1: 15:30-17:00

Chair: Phillp Kim	Classroom LSK 1009
LOGMS 0038	Design of the Customer-centric Supply Network with Lead-time Sensitive Demands Yongjang Kwon, **Taebok Kim** Incheon National University, Korea
LOGMS 0034	Container Stacking Activity Modeling in Jakarta Container Terminal (JCT) with Three Different Stacking Rules Using Discrete Event Simulation Approach **Armand Omar Moeis**, Alvin Goputra University of Indonesia, Indonesia
LOGMS 0035	Achieving the Operational Excellency in Coffee Industry through the Adoption of the Supply Chain Management Concept **Philip Kim**, Taebok Kim, Kang-Dae Lee RUHU Coffee Company, Korea

SESSION 2-2 Industry Application

Day 1: 15:30-17:00

Chair: Prof. Loo Hay Lee	Classroom LSK 1010
LOGMS 0039	Airport Gate Assignment for Improving Terminal Internal Gate Efficiency Jaehwan Lee, Sha Xi, **Chulung Lee** Korea University, Korea
LOGMS 0037	Impact of Introducing Foldable Container to Rail Freight Service **Hag-Seoung Kim** Logistics System Research Team Korea Railroad Research Institute, Korea
LOGMS 0030	A Study of the Service Quality of Chinese Herbal Medicine Logistics: A Case of a Taiwanese Logistics Service Provider Shih-Liang Chao, **Wang-Rung Tsai**, Wei-Hsiung Chen National Taiwan Ocean University, Taiwan
LOGMS 0080	Innovative Terminal Designs Xinjia Jiang, Ek Peng Chew and **Loo Hay Lee** National University of Singapore, Singapore

SESSION 2-3 Supply Chain Models

Day 2: 15:30-17:00

Chair: Ming-Jong Yao	Classroom LSK1011
LOGMS 0068	A Two-echelon Inventory System with a Minimum Order Quantity Requirement **Han Zhu**, Youhua Chen City University of Hong Kong, Hong Kong
LOGMS 0042	A Decision Support Model for Sea Cargo Revenue Management Chi-Leung Chu, **Vincent C. Li** National Chiayi University, Chiayi, Taiwan
LOGMS 0072	Two Types of Financing Schemes for a Upstream Supplier **Weixiang Huang**, Yanzhi Li, Qiaohai Hu Department of Management Sciences, City University of Hong Kong
LOGMS 0044	On the Joint Replenishment Problem Considering Transportation Costs and Material Handling Capacity Constraints Jen-Yen Lin, **Ming-Jong Yao**, Jiun-Yi Chen National Chiao Tung University , Taiwan

SESSION 2-4 Network Design

Day 1: 15:30-17:00

Chair: Stein W. Wallace	Classroom LSK1014
LOGMS 0060	A Multi-modal Freight Network Flow Problem for Port-hinterland Container Distribution System Yulong Zhao, Nathalie Bostel, **Lu Chen**, Pierre Dejax Shanghai Jiao Tong University, China
LOGMS 0031	Building a Measurement Model for Port-Hinterland Container Transportation Network Resilience **Hong Chen**, Nan Liu, Kevin Cullinane Zhejiang University, Zhejiang, China
LOGMS 0021	New Solution Methods for Liner Service Network Design with Transshipment Cost Zhou Xu, **Jun Xia** The Hong Kong Polytechnic University, Hong Kong
LOGMS 0008	Liner shipping network design: a case of intra-Indonesia connections. **Rommert Dekker**, Judith Mulder Econometric Institute, Erasmus University Rotterdam, Rotterdam, Netherlands
LOGMS 0024	Stochastic Service Network Design **Stein W. Wallace** Norwegian School of Economics, Bergen, Norway

SESSION 3-1 Warehouse and AGV

Day 2: 09:00-10:30

Chair: Ren Zhao	Classroom LSK 1009
LOGMS 0020	Optimizing a Warehouse Crane Scheduling Problem using a Tabu Search Algorithm **Guodong Zhao**, Lixin Tang Northeastern University, Shenyang, China
LOGMS 0022	Minimum-Time Routing of AGVs in a Graph by Searching for Optimal Transit Speeds on the Arcs Taekwang Kim, **Kisung Song**, Kwang Ryel Ryu Pusan National University, Busan, Korea
LOGMS 0014	A Rolling Variable Horizon Heuristic for Storage Space Relocation Problem **Ren Zhao**, Lixin Tang Northeastern University, Shenyang, China

SESSION 3-2 Yard Operations

Day 2: 09:00-10:30

Chair: Takeshi Shinoda	Classroom LSK 1010
LOGMS 0018	A sea-side Oriented Heuristic Algorithm for Minimizing the Effects of Block Relocation Problem **Javier Gálvez**, Enrique Martín, Sergi Saurí and Eduardo César. The Universitat Politècnica de Catalunya BarcelonaTech (UPC), Barcelona
LOGMS 0053	Flexible Loading Sequencing in Container Terminals **Ivan Singgih**, Soondo HONG, Kap Hwan KIM Pusan National University, Busan, Korea
LOGMS 0054	Methodology of Energy Analysis for Hybrid Straddle Carrier in Container Handling Operation **Takeshi Shinoda**, Putu Hangga Kyushu University, Japan

SESSION 3-3 Vessel Operations

Day 2: 09:00-10:30

Chair: Roar Adland	Classroom LSK1011
LOGMS 0019	Mixed Integer Linear Programming and Differential Evolution for Containership Stowage Plan **Yun Dong**, Lixin Tang Northeastern University, Shenyang, China
LOGMS 0077	Real-time Schedule Recovery in Liner Shipping Service with Regular Uncertainties and Disruption Events **Chen Li**, Xiangtong Qi, Dongping Song Hong Kong University of Science and Technology, Hong Kong
LOGMS 0078	Evading Strategies for A Vessel Being Chased By Pirate Skiffs **Yu Wang**, Xiangtong Qi Hong Kong University of Science and Technology, Hong Kong
LOGMS 0016	Short-term Vessel Speed Determinants: A Big Data Approach **Roar Adland**, Mathias O. Maanum, Henrik Selnes Norwegian School of Economics, Bergen, Norway

SESSION 4-1 Empty Container Repositioning

Day 2: 13:30-15:00

Chair: Loo Hay Lee	Classroom LSK 1009
LOGMS 0001	Saving Cost by Efficiently Repositioning Both Damaged and Non-damaged Empty Container Flows in Ports and their Hinterland T. Hjortnaes , B. Wiegmans, R.R. Negenborn, **R.A. Zuidwijk**, R. Klijnhout Delft University of Technology, Delft, Netherlands
LOGMS 0073	Coordinating Pricing and Empty Container Repositioning: An analysis of Two-Depot Shipping Systems **Tao Lu**, Chung-Yee Lee, Loo-Hay Lee Hong Kong University of Science and Technology, Hong Kong
LOGMS 0069	Pricing and Competition in a Shipping Market with Waste Shipments and Empty Container Repositioning **Rongying Chen**, Jing-Xin Dong, Chung-Yee Lee Hong Kong University of Science and Technology, Hong Kong
LOGMS 0026	A New Revenue-Based Empty Repositioning Jia Wei Chee, Giulia Pedrielli, **Loo Hay Lee**, Ek Peng Chew National University of Singapore, Singapore

SESSION 4-2 Quay Crane Scheduling

Day 2: 13:30-15:00

Chair: Zizhen Zhang	Classroom LSK 1010
LOGMS 0029	An Quay Crane Sequencing Model for Dual Cycling Operations in Container Terminals Xiaoju Zhang, **Qingcheng Zeng** Dalian Maritime University, Dalian, China
LOGMS 0052	An Exact Algorithm for Quay Crane Scheduling Problem **Xu Cheng** , Lixin Tang Northeastern University, Shenyang, China
LOGMS 0079	The Quay Crane Scheduling Problem with Stability Constraints **Zizhen Zhang**, Chung-Yee Lee Sun Yat-sen University, Guangzhou, China

SESSION 4-3 Business Models

Day 2: 13:30-15:00

Chair: Fan Wang	Classroom LSK1011
LOGMS 0003	A Floating Price Contract for the Ocean Freight Industry Xiaochen Gao, Chung-Yee Lee, **Ruina Yang** Xi'an Jiaotong University, Xi'an, China
LOGMS 0067	Tying Mechanism for Airline's Air Cargo Capacity Allocation Bo Feng, Yanzhi Li, **Huaxiao Shen** City University of Hong Kong, Hong Kong
LOGMS 0010	A New Business Model - Synchromodal Container Transportation **Bart van Riessen**, Rudy R. Negenborn, Rommert Dekker Econometric Institute, Erasmus University Rotterdam, Rotterdam, Netherlands
LOGMS 0011	Strategic Entry for Inland Feeder Service under Joint Price and Lead-Time Competition Xiaopo Zhuo, Baozhuang Niu, **Fan Wang** Sun Yat-sen University, Guangzhou , China

SESSION 4-4 Data Analysis

Day 2: 13:30-15:00

Chair: René de Koster	Classroom LSK1014
LOGMS 0002	Estimating Vessel Utilization in the Drybulk Freight Market: The Reliability of Draught Reports in AIS Data Feeds **Haiying Jia**, Vishnu Praksh, Tristan Smith SNF Centre for Applied Research at NHH, Bergen, Norway
LOGMS 0058	Geospatial Vessel Attribute Maps Based on AIS Data on a Geodesic Grid **Ove Daae Lampe** Christian Michelsen Research AS, Bergen, Norway
LOGMS 0066	An Investigation into the Effectiveness of Strategy Theories in Explaining Supply Chain Performance using Archival Data **Javad Feizabadi**, Mahender Singh, Somayeh Alibakhshi Motlagh Malaysia Institute for Supply chain Innovation, MIT Research Affiliate, Malaysia
LOGMS 0043	What makes truck drivers safe and productive? Empirical Insights from GPS-Enabled Trips and Driver Personality Attributes **René de Koster**, Jelle de Vries, Debjit Roy Rotterdam School of Management, Erasmus University, Netherlands

SESSION 5-1 Berth Allocation

Day 2: 15:30-17:00

Chair: I. Kuban Altinel	Classroom LSK1009
LOGMS 0046	A Branch-and-Bound Algorithm for Berth Planning Problem Based on Sequence-pair Representation **Mai-Luan Nhu**, Byung-Hyun Ha Pusan National University, Busan, Korea
LOGMS 0074	Berth Scheduling with Limited Distributional Information Chung-Yee Lee, Ming Liu, **Tao Lu**, Chung-Piaw Teo Hong Kong University of Science and Technology, Hong Kong
LOGMS 0057	Berth Allocation and Service Pricing for Emergency Assistance between Two Terminals in a Port **Ya Xu**, Fanrui Xie, Heng Zhang Nankai University, Tianjin, China
LOGMS 0013	Optimal Berth Allocation, Time-variant Quay Crane Assignment and Scheduling with Crane Setups in Container Terminals **I.Kuban Altinel**, Yavuz B. Turkogullari, Z. Caner Taskin, Necati Aras Bogazici University , Istanbul, Turkey

SESSION 5-2 Yard Operations

Day 2: 15:30-17:00

Chair: Lu Zhen	Classroom LSK1010
LOGMS 0005	Re-marshalling in Automated Container Yard Blocks with Terminal Appointment Systems **Filip Covic** University of Hamburg, Germany
LOGMS 0048	TwinCrane-ATCRSS-Game: Job Dispatching with Lookahead for Twin Yard Cranes Shell Ying Huang, **Ya Li**, Xiaoxuan Fan Nanyang Technological University, Singapore
LOGMS 0009	Yard Template Planning to Mitigate Congestion in Container Ports **Lu Zhen** Shanghai University, Shanghai, China

SESSION 5-3 Land Logistics

Day 2: 15:30-17:00

Chair: Haiqing Song		Classroom LSK1011
LOGMS 0050	A Response Mechanism for Disruptions in Truck Appointment System **Na Li**, Gang Chen, Zhihong Jin Dalian Maritime University, Dalian, China	
LOGMS 0070	Designing Racks for Handling Flat Glass Products for Construction Industries **Kyung Jin Kwon**, Kap Hwan Kim, Soondo Hong Pusan National University, Busan, Korea	
LOGMS 0012	A New Activity Based Model for Pick-up and Delivery with Time Windows **Chenhao Zhou**, Giulia Pedrielli, Pau Morales Fusco, Ek Peng Chew, Loo Hay Lee National University of Singapore, Singapore	
LOGMS 0071	A Column Generation Method To The Vehicle Scheduling Problem with Heterogeneous Vehicles **Haiqing Song**, Xiaonan Ruan, Ke Fu Lingnan College, Sun Yat-sen University, China	

SESSION 5-4 Collaboration

Day 2: 15:30-17:00

Chair: Zhou Xu		Classroom LSK 1014
LOGMS 0062	Alliance Formation among Ocean Container Carriers Albert Ha, **Tingting Xiao** Hong Kong University of Science and Technology, Hong Kong	
LOGMS 0047	Collaborative Inter-Terminal Transshipment of Containers and Benefit Allocation **Hak Bong Kim**, Xuehao Feng, Kap Hwan Kim Pusan National University, Busan, Korea	
LOGMS 0061	Coordination of Resource Sharing in Liner Shipping Xiaofan Lai, Liming Liu, **Zhou Xu** The Hong Kong Polytechnic University, Hong Kong	

SITE VISIT TOUR (DAY 3: 09:00-12:30)

About HIT (source from HIT website: https://www.hit.com.hk)

Hongkong International Terminals Limited (HIT) is a member of HPH Trust, the world's first container port business trust listed in Singapore. HIT is also a part of Hutchison Port Holdings Limited's (HPH) global network of port and logistics operations, and continues to have access to services and resources enjoyed by companies within the HPH Group.

Situated in the Kwai Tsing container port area of Hong Kong - one of the busiest container ports in the world.

HIT operates twelve berths at Terminals 4, 6, 7 and 9. Established in 1969, HIT has continuously set industry benchmarks for productivity, efficiency and value-added services. Using modern management techniques, state-of-the-art computer systems and award winning IT applications, HIT has become a pinnacle of industry excellence.

HIT plays a key role in the continuing development of the port of Hong Kong, ensuring the port has the resources, facilities and people required to achieve smooth and efficient handling of container cargoes.

As global trade and the needs for logistics chain management increases, HIT has diversified its operations beyond the traditional role of a container port operator. HIT has leveraged the strength of HPH and developed a logistics network covering the Pearl River Delta and the rest of South China, based on the principles of efficiency, productivity and cost-effectiveness. The ultimate goal is the creation of an integrated supply chain network, with total logistics management services.