JESPA 2019

International Forum on Shipping, Ports, and Airports (IFSPA) 2019

BEYOND BREAKTHROUGHS, ABOVE EXCELLENCE

20 - 24 MAY 2019 • HONG KONG





Faculty of Business 工商管理學院





Welcome Message from the Dean of Faculty of Business



Hong Kong is a major trading economy and an international maritime centre with one of the world's busiest ports and airports. According to the World Bank's *2018 Logistics Performance Index*, we rank 12th globally. We have good connections with urban centres in the region and half of the world's population is within five hours' flight from us. Strategic location, easy accessibility, and well-developed infrastructure make this city a popular destination for meetings and exhibitions, as well as for business and holiday visitors.

The International Forum on Shipping, Ports and Airports (IFSPA), hosted by the CY Tung International Centre for Maritime Studies and the Department of Logistics and Maritime Studies at the Faculty of Business of The Hong Kong Polytechnic University, is where academics and practitioners from around the world converge for exchange of views and information. From a workshop in 2007 to the presently important event of the transport and logistics industries, it has grown alongside the business and economic development of Hong Kong. The forthcoming 10th event, themed "Beyond Breakthroughs, Above Excellence", will continue to bring together experts, professionals, scholars, researchers, and research students from different institutions, sectors, and countries for an extensive exploration of topics relating to maritime and aviation economics, policy, and management.

I would like to invite you to join us at IFSPA 2019, to be held on 20 to 24 May, and look forward to welcoming you in Hong Kong.

Ir Professor T.C. Edwin Cheng Dean, Faculty of Business Fung Yiu King – Wing Hang Bank Professor in Business Administration Chair Professor of Management The Hong Kong Polytechnic University

Welcome Message from the Head of the Department Logistics and Maritime Studies



The International Conference on Shipping, Ports and Airports (IFSPA) has been a significant event for the Department of Logistics and Maritime Studies of The Hong Kong Polytechnic University. Indeed, the history of this important event was dated back to 10 years ago when we continued to stress the significance of maritime research and education to the Hong Kong community, and to the world as a whole. Throughout the years, IFSPA has been one of the icons of the department, and a major event in maritime and transportation research community. Each year, top scholars in this area around the world gather in Hong Kong to discuss the latest research developments and significant events of interests in this field.

This year, the theme of the Conference is "Beyond Breakthroughs, Above Excellence", which reflects the need for us to strive for excellence continuously. In fact, the theme also reflects what we want ourselves to be. As researchers we can never be complacent for any research we have already done. The technology and the methodology in research are fast-changing, so as the maritime and transport industries. I am sure we will have much to learn every year in this important event.

Let me welcome all the participants for coming over to the IFSPA, and we wish you all a fruitful event and wish you well in your never-ending research journeys!

Professor Andy C. L. Yeung Head, Department of Logistics and Maritime Studies Chair Professor of Operations Management The Hong Kong Polytechnic University

Welcome Message from Conference Chairman



On behalf of the organizing committee, it is our great pleasure to warmly invite you to attend the 10th International Forum on Shipping, Ports and Airports (IFSPA) hosted by the C. Y. Tung International Centre for Maritime Studies, Department of Logistics and Maritime Studies at Hong Kong Polytechnic University. The conference will be held on 20-24 May, 2019 (Monday to Friday) in Hong Kong.

The conference theme in 2019 is "**Beyond Breakthroughs, Above Excellence**." The conference plays a general platform and will bring together, interdisciplinary groups of practitioners, academics, researchers, and research students from all over the world to share and exchange break-through ideas relating to the theory and practice in the shipping and transport logistics sectors. This will highlight the rich diversity of approaches and initiatives to understanding new challenges and opportunities of current economic and operations issues, as well as advocating the development of innovation proficiency and technologies to foster global competitiveness and sustainable benefits. It promotes the quality research in general, selected papers will be recommended for publication in the Special Issues of Maritime Business Review (MABR) journal and other journals.

As an Asia's world city, Hong Kong is the largest air cargo hub and the 5th busiest container sea port in the world. Its role is particularly critical on the East-West trade route and as a gateway to the Mainland China. With a strong pool of experienced professionals, researchers and operators in Hong Kong, we are confident that you will enjoy a pleasure and fruitful conference here. Your participation and presence will enrich professional knowledge exchange, insights and provide useful strategies and resolutions for industries.

I gratefully acknowledge the support received from our Conference Sponsors including TCC Group, Department of Logistics and Maritime Studies for exhibiting at IFSPA.

I would also like to thank the time and effort of the conference secretariat, as well as the invaluable contribution from the invited speakers, authors, paper reviewers, special issue editors, and supporting organizations.

Last but not least, we would like to thank you all for attending and supporting IFSPA 2019 and helping to make it another success. We hope you have a fulfilling and enjoyable time in Hong Kong.

Chin-Shan Lu Conference Chairman, IFSPA 2019 Director, C.Y. Tung International Centre for Maritime Studies Professor, Department of Logistics and Maritime Studies, The Hong Kong Polytechnic University The **International Forum on Shipping, Ports and Airports (IFSPA)** is an annual international conference jointly organised by the C.Y. Tung International Centre for Maritime Studies, the Department of Logistics and Maritime Studies and Faculty of Business of The Hong Kong Polytechnic University. It aims to invite international academics and practitioners to discuss and exchange views on issues related to global maritime and aviation economics, policy and management. The conference also serves as a good platform for networking and promoting academic-industry collaboration.

The roots of IFSPA can be dated back to 2006 when it was started as a workshop with the objective to promote high-quality research papers. Since then it has experienced significant successes and has attracted more than 900 participants from different countries and regions of the world.

IFSPA 2019

The conference advocates international academics, industry leaders and global stakeholders to ponder upon issues concerning how to implement a sustainable balance of economic, environmental and social objectives in shipping and transport logistics. IFSPA 2019 also provides an industry-wide initiative to debate and discuss new challenges faced by the industry at present or which it is likely to face in the future.

IFSPA 2019 Organizing Committee

Conference Chair International Steering Committee: Professor Chin-Shan Lu Roar Os Ådland (Norwegian School of Economics, Norway) Peggy Shu-Ling Chen (University of Tasmania, Australia) Martin Dresner (University of Maryland, USA) **Co-Chairs:** Ying-En Ge (Shanghai Maritime University, China) Dr Stephen Y.K. Li David Gillen (University of British Columbia, Canada) Dr Dong Yang Anne Graham (University of Westminster, UK) Dr T. L. Yip George Q. Huang (The University of Hong Kong, Hong Kong) Manolis Kavussanos (Athens University of Economics and Business, Greece) **Organizing Committee:** Kap Hwan Kim (Pusan National University, South Korea) Dr Petrus Choy Jasmine Siu Lee Lam (Nanyang Technological University, Singapore) Dr Achim I. Czerny Chung-Yee Lee (The Hong Kong University of Science and Technology, Hong Kong) Professor Kee-Hung Mike Lai Ling Li (Old Dominion University) Dr Edward Lee Jing xian Liu (Wuhan University of Technology School of Navigation, China) Dr Meifeng Luo Nan Liu (Zhejiang University, China) Professor Chi To Daniel Ng Becky P.Y. Loo (The University of Hong Kong, Hong Kong) Dr Kelvin Pang Chin-Shan Lu (The Hong Kong Polytechnic University, Hong Kong) Dr Sik Kwan Tai Theo E. Notteboom (Shanghai Maritime University, China) Dr Shuaian Hans Wang Tae Hoon Oum (University of British Columbia, Canada) Dr C. L. Johnny Wan Thanos Pallis (University of the Aegean, Greece) Dr Yulai Sarah Wan Harilaos N. Psaraftis (Technical University of Denmark, Denmark) Dr 7hou Xu Kuo-Chung Shang (National Taiwan Ocean University, Taiwan) **Professor Hong Yan** Jiuh-Biing Sheu (National Taiwan University, Taiwan) Dr Ling Zhu Atsuo Suzuki (Hanzan University, Japan) Wayne K. Talley (Old Dominion University, USA) **Conference Secretariat** Jose L. Tongzon (Inha University, South Korea) Miss Vera Tsui Stefan Voss (University of Hamburg, Germany) Wen-Yao Grace Wang (Texas A & M University at Galveston, USA) Fan Wang (Sun Yat-Sen University, China) Mariner Wang (Ritsumeikan Asia Pacific University, Japan) Wesley W. Wilson (University of Oregon, USA) Hai Yang (The Hong Kong University of Science and Technology, Hong Kong) Ching-Chiao Yang (National Kaohsiung University of Science and Technology, Taiwan) Anming Zhang (University of British Columbia, Canada)

About the Organizers

The Hong Kong Polytechnic University

The Hong Kong Polytechnic University (PolyU) is strategically located in Hung Hom, Kowloon, on a 9.34-hectare site adjacent to the Cross Harbour Tunnel. It is the largest tertiary institution in Hong Kong in terms of number of students, with approximately 28,000 full-time and part-time students. A wide range of courses, which directly meets industrial, commercial and community needs are offered. In addition to meeting Hong Kong's manpower requirements, PolyU also makes significant contributions towards the territory's success by providing the public and private sectors with its expanding range of consultancy, professional training, and applied research services. Through these activities, the University maintains a strong partnership with the business and industrial sectors. Over the years, more than 310,000 young men and women have graduated from PolyU and its predecessors. The graduates have found their places in various sectors of the society, dedicating their knowledge and expertise to the building and development of Hong Kong's thriving economy.

Department of Logistics and Maritime Studies

The **Department of Logistics and Maritime Studies** (LMS) of Faculty of Business strives to provide quality and comprehensive education in logistics and maritime studies at both undergraduate and postgraduate levels for Hong Kong, Chinese Mainland and Asia. The primary aims are to nurture highly effective managers and leaders through the development of contemporary educational materials and the use of innovative and teaching methods. In line with PolyU's tradition, LMS places strong emphasis on academic and applied research in various areas covering maritime, shipping, ports, supply chain management and transport logistics. It also provides professional training and consultancy services to the industries in such areas as maritime law, logistics IT, containerization, port benchmarking, operations research, simulation, shipping economics, and shipping finance. With close collaboration with the industries and dedication to real world application, LMS can bring the highest quality and the most up-to-date research findings and consultancy experience into classes, which will benefit the industry and the community as a whole. It is what LMS makes a difference in logistics and maritime education.

C.Y. Tung International Centre for Maritime Studies

With the passion for creating a world-class heartland of maritime studies, education and consultancy in the Asian region, LMS established the International Centre for

Studies in 2005. Developed under PolyU's Area of Strategic Development Scheme, the Centre is the first of its kind in Hong Kong. The founding of the Centre also underlines the determination of PolyU and LMS to play an essential role in supporting the Chinese Mainland's strategic direction of developing logistics as a major of national economy. At the same time, the Centre strives to support Hong Kong to reinforce its role as a world-renowned international maritime centre. In March 2009, in conjunction with its Opening Ceremony after a major renovation, the Centre was named after the late Mr C.Y. Tung as the **C.Y. Tung International Centre for Maritime Studies**, in appreciation of a pledge of HK\$10 million from The Tung Foundation. With the generous donation, the Centre has embarked on further expansion to provide maritime resources and support for the Department's students, academics, and industrial partners, and the maritime community as a whole.





Maritime



Conference Schedule

20 May 2019 (Monday) Venue					
14:30 – 18:30 Registration				3/F Core C CD301	
Day 1: 21 M	ay 2019 (Tuesday)				
08:30 - 09:00	School Reception				3/F Core C
09:00 - 10:30	School Session 1 (Dr S	huaian Hans Wang	;)		CD301
10:30 - 11:00	Coffee Break				3/F Core C
11:00 - 12:30	School Session 2 (Dr S	huaian Hans Wang	;)		CD301
12:30 - 14:00	Conference Lunch (Po	olv U Staff Club Rest	,, taurant)		
	5/F Communal Buildir	ng	,		
14:00 - 15:30	School Session 3 (Prot	fessor Ching-Chiao	Yang)		CD301
15:30 - 16:00	Coffee Break				3/F Core C
16:00 - 17:15	School Session 4 (Dr C	Christina W. Y. Won	ig)		CD301
Day 2: 22 Ma	y 2019 (Wednesda	y)			
09:15 - 10:00		Openii	ng Ceremony		V322
		-			Innovation Tower
10:00 - 10:50	Keynote Session 1 (M	r. Albert Yau)			V322
					Innovation Tower
10:50 - 11:10	Coffee Break				3/F Core V
11:10 - 12:00	Keynote Session 2 (M	r. Ting-Yi Tsai)			V322
					Innovation Tower
12:15 – 13:20	Conference Lunch (Pc 5/F Communal Buildir	oly U Staff Club Rest ng	taurant)		
13:20 - 14:50	Feature Session 1	Parallel	Parallel	Parallel	Industrial
	and Parallel	Session 2	Session 3	Session 4	Session
	Session 1 (CD302)	(CD303)	(CD304)	(DE309)	(CD301)
14:50 - 15:00	Coffee Break				3/F Core C
15:00 - 16:30	Parallel	Parallel	Parallel	Parallel	Industrial
	Session 5	Session 6	Session 7	Session 8	Session
	(CD302)	(CD303)	(CD304)	(DE309)	(CD301)
16:30 - 17:00	Coffee Break				3/F Core C
17:00 - 18:30	Parallel	Parallel	Parallel	Parallel	Special
	Session 9	Session 10	Session 11	Session 12	Session
	(CD302)	(CD303)	(CD304)	(DE309)	(CD301)
18:35 – 20:30	Conference Banquet (Regal Kowloon Ho	tel)		
	3/F, 71 Mody Rd, Tsin	n Sha Tsui East			

Conference Schedule

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Day 3: 23 May 2019 (Thursday)				Venue	
09:00 - 10:30	Feature Session 2	Parallel	Parallel	Parallel	Special
	and Parallel	Session 14	Session 15	Session 16	Session
	Session 13 (CD302)	(CD303)	(CD304)	(DE309)	(CD301)
10:30 - 11:00	Coffee Break				3/F Core C
11:00 - 12:30	Feature Session 3	Parallel	Parallel	Parallel	Special
	and Parallel	Session 18	Session 19	Session 20	Session
	Session 17 (CD302)	(CD303)	(CD304)	(DE309)	(CD301)
	1				
12:30 - 14:00	Conference Lunch (Na	n Pei Xiao Chu 南	比小廚) 4/F Communa l	Building	
14:00 - 14:50	Keynote Session 3 (Professor Juan de Dios Ortuzar Salas)			V322	
14:50 - 15:10	Coffee Break			3/F Core V	
15:10 - 16:00	Keynote Session 4 (Professor Qiang Meng)			V322	
16:00 - 16:50	Keynote Session 5 (Professor Thanos Pallis)			V322	
16:50 – 17:20	Closing Ceremony			V322	
18:00 - 20:00	Appreciation Dinner (by invitation only)				
Day 4: 24 May 2019 (Friday)					
09:00 - 18:30	Zhuhai Technical Visi	t			
	(Hong Kong-Zhuhai-N	/lacau Bridge, Zhuh	ai Jinwan Airport, Gree	Electric Appliances Inc.	of Zhuhai)
	(for confirmed by reg	istrants only)			
	Gathering site: PolyU	Main Entrance, G/	F, Core AB		
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- End of Conference -

Opening & Closing Ceremony

Opening Ceremony

Wednesday, 22 May 2019 (09:15 – 10:00), Lecture Theatre V322 (Innovation Tower)

	PROGRAMME
09:00 - 09:15	Registration
09:15 – 09:25	WELCOME ADDRESS by
	Professor Mike Kee-Hung Lai
	Associate Dean, Faculty of Business
	The Hong Kong Polytechnic University
	Professor Andy C. L. Yeung
	Head, Department of Logistics and Maritime Studies
	The Hong Kong Polytechnic University
09:25 – 09:45	OPENING REMARKS by
	Miss Agnes Wong
	Director, Marine Department
	The Government of the Hong Kong special Administrative Region
	Dr Chang-Ho YANG
	President
	Korea Maritime Institute
	Topic. Introducing Global Shipping Think Tank Alliance and Kim
	HONORABLE GUEST
	Mr. Andy Tung
	Steering Committee Member of C. Y Tung International Centre for Maritime Studies Co-Chief Executive Officer, Orient Overseas Container Line (OOCL)
	Souvenirs Presentation and Group Photos
09:45 - 10:00	Break & Networking

Closing Ceremony

Thursday, 23 May 2019 (16:50 – 17:20), Lecture Theatre V322 (Innovation Tower)

PROGRAMME

16:50 – 17:20 BEST PAPER AWARD PRESENTATION by

Ir Professor T.C. Edwin Cheng Dean, Faculty of Business The Hong Kong Polytechnic University

CONCLUDING REMARKS by

Professor Chin-Shan Lu IFSPA 2019 Conference Chairman Director, C. Y. Tung International Centre for Maritime Studies The Hong Kong Polytechnic University

Keynote Session 1

Day 2 (22 May) : 10:00 - 10:50

Session Chair: Dr Achim I. Czerny		Room: V322
Building a Major Regional Aviation Hub in the West Coast of the Greater Bay Area	201	L.
Mr. Albert Yau General Manager Hong Kong Zhuhai Airport Management Co Ltd.	A	M
Hong Kong		

Abstract:

Zhuhai Airport, situated in the west coast of the Greater Bay Area, is the first airport in China managed by a foreign owned airport management company. Being the major stakeholder in the company, the Hong Kong Airport Authority introduced its airport management expertise at the Hong Kong International airport to unleash the potential of the Zhuhai Airport. Zhuhai Airport had experienced a leap of passenger throughput from less than 1 million to over 11 millions in 2018 since the Hong Kong-Zhuhai Airport Management Co. Ltd started to manage and operate the airport in 2006. The vast opportunities brought by the Greater Bay Area plan signed in 2017 further contributed to the vigorous growth of the airport. Both the country and the municipal Govt. have laid a solid foundation on developing the area by building comprehensive infrastructures like the commencement of the Hong Kong-Zhuhai-Macao Bridge and the construction of the intra-city bridges in Zhuhai downtown. These infrastructures will eventually strengthen the connectivity of the airport to tap the strong demand for aviation in the region. To cope with the growth, Zhuhai Airport has implemented diverse corporate strategies to seize the opportunities brought by the infrastructures. Strategies on expanding the routes and destinations and strategies to further improve land connectively and customer services are being implemented or going to implement in the coming years. Ultimately, Zhuhai Airport would like to become a key engine of the aviation industry in the west coast of the bay area, by performing a complementary role among the airports in the region with differentiation in routes, destinations and services.

Keynote Session 2

Day 2 (22 May) : 11:10 - 12:00

Outlook of Deep-Water Container Terminal at the Port of Kaohsiung

Mr. Ting-Yi Tsai Ex-Vice President, Business and Administration, Taiwan International Ports Corporation (TIPC) Chairman, Taiwan International Ports Logistics Corporation



Abstract:

This presentation will demonstrate the internal and external environmental factors encountered by the Port of Kaohsiung and their impact to the development of the port. In particular, this presentation will point out the effectiveness of the deep-water Container Terminal Center No. 7 to the Port of Kaohsiung regarding breaking through its current bottleneck and revitalizing its advantage as a container hub port. Container Terminal Center No. 7 is not only expected to allow the Port of Kaohsiung to be capable to accommodate mega container ships, but also reintegrate the new and old terminals and readjust the capacity distribution and terminal function to increase the port's efficiency and performance. In addition, the reallocation of the terminal capacity and function readjustment of the port area would reinforce Port of Kaohsiung's container transshipment function and scenic waterfront attraction.

Keynote Session 3

Day 3 (23 May) : 14:00 – 14:50

Session	Chair:	Dr T.	L. Yip

Room: V322

Recent Advances in Modelling Customer Behaviour for Market Analysis

Professor Juan de Dios Ortúzar Salas Pontificia Universidad Católica de Chile, Santiago, Chile Editor-in-Chief, Transportation Research Part A: Policy and Practice



Abstract:

Discrete choice models, estimated with both revealed (RP) and stated preference (SP) data, have become the cornerstone for modelling customer behaviour, which is at the base of contemporary market analysis. In this presentation we first discuss the advantages of counting with a particular form of SP data, stated choice (SC) information, particularly when dealing with radically new choice alternatives, or with attributes which are not easy or even possible to measure. We then introduce the mixed logit (ML) model, which is the current standard in this field and, finally, move to discuss hybrid discrete choice models (incorporating latent variables), and the power they bring in terms of dealing with heterogeneity in tastes and treating unobservable traits in the customer population.

Keynote Session 4

Session Chair: Dr Shuaian Hans Wang

Impact Analysis of Large Ships on Ship Traffic in the Singapore Strait

Professor Qiang Meng National University of Singapore, Singapore Editor-in-Chief, Transportation Research Part E: Logistics and Transportation Review Associate Editor, Transportation Research Part B: Methodological



Room:

Day 3 (23 May): 15:10 - 16:00

Abstract:

As one of the most important and busiest shipping waterways in the world, the Singapore Strait are unique and vital to Singapore economics development. It can be foreseen that more and more large-sized ships will pass through the strait. The chance of a navigational accident involving large ships in the Strait becomes high accordingly, and it may lead to catastrophic consequences. To maintain the current navigational safety level, it is crucial to develop tangible models to examine the impacts of large ships on the navigational risk and capacity of the future ship traffic in the strait.

This study aims to develop a holistic approach being able to quantitatively analyze the impacts of large ships on navigational accident risks and ship traffic capacity of the Singapore Strait. It first develops a ship interaction model to characterize interactions of various ships sailing in the strait by conducting navigation simulator-based experiments. A novel multi-agent based ship traffic simulation (MABSTS) model incorporating the developed ship interaction model is subsequently built to mimic ship movements in the strait. The model enables us to quantitatively evaluate the impact of large ships on the navigation accident risks in the strait. The navigation risk-based ship traffic capacity of the strait (operational level and planning level) as a new concept is defined from the perspective of navigational safety. The impact analysis of large ships on the operational level risk-based ship traffic capacity is conducted by using the MABSTS model.

Keynote Session 5

Co-director, PortEconomics.eu

Day 3 (23 May): 16:00 - 16:50

Session Chair: Dr Dong Yang	Room: V322
Developing Cruise Ports to Serve the Global Cruise Industry	Line Line Line Line Line Line Line Line
Dr Thanos Pallis	
University of the Aegean, Greece President, International Association of Maritime Economists (IAME)	at failer in a



Abstract:

A total of 25, 2 million single persons cruised one of the numerous itineraries calling to ports around the world in 2017. This total is expected to reach 28 million in 2018, and soon double the number of people that were cruising per year a decade ago (15 million in 2008). Beyond revealing a most dynamic shipping sector, such growth illustrates a changing business model: bigger vessels, market segmentation, enriched on-board amenities, and redesign of itineraries in order to add new destinations and attract further age and social groups.

Cruise ports, whether these are ports of call, home-ports, or hybrid ports need to adjust in order to secure their selection as part of cruise itineraries, and whenever possible to serve most profitable (in terms of economical returns) home-porting activities. The keynote presentation will focus on the operational, governance and strategy adjustments that will help the port industry to adjust and secure the sustainable growth of cruise activities.

Feature Session

Feature Session 1

Day 2 (22 May) : 13:20 –14:00

Session Chair: Dr Achim I Czerny

Room: CD302

Impacts of High-speed Rail on Airlines, Airports and Regional Economies: A survey of Recent Research

Professor Anming Zhang Vancouver International Airport Authority Chair Professor in Air Transportation at Sauder School of Business, University of British Columbia



Abstract:

This presentation first reviews impacts of the air-HSR competition on airlines, focusing on the overall effects of parallel HSR services on passengers' mode choice as well as on airlines' flight frequencies, traffic volumes, airfares and market power. The modal complementarity and air-HSR intermodal services, together with the network feature of airline business, are also discussed. The main part of the paper is the second part, which summarizes theoretical and empirical findings on the impacts of HSR on airports and regional economies. The main insights from our extensive review are: First, HSR can have a traffic redistribution effect on airport traffic: in particular, some primary airports with good air connectivity may gain traffic while others may lose traffic. Second, to mitigate congestion at hub airports, policy makers

may consider diverting some traffic to regional airports by promoting air-HSR intermodal services. Third, as HSR may stimulate long-haul / international air traffic, its overall impacts on emission reduction remains unclear. Finally, similar to the impacts on airport traffic, spatial disparity of economic activities may also occur after the introduction of HSR. In general, the disparity tends to rise between the cities with HSR and those without HSR, as the former gets better accessibility. However, among the cities with HSR services, the disparity between the large and small cities could increase or decrease depending on several factors.

Feature Session

Feature Session 2

Day 3 (23 May) : 09:00 - 09:40

Session Chair: Dr Dong Yang

Room: CD302

Researchers on Decision Optimization Problems for Port Operations and Maritime Logistics

Professor Lu Zhen Associate Dean, School of Management, Shanghai University Associate Editor, Journal of the Operational Research Society, IMA Journal of Management Mathematics, Asia-Pacific Journal of Operational Research



Abstract:

China hosts seven out of the ten largest ports in the world. The industries related to the ports become more and more important. The academic research about the port and sea transportation has increasingly attracted the attention of the scholars in the management science and engineering area. This talk introduces the latest research problems in port operation management and shipping logistics. Moreover, we discuss the potential future directions of this area.

Feature Session

Feature Session 3

Session Chair: Dr T. L. Yip

Unmanned Ships and Intelligent Navigation Techniques

Professor Liu Jingxian Chair Professor and Dean School of Navigation, Wuhan University of Technology Editor-in-Chief, Transportation Enterprise Management, Editorial Board Member of Navigation of China

Day 3 (23 May) : 11:00 - 11:40

Room: CD302



Abstract:

With the rapid development of unmanned ship and intelligent navigation technology in China, Unmanned ships and intelligent navigation techniques have attracted increasing attention both from academic and industry institutes. This presentation mainly focuses on the current progress and future directions for research and applications in unmanned ships. In particular, the automatic driving and intelligent collision avoidance techniques related to the unmanned ships will be surveyed to make us better understand this subject. It is well known that reliable navigation is a key requirement for autonomous ships. This presentation will deeply discuss the intractable safety problems arising from the popular maritime unmanned navigation. Newly developed big data and artificial intelligence techniques related to unmanned ships and intelligent navigation will also be introduced in this presentation. The corresponding monitoring and controlling strategies will be presented to guarantee safe and reliable navigation. This representation is ended with the directions for future work on full realization of unmanned ships in practical applications.

School Session

School Session 1 & 2

Day 1 (21 May) : 09:00 - 10:30

11:00 - 12:30

Room: CD301

Session Chair: Professor Chin-Shan Lu

Optimization Models Applications : Empirical Studies of Shipping and Port Management

Dr Shuaian Hans Wang Associate Professor, The Hong Kong Polytechnic University Associate Editor, Transportation Research Part E: Logistics and Transportation Review



Abstract:

In this presentation, I will talk about how to conduct research that is related to mathematical modeling in maritime studies (shipping and port operations). The target audience of the presentation is PhD students and other junior researchers in the field of maritime studies who are interested in applying operations research techniques to shipping and port management problems. First, I will use examples to show how to identify meaningful research problems. Second, I will elaborate on a few research methods that are frequently used in maritime studies. Finally, I will show some tips in academic paper writing.

School Session

School Session 3

Day 1 (21 May) : 14:00 – 15:30

Session Chair: Professor Chin-Shan Lu

Structural Equational Modeling (SEM) Application: Empirical Studies of Shipping and Logistics

Professor Ching-Chiao Yang National Kaohsiung University of Science and Technology Associate Editor, Journal of Shipping and Trade Managing Editor of Maritime Quarterly (Taiwan)

Abstract:

The SEM model is a multivariate technique and has been commonly applied in business research. It is most appropriate to evaluate causal and effect relationship when the research has multiple constructs. The presentation thus aims to introduce the use of SEM model in shipping and logistics researches. Firstly, some key concepts and definition will be addressed. Then, the main processes will be introduced including model formation, model estimation, model assessment, and so on. In particular, the confirmatory factor analysis was also introduced for assessing the validity of model. Finally, a true case study will be demonstrated to highlight how to apply the SEM model in shipping and logistics researches. Hope each participant can get some knowledge on how to apply SEM model in the research.

School Session 4

Day 1 (21 May): 16:00 – 17:15

Session Chair: Professor Chin-Shan Lu

Moderating and Mediating Effects in SEM

Dr Christina W. Y. Wong Associate Professor, The Hong Kong Polytechnic University Editor, Maritime Business Review Editor, International Journal of Shipping and Transport Logistics Associate Editor, Journal of Operations Management Regional Editor, International Journal of Operations and Production Management

Abstract:

In the School Session, SEM will be introduced as a tool to analyze moderating and mediating effects of research model.



Room: CD301



Room: CD301

Industrial Session 1 Da	y 2 (22 May): 13:20 - 1	L4:50
Section Chairs: Mr. Raymond T C Wong and Mr. Manson Che (Organized by IST and HKLMSA)	ang	Room: CD301
Block-Chain Electronic Bill of Lading		
Speaker: Mr. Kevin X. B. Li President, South China & Taiwan Zim Integrated Shipping Services Ltd		
Moderators: Raymond T.C. Wong, Chairman of Institute of Seatransport (IST) Sunny Ho, Chairman of The Hong Kong Logistics Management Staff A Manson Cheung, Vice Chairman of IST, HKLMSA, and Institute of Branch) Cho Hor Wong, Director of Five Oceans	ssociation (HKLMSA) Chartered Shipbrokers (Ho	ong Kong

Industrial Session 2	Day 2 (22 May): 15:00 – 16	5:30
Session Chair: Dr Stephen Y.K. Li		Room: CD301
Regulating Ships for Safety, Environmental Protection and Mr. LAU Yau-wah, Ben Senior Surveyor of Ships in Government New Construction	l Welfare of Seafarers Section, Marine Department	
Maritime Autonomous Ships (MAS), its Implementation a	nd Opportunities in Hong Kong	
Dr Stephen Y.K. Li Professor of Practice (Maritime Studies), Department of Lo Polytechnic University	gistics and Maritime Studies, The H	ong Kong

Special Session 1

Day 2 (22 May): 17:00 – 18:30

Session Chairs: Dr Xiaoming Xu and Dr Zhou Xu	Room: CD301
Presentation 1 An Efficient Train Scheduling Algorithm on a Single-track Railway System	
Xiaoming Xu (Presenter) Hefei University of Technology	
Keping Li Beijing Jiao Tong University	
Lixing Yang Beijing Jiao Tong University	
Ziyou Gao	
Abstract:	
We'll present an iterative train scheduling algorithm that developed based on a train movement method. In this method, the time space statuses of trains in the railway system are firstly divid categories, including dwelling at a station, waiting at a station and traveling on a segment. A check then particularly proposed to guarantee the feasibility of transition among different statuses whe transition is defined as a discrete event. Besides, several detailed operation rules are also develop the scheduling procedure in some special cases. We conduct some extensive experiments by us generated data set to show the effectiveness and efficiency of the proposed method.	ent simulation ded into three ck algorithm is re each status oped to clarify sing randomly
Presentation 2 Integrated Railway Timetable Rescheduling and Dynamic Passenger Route Choice in a Complet	e Blockage
Shuguang Zhan (Presenter) Southwest Jiaotong University,	
S. C. Wong The University of Hong Kong	
Pan Shang Tsinghua University	
Qiyuan Peng Southwest Jiao Tong University	
S. M. Lo City University of Hong Kong	

Abstract:

In this talk, we are going to present a work on the train rescheduling in a seriously disrupted situation where a track segment is completely blocked for a relatively long period of time, e.g., 2 hours. In this disrupted situation, trains cannot pass the disrupted segment during the disruption. Passengers will be influenced by the disruption and cannot travel as scheduled. We simultaneously reschedule trains and passenger routes from both operator's and passenger's perspectives. Train rescheduling and passenger route choice problem is formulated by an Integer Linear Programming model based on a space-time network. We decompose the integrated model into two subproblems, train rescheduling problem and passenger route choice problem, by Lagrangian relaxation approach. Both subproblems can be further decomposed into a series of shortest path problems for trains or passenger groups, and solved by dynamic programming. Finally, we test our models and algorithms on both a small artificial railway network and a part of Chinese high speed railway network.

Presentation 3

Integrated Train Timetabling and Locomotive Assignment

Xiaoming Xu Hefei University of Technology

Chung-Lun Li Hong Kong Polytechnic University

Zhou Xu (Presenter)

Hong Kong Polytechnic University

Abstract:

In this talk, we are going to present our recent study on modeling and solving an integrated train timetabling and locomotive assignment problem. We first present a three-dimensional state-space-time network model in which a state is used to indicate which train a locomotive is serving. Based on this, we formulate the problem as a minimum cost multi-commodity network flow problem with incompatible arcs and integer flow restrictions. We then develop a Lagrangian relaxation heuristic for solving this network flow problem, and conduct a computational study to show its effectiveness.

Special Session 2 (Organized by Logistics Research Centre)	Day 3 (23 May) : 09:00 – 10:30
LRC Logistics Research Centre 物流研究中心 The Hong Kong Polytechnic University	
Session Chair: Professor Chi To Daniel Ng	Room: CD301
New Retail versus Traditional Retail in E-commerce: Channe Price Competition, and Consumer Recognition Xuan Wang, Chi To Daniel Ng*	l Establishment,
Optimal Government Subsidy to Vaccine Market under Cons Yuqing Pan*, Chi To Daniel Ng	sumer Regret
Robust Liner Schedule Design in a Cycle with Service Level G Xiaofan Lai*, Fan Wang, Jun Xia	uarantee
An Evolutionary Game Approach to Developing an N-enterp for Domino Accident Prevention in a Chemical Cluster Jun Wu, Hui Yang, Yuan Cheng, Chi To Daniel Ng*, T.C.E. Cher	rise Investment Strategy
Acquisition Price Competition in Dual Supply Chains: Applica Chi To Daniel Ng*, Yanlin Bi, Jun Wu	tion to Waste Cooking Oil Recycling

Special Session 3 Day 3 (23 May): 11:00 – (Organized by Texas A & M University at Galveston) Image: Comparison computer structure Image: Comparison computer structure	· 12:30
Session Chair: Professor Joan P Mileski	Room:
Interdiscipling we Approach to Collaborative Maritime Descents Daing Much with Little	CDSUI
Interdisciplinary Approach to Collaborative Maritime Research: Doing Much with Little	
loan D Miloski. Donartmont Hoad	
Texas A & M University at Galveston	
My views on trailblazing collaboration	
Grace Wang, Associate Professor	
Texas A & M University at Galveston	
How to collaborate across researcher level and borders	
Ping Wang, Assistant Professor	
Texas A & M University at Galveston	
Assistant Professor's Perspective with cross college/ department researching	
Cassia Bomer Galvao, Assistant Professor	
Texas A & M University at Galveston	
As mentors become colleagues	
Mazen Brho	
Assistant Professor	
Texas A & M University at Galveston	
Abstract: Truly impactful maritime business research can happen along the edges and inter	sections of

Abstract: Truly impactful maritime business research can happen along the edges and intersections of business, science, engineering and social science disciplines. In order for maritime business researchers to participate in this type of interdisciplinary research, collaborations must be formed with researchers in science, engineering, and various social sciences. This panel presentation will address the importance of good collaborations with other maritime business researcher and with other researchers across disciplines to produce globally impactful and high quality maritime business research. We explore a case of a department whose research was relatively unknown less than 8 years ago. Now that same department is now ranked highly for its maritime business degree and research in its country. Critical to the success of collaborative research, a maritime business department, first and foremost, must have a strong departmental research program. The research program should have a strategy, personnel motivated to collaborate, and institutional support for interdisciplinary successful research. Success, in this case, is defined as research that has high impact on the literature and, more importantly, on the industry.

This panel presentation will address what works and what does not work in producing collaborative interdisciplinary maritime business research. Furthermore, we address what are the right, wrong and inappropriate behaviours in collaborative research. We discuss the planning an impactfulness strategy, overcoming independence by researchers to benefit collaboration and impact, understanding that sharing is caring, brainstorming with all researchers along the interdisciplinary lines and looking for gaps in the research that can best be served with many lenses. We find that good collaboration strategies include 1. Exchanging ideas in weekly meetings among department members; 2. Using the department head to reach out across colleges to arrange forums for collaborative discussions on maritime topics; 3. Providing resources to travel to conferences within and outside the comfort zones of the researchers' areas; 4. and inviting and supporting researchers outside the university to meet and collaborate with internal researchers. The panelists bring their experiences and expertise to the roundtable format to begin a discussion of what they have learned and the keys to successful interdisciplinary collaborations.

Session 1 Transport Pricing				
		Day 2 (2	2 May): 14:00 – 14:50	
Session Chair	: Dr Achim I Czerny		Room: CD302	
M170	Pricing in Overlapping	Transport Networks		
	Achim I Czerny	The Hong Kong Polytechnic University		
	Peter-J Jost	School of Management		
	Benny Mantin	University of Waterloo		
M162	A Comprehensive Com	parison on Cost Function Applied in Shipping	and Aviation research	
	Tingting Han	The Hong Kong Polytechnic University		
	Eejia Bao	The Hong Kong Polytechnic University		
	Dong Yang	The Hong Kong Polytechnic University		
	Yulai Sarah Wan	The Hong Kong Polytechnic University		

Session 2	Liner Snipping and Te	erminal Salety	
		Day 2 (2	2 May): 13:20 – 14:50
Session Chair	: Professor Pei-Chun Lin		Room: CD303
M64	The Spillover Effect of Liner	r Shipping Performance on Trade Values for Coastal Countries	
	Po-Yuan Huang	National Cheng Kung University	
	Pei-Chun Lin	National Cheng Kung University	
	Chung-Wei Shen	National Cheng Kung University	
	Szu-Yu Kuo	National Penghu University of Science a	and Technology
M42	Evaluation System Design a	nd Index Model Construction for Contair	ner Liner Shipping
	Operation		
	Chun-Juan Wang	Shandong Jiaotong University	
	Chao Chen	Shandong Jiaotong University	
	Yang Liu	Shandong Jiaotong University	
M115	Marketing Service Capabilit	ies in Container Shipping: Construct Dev	elopment and
	Measurement		
1			
	Chih Wen Lee	The Hong Kong Polytechnic University	
	Chih Wen Lee Chin-Shan Lu	The Hong Kong Polytechnic University The Hong Kong Polytechnic University	
	Chih Wen Lee Chin-Shan Lu T. C. Edwin Cheng	The Hong Kong Polytechnic University The Hong Kong Polytechnic University The Hong Kong Polytechnic University	
	Chih Wen Lee Chin-Shan Lu T. C. Edwin Cheng Kuo-Chung Shang	The Hong Kong Polytechnic University The Hong Kong Polytechnic University The Hong Kong Polytechnic University National Taiwan Ocean University	
L87	Chih Wen Lee Chin-Shan Lu T. C. Edwin Cheng Kuo-Chung Shang Risk Assessment of Operatio	The Hong Kong Polytechnic University The Hong Kong Polytechnic University The Hong Kong Polytechnic University National Taiwan Ocean University Donal Safety in Inland Container Terminals	s (ICTs)
L87	Chih Wen Lee Chin-Shan Lu T. C. Edwin Cheng Kuo-Chung Shang Risk Assessment of Operatio Jun-Wen P. Chen	The Hong Kong Polytechnic University The Hong Kong Polytechnic University The Hong Kong Polytechnic University National Taiwan Ocean University onal Safety in Inland Container Terminal National Kaohsiung University of Science	s (ICTs) Se and Technology
L87	Chih Wen Lee Chin-Shan Lu T. C. Edwin Cheng Kuo-Chung Shang Risk Assessment of Operatio Jun-Wen P. Chen Wen-Kai K. Hsu	The Hong Kong Polytechnic University The Hong Kong Polytechnic University The Hong Kong Polytechnic University National Taiwan Ocean University Deal Safety in Inland Container Terminal National Kaohsiung University of Science National Kaohsiung University of Science	s (ICTs) te and Technology te and Technology
L87 M23	Chih Wen Lee Chin-Shan Lu T. C. Edwin Cheng Kuo-Chung Shang Risk Assessment of Operatio Jun-Wen P. Chen Wen-Kai K. Hsu Barriers and Cost Efficiency	The Hong Kong Polytechnic University The Hong Kong Polytechnic University The Hong Kong Polytechnic University National Taiwan Ocean University onal Safety in Inland Container Terminals National Kaohsiung University of Science National Kaohsiung University of Science Analysis of Ultra Large Container Ships i	s (ICTs) se and Technology se and Technology n the
L87 M23	Chih Wen Lee Chin-Shan Lu T. C. Edwin Cheng Kuo-Chung Shang Risk Assessment of Operatio Jun-Wen P. Chen Wen-Kai K. Hsu Barriers and Cost Efficiency Liner Shipping Companies' F	The Hong Kong Polytechnic University The Hong Kong Polytechnic University The Hong Kong Polytechnic University National Taiwan Ocean University onal Safety in Inland Container Terminals National Kaohsiung University of Science National Kaohsiung University of Science Analysis of Ultra Large Container Ships i Perspective	s (ICTs) e and Technology e and Technology n the
L87 M23	Chih Wen Lee Chin-Shan Lu T. C. Edwin Cheng Kuo-Chung Shang Risk Assessment of Operatio Jun-Wen P. Chen Wen-Kai K. Hsu Barriers and Cost Efficiency Liner Shipping Companies' F Shih-Chan Ting	The Hong Kong Polytechnic University The Hong Kong Polytechnic University The Hong Kong Polytechnic University National Taiwan Ocean University onal Safety in Inland Container Terminals National Kaohsiung University of Science National Kaohsiung University of Science Analysis of Ultra Large Container Ships in Perspective National Taiwan Ocean University	s (ICTs) se and Technology se and Technology n the

Session 3 Intermodal Transport and Logistics

		Day 2 (22 May): 13:20 – 14:50
Session Chair: Pr	ofessor Hong Yan	Room: CD304
A67	Exact Solutions of the Spherical Contin	uous Hub Location Problems in a Continent
	Atsuo Suzuki	Nanzan University
A116	Hub Status of Primary Cities in Asia fro	m the Perspective of International Air
	Transportation	
	Hidenobu Matsumoto	Kobe University
	Koji Domae	Kansai Gaidai University
A158	Time Series forecasting using ARIMA vs	s. Bayesian Structural Time Series Models: The Case
	of Indian Airline Industry	
	Meena Madhavan	Chiang Mai University
	Pairach Piboonrungroj	Chiang Mai University
	Mohamed Ali Sharafuddin	St. Theresa International College
M125	System Dynamic Modelling of the Inter	rmodal Transportation System in Guangdong-Hong
	Kong-Macao Greater Bay Area	
	Huiling Zhong	South China University of Technology
	Dan Cheng	South China University of Technology
	Yimiao Gu	South China University of Technology
L157	Integration of Private Medical Clinics a	nd Medical Suppliers
	Chung Lam Ng	The Hong Kong Polytechnic University
	Hong Yan	The Hong Kong Polytechnic University

Session 4 Green Shipping

Day 2: 13:20 - 14:50

Session Chair: Dr Shuaian Hans Wang Room: DE309			Room: DE309
M27	Reducing Air Emissions from Ships: Policy Development		
	Shuaian Hans Wang	The Hong Kong Po	lytechnic University
M48	Sustainability Cruising and Its Supply Chain		
	Grace Wang	Texas A & M Unive	ersity at Galveston
M29	Drone Scheduling to Monitor Air Emis	ssions from Ships	
	Kai Wang	The Hong Kong Po	olytechnic University
	Jun Xia	The Hong Kong Po	lytechnic University
	Shuaian Hans Wang	The Hong Kong Polytechnic University	
M38	Share Power Planning: Making At-be	berth Air Emission Reduction Effective	
	Lingxiao Wu	The Hong Kong Po	lytechnic University
	Shuaian Hans Wang	The Hong Kong Polytechnic University	
M30	Liner Shipping Service Planning Und	ler Sulfur Emission	Regulations
	Shuaian Hans Wang	The Hong Kong Po	olytechnic University
	Dan Zhuge	The Hong Kong Polytechnic University	
	Lu Zhen	Shanghai Universit	Y
	Chung-Yee Lee	The Hong Kong Ur Technology	niversity of Science and

Session 5 Air Line Services			
	Day 2	: 15:00 – 16:30	
Dr Yulai Sarah Wan		Room: CD302	
The Optimum Service Quality	y of International Air Express – The Perspect	ives of High-tech	
Manufacturers			
Show-Hui S. Huang	Shu-Te University		
Wen-Kai K. Hsu	National Kaohsiung University of Science	and Technology	
Jun-Wen Chen	National Kaohsiung University of Science	and Technology	
Hong Kong's Aviation and To	urism Growth – An Empirical Investigation		
Wai Hong Kan Tsui	Massey University		
Xiaowen Fu	The Hong Kong Polytechnic University		
Chuanzhong Yin	Shanghai Maritime University		
Huaxin Zhang	Shanghai Maritime University		
From Full Freighters to Belly	Cargo Aircraft: Stochastic Analysis of Alterna	atives for Freight in	
Schiphol Airport			
Miguel Mujica Mota	Amsterdam University of Applied Science	es	
Abdel El Makhloufi	Amsterdam University of Applied Science	es	
Rodrigo Romero	VU Amsterdam University		
How are Passengers' Feeling	s About Code-sharing and Who are They?		
Jin-Long Lu	National Kaohsiung University of Science	and Technology	
Chih-Wen Yang	National Taichung University of Science a	ind Technology	
Air Passengers' Flight Choice	and Ticket Purchase Behavior for Low-cost	Airlines	
Chieh-Hua Wen.	Feng Chia University		
Fang-Ning Yang	Feng Chia University		
	Image: constraint of the constra	Image: Service	

Session 6 Cruise Port and Services

Day 2 (22 May): 15:00 – 16:			
Session Chair: Dr Edward Lee Room: C			Room: CD303
M109	Port Competitiveness Models for Cr	ruise Industry	
	Douglas N. Hales	The University of Rhode Island	
	Kuo-Chung Shang	National Taiwan Ocean University	
	Ted T. C. Lirn	National Taiwan Ocean University	
	Dara Schniederjans	The University of Rhode I	sland
M107	Evolution and Emerging Trends in	Cruise Research	
	Grace Wang	Texas A & M University at	t Galveston
	Peyton Heinze	Texas A & M University at	t Galveston
M110	Integrated Efficiency of Port and H Regionalization: A Network SBM-D	interland from The Perspe	ective of Port
	Young-Tae Chang	Inha University	
	Ahhvun Jo	Inha University	
M85	The Moderating Bole of Service Rec	overy on Customer Lovalty	, in the Context of Cruise
NIC5	Passengers	overy on customer boyany	in the context of cruise
	Ming-Ren Chiou	National Taiwan Ocean U	niversity
	Shih-Liang Chao	National Taiwan Ocean U	niversity
	Hsin-Yu Hsieh	National Taiwan Ocean U	niversity
M155	A Study of the Impact of Cruise Line	r Service Quality on Custo	mer Loyalty – Using Trust as a
	Moderator		
	Tan-Shou Shee	National Taiwan Ocean U	niversity
	Shih-Liang Chao	National Taiwan Ocean U	niversity
	Hsuan-Shih Lee	National Taiwan Ocean U	niversity
	Hsian-Ning Hsu	National Taiwan Ocean U	niversity

Session / IVI	aritime Safety and Risk		
		Day	2 (22 May): 15:00 – 16:30
Session Chair: Dr Petrus Choy Room: CD		Room: CD304	
M25	The Challenge of Minimizing F	zing Financial Losses Due to Accidents at Sea – Observing	
	Regulatory Compliance or Mal	Vaking a Profit? Developing a Model Safety Culture in Merchan	
	Shipping		
	Deb Nayaran Goswami	Maastricht School of Manag	gement
	Stephanie Jones	Maastricht School of Manag	gement
	Jose Tongzon	Maastricht School of Manag	gement
M40	Ship Risk Classification in Port	State Control	
	Wu-Hsun Chung	National Taiwan Ocean Uni	versity
	Shu-Te Sung	National Taiwan Ocean Uni	versity
	Sheng-Long Kao	National Taiwan Ocean Uni	versity
	Chien-Chung Yuan	Taipei University of Marine Technology	
M108	Maritime Traffic Safety Enhan	cement with Computer Visior	n Techniques
	Ryan Wen Liu	Wuhan University of Techno	ology
M55	Maritime Accident Risk Probal	oility Prediction of Sea lanes E	Based on Dynamic Bayesian
	Network		
	Meizhi Jiang	Dalian Maritime University	,
	Jing Lu	Dalian Maritime University	/
M84	Research on Investigation and	Treatment Mechanism of Wa	ater Traffic Accidents
	Xin Yang	Wuhan University of Techr	nology
	Jingxian Liu	Wuhan University of Techr	nology
	Zhao Liu	Wuhan University of Techr	nology
	Deng Jian	Wuhan University of Techr	nology
	Zhi Yuan	Wuhan University of Techr	nology

Session 8	Green Shipping (1)		
		Day 2 (22 May): 15:00 – 16:30	
Session Chair: Dr Judy Tong Room: DE309			
M99	Scenario-based System Dy	namics Analysis of Ship Emission	
	Jasmine Siu Lee Lam	Nanyang Technological University	
	Yuwei Yin	Nanyang Technological University	
M53	Spatial Analysis of AIS-bas	ed LNG Fleet Emission Inventory	
	Hoegwon Kim	Tokyo University of Marine Science and Technology	
	Daisuke Watanabe	Tokyo University of Marine Science and Technology	
	Shigeki Toriumi	Chuo University	
M119	Sustainable seaports in Ch	ina: A secondary study	
	Yu Gong	University of Southampton	
L56	The Study of the Relations	hip Between Citizenship Behaviors and the Traffic Safety	
	Behavior		
	Tsai Chaur-Luh	National Kaohsiung University of Science and Technology	
M110	Renewable Energy Option	s in Seaports	
	Wei Yim Yap	Singapore University of Social Sciences	
	Jasmine Siu Lee Lam	Nanyang Technological University	

Session 9 Port Logistics				
		Day	2 (22 May): 17:00 – 18:30	
Session Chair: Professor Chi To Daniel Ng Room: CD302				
M13	Interactions and Influencing Fa	Factors of Baltic Dry Index and Tianjin Shipping Index		
	Yimiao Gu	South China University of Te	echnology	
	Xiaoxu Dong	South China University of Te	echnology	
	Zhenxi CHEN	South China University of Te	echnology	
L31	Online Integrated Optimization	n Model for Container Rehan	dling and Pickup Sequence in	
	Container Terminals			
	Su-min Chen	Dalian Maritime University		
	Qing-cheng Zeng	Dalian Maritime University		
L35	Dynamic Transportation Plann	Inning Under Non-linear Convex Congestion Costs at Terminals		
	Amit Vatsa	Indian Institute of Managem	nent Indore	
	Saurabh Chandra	Indian Institute of Managem	nent Indore	
L83	Bi-level Programming for the R	esilience Problem of Port-hin	terland Container	
	Transportation Networks			
	Song Gao	Zhejiang University		
	Nan Liu	Zhejiang University		
L99	Multimodal Iron Ore Inbound I	ogistics Service Network Des	sign Under Uncertainty	
	Nan Ni	Central South University		
	Dezhi Zhang	Central South University		
	Xiaofan Lai	Sun Yat-sen University		

Session 10	Liner Shipping and Intermodal			
		Day 2 (22 May): 17:00 – 18:30	
Session Chair: Dr Meifeng Luo Room: CD303				
M106	Modelling N-person Non-cooperat Alliance	ooperative Equilibria in Slot Exchange of Ship Liners Under a Ship		
	Eugene Y. C. Wong	The Hang Seng University of H	ong Kong	
	Allen H. Tai	The Hong Kong Polytechnic Ur	niversity	
M140	Economic Analysis of Liner Compar	ny's Collection of Fuel Surcharg	je	
	Jin Yang	Jimei University		
M145	Dynamic Pricing for Revenue Mana	gement in Liner Shipping Face	d with Seasonal Variations	
	and No-shows			
	Meifeng Luo	The Hong Kong Polytechnic Ur	niversity	
M159	Half-Century Computing Developm	ents in Maritime Studies: Futu	re Directions	
	Thanapong Chaichana	Chiang Mai University		
M18	An Intergrated Fuzzy ANP-QFD App	proach for Port Selection Consi	dering Intermodal	
	Transportation: A Case Study abou	t China-Africa Line Under Belt	and Road Initiative	
	Huiling Zhong	South China University of Tec	hnology	
	Xinyi Zou	South China University of Tec	hnology	
	Yimiao Gu	South China University of Tec	hnology	

Session 11	Airline Operations & Manag	ement			
		Day 2 (22 May): 17:00 – 18:30		
Session Chair	Session Chair: Dr C. L. Johnny Wan Room: CD304				
A105	When is Good Time? Market Entry Timi Asia-Pacific Low Cost Airlines	ning from Competitive Dynamics Perspective: Case of			
	Don Jyh-Fu Jeng	National Chengchi Unive	ersity		
	Le Truong Bao Tran	National Cheng Kung Un	iversity		
A135	Landing Charges with Ramsey Priciing N	lechanism: An Application	at TPE		
	Jin-Ru Yen	National Taiwan Ocean l	Jniversity		
	Chia-Yi Shih	National Taiwan Ocean l	Jniversity		
	Chia-Ping Tsou	National Taiwan Ocean U	Jniversity		
	Man-Hsuan Chen	National Taiwan Ocean I	Jniversity		
A169	The Impact of Mergers and Acquisitions	on Profitability and Marke	tability of Major Airlines		
	Young-Tae Chang	Inha University			
	Suhyung Lee	Inha University			
A46	Competition between High-speed Rail a	nd Airlines with Heterogen	eous Passengers		
	Yulai Sarah Wan	The Hong Kong Polytech	hnic University		
A137	Airline Unit Load Device Re-Dispatching	under Stochastic Demands	5		
	Ping-Hsuan Hsieh	National Taiwan Ocean	University		
	Ching-Hui Tang	National Taiwan Ocean	University		

Session 12	Maritime and Port		
		Day 2 (22 May): 17:00 – 18:30
Session Chair: Dr Girish Gujar Room: DE309			Room: DE309
M151	The Evolution of Seasonality Patterns o	s of Dry Bulk Shipping	
	Manolis G. Kavussanos	Athens University of Eco	nomics and Business
	Wenhao Peng	The Hong Kong Polytech	nic University
	T. L. Yip	The Hong Kong Polytech	nic University
M118	Dynamic Interdependence and Spillove	rs of Market Volatility ov	er Distance: Evidence from
	Bunker Fuel Markets		
	Xiaoxia Li	The Hong Kong Polytechnic University	
	T. L. Yip	The Hong Kong Polytech	inic University
M136	Developing Maritime Express Business i	siness in Taiwan	
	Rong-Her Chiu	National Taiwan Ocean	University
	Chen-Hsin Liao	National Taiwan Ocean	University
M149	Liability Implications of the Rotterdam	Rules for Indian Dry Ports	5
	Girish Gujar	United International Col	lege, BNU-HKBU
	Sik Kwan Tai	United International Col	lege, BNU-HKBU
	Adolf K. Y. Ng	University of Manitoba	
M124	New Developments of Seaworthiness -	In Aspect of the Rotterda	am Rules
	Shengyun Ding	Dalian Maritime Univers	sity

Session 13	Green Shipping (2)		
		Day 3 (2	3 May): 09:40 – 10:30
Session Chair: D	r Jingbo Yin		Room: CD302
M92	System Impulse Modeling of the	Green Shipping Policies	
	Lixian Fan	Shanghai University	
	Jingbo Yin	Shanghai Jiao Tong University	
M22	Shipowner's Responses under th	e Global Sulfur Control Policy	
	Liang Li	Shanghai Jiao Tong University	
	Ying Kou	Shanghai Jiao Tong University	
	Qian Yao	Shanghai Jiao Tong University	
M156	Research on the ship exhaust emissions monitoring techniques in port water		
	Xin Peng	Wuhan University of Technology	/
	Yuanqiao Wen	Wuhan University of Technology	/
	Changshi Xiao	Wuhan University of Technology	/
	Liang Huang	Wuhan University of Technology	/
	Chunhui Zhou	Wuhan University of Technology	/
	Fan Zhang	Wuhan University of Technology	/
	Haiwen Yuan	Wuhan University of Technology	/

Session 14	Logistics and Free Trade	Zone		
		Day 3 (2	23 May): 09:00 – 10:30	
Session Chair: Professor Shih-Liang Chao			Room: CD303	
L86	Using the Kano Model to Investi	gate the Quality of a Pharmaceu	tical Logistics Services: A	
	study of Taiwanese Health Insur	ance Pharmacies		
	Shih-Liang Chao	National Taiwan Ocean University	ersity	
	Chin-Ping Chuang	National Taiwan Ocean University	ersity	
	Hsuan-Yun Lin	National Taiwan Ocean University	ersity	
L98	The Impact of Corruption on Log	istics: By Methodology of PLS-SI	M	
	Dongheon Lee	Inha University		
L69	Distribution Structure Design: In	ventory of Practices in 3 Sectors		
	Alexander T. C. Onstein	Delft University of Technology		
	Lorant A. Tavasszy	Delft University of Technology		
	Dick A. van Damme	Amsterdam University of Ap	oplied Sciences	
L44	Using Analytic Hierarchy Process to Analyze the Development Strategies of Multi-			
	temperature Logistics Center in	n Free Trade Zone		
	Feng-Ming Tsai	National Taiwan Ocean University		
	Chih-Hung Wu	National Taiwan Ocean University		
	Pin-Yen Hsieh	National Taiwan Ocean Uni	versity	
M93	Research on Compression and C	lustering of Vessel Trajectory in	the Intersection Waters	
	Based on AIS Data	- · ·		
	Zhi Yuan	Wuhan University of Techn	ology	
	Jingxian Liu	Wuhan University of Techn	ology	
	Yi Liu	Wuhan University of Techn	ology	
	Xin Yang	Wuhan University of Techn	ology	
	Mengyu Zhang	Wuhan University of Techn	ology	

Session 15	Airport Operations			
		Day 3	3 (23 May): 09:00 – 10:30	
Session Chair:	Professor Xiaowen Fu		Room: CD304	
A127	DEA Window Analysis for Chinese Ai Adopting CFPR	irport Efficiency Using Weighted Input Variables		
	Wen Lu	Incheon National Universit	y	
	Sung-hoon Park	Incheon National Universit	y	
	Tae-Hyeon Yang	Incheon National Universit	y	
	Gi-Tae Yeo	Incheon National Universit	У	
	Tianci Huang	Qingdao University of Scier	nce & Technology	
A33	Industry Choice for Airport Economi	c Zone by Multi-Objective (Optimization	
	Dan Wang	Dalian Maritime Universit	y	
	Lixin Shen	Dalian Maritime Universit	У	
	Zhongzhen Yang	Ningbo University		
A58	An Airport Pricing Versus Slots Aame: The Case of Substitute Air Services			
	Hao Lang	The Hong Kong Polytechni	c University	
A152	Analysis of the Matching Relationship between Airport Passenger Transport Scale and Home			
	City Scale in China Scale in China Based on Relative Concentration Index			
	Dan Wang	Dalian Maritime University		
	Zhongzhen Yang	Ningbo University		
	Rui Ding	Ningbo University		
	Chao Wang	Ningbo University		
A96	Climate Change Adaptation for Airpo	orts by a Climate Change Ri	sk Indicator (CCRI) framework	
	Mark Ching-Pong Poo	Liverpool John Moores U	niversity	
	Zaili Yang	Liverpool John Moores U	niversity	
	Zhuohua Qu	Liverpool John Moores U	niversity	
	Paul Tae-Woo Lee	Zhejiang University		
	Xuehao Feng	Zhejiang University		
	Delia Dimitriu	Manchester Metropolitar	n University	

Session 16	Shipping Safety and Innovation			
		Day 3	(23 May): 09:00 – 10:30	
Session Chair: Dr Taih-Cherng Lirn Room: DE309			Room: DE309	
L104	Leader-Member Exchange, Emo	tional Intelligence, Job Stress, a	nd Safety Behavior in	
	Container Terminal Operations			
	Hsiang Kai Weng	The Hong Kong Polytechnic Ur	niversity	
	Chin-Shan Lu	The Hong Kong Polytechnic Ur	niversity	
	Kee-hung Lai	The Hong Kong Polytechnic Ur	niversity	
M133	The Linkages between Leader-M	ember Exchange, Team-Membe	er Exchange, Safety Climate	
	and Safety Citizenship Behaviors	Sehaviors: A Seafarer's Perspective		
	Jiunn-Liang Guo	National Taiwan Ocean University		
	Je-Min Pan	National Taiwan Ocean University		
	Kuo-Chung Shang	National Taiwan Ocean University		
	Chin-Shan Lu	The Hong Kong Polytechnic University		
M164	The Effects of the Employee's Pe	Perceived Safety Behavior in Ferry Services		
	Rhaptyalyani Herno Della	National Taiwan Ocean Unive	rsity	
	Taih-Cherng Lirn	National Taiwan Ocean University		
	Kuo-Chung Shang	National Taiwan Ocean University		
M99	Why Users Postpone Adopting	nnovation During the Early Sta	ge —A Case Study on the	
	Internet-based Platformlization	in Chinese Container Trucking	Industry	
	Yang Chen	Shanghai Maritime University		
	Dong Yang	The Hong Kong Polytechnic University		
M60	China's Inland Water Traffic Security Risk Assessment Based on Data Mining			
	Zhaochen Wang	Shanghai Jiao Tong Universit	Σ γ	
	Jingbo Yin	Shanghai Jiao Tong Universit	Σγ	

Session 17 Shipping Technology				
		Day	/ 3 (23 May): 11:40 – 12:30	
Session Chair: E	Dr Stephen Y.K. Li		Room: CD302	
M19	Maritime Autonomous Surface Ships (MASS) and Its Implementation in Hong Kong			
	Stephen Y. K. Li	The Hong Kong Polytechn	ic University	
	K. S. Fung	Hong Kong Institute of Vo	cational Education	
M81	Forecasting Chinese Cruise Touri	urism Demand with Big Data Chinese Academy of Sciences		
	Gang Xie			
	Yatong Qian	Chinese Academy of Sciences		
	Shouyang Wang	Chinese Academy of Sciences		
M59	Evaluating the inspection efficiency of port state control			
	Yi Xiao	Chung-Ang University Nanjing University of Finance and Economics		
	Mengjie Jin			
	Zhuo Chen	Ocean University of China		
	Kevin X. Li	Zhejiang University		

Session 18	Green Transportation	Day 3 (23 May): 11:00 – 12:30		
Session Chair: Dr Ling Zhu		Room: CD303		
L101	Impacts of Different Low-carbon Policies on Route Decisions in Intermodal Freight			
	Transportation: The Case of the V	Vest River Region in China		
	Xing-Qun Cheng	Dalian University of Technology		
	Chun Jin	Dalian University of Technology		
	Cong Wang	Dalian Maritime University		
	Yuliya Mamatok	Quanzhou Normal University		
L144	Structural Breaks and Fuel Surcharge Policy: Evidence from the U.S. Less-than-Truckload			
	Motor Carrier Industry			
	Angela Yan Du	Fort Hays State University		
	Chi Keung Marco Lu	University of Huddersfield		
L103	Environmental Efficiency of China	a's Transportation Sectors		
	Young-Tae Chang	Inha University		
	Seong-Hyun Cho	Inha University		
	Donggyu Jeon	Seoul National University		
M34	Comparative Analysis of Competi	tiveness of Sino-Euro Railway Express and Liner Shipping in		
	the context of Sulphur Emission C	ontrol Convention		
	Jiaru Jin	Dalian Maritime University		
	Feng Lian	Dalian Maritime University		
	Zhongzhen Yang	Dalian Maritime University		
M24	Smart Contracts and Demurrage i	e in Ocean Transportation		
	Haiying Jia	Norwegian School of Economics		
	Roar Ådland	Norwegian School of Economics		

Session 19	Port Policy and Shipping Co	nnectivity Day 3 (23 May): 11:00 – 12:30		
Session Chair: Dr Judy Tong Room: CD304				
M129	The Linkages between Service Quality, Corporate Image and Customer Loyalty at the			
	Taiwanese Ports			
	Hsu-Li Tsai	Taipei University of Maritime Technology		
	Chin-Shan Lu	The Hong Kong Polytechnic University		
	Chih-Ching Chang	National Taiwan Ocean University		
M80	Cooperative Compensation Mechanis	sm under the Balance of 'Cruise-Port-City' Benefits of		
		Shanghai Maritime University		
	Kai-yuan Li	Shanghai Maritime University		
	Chen-bin Hu	Shanghai Maritime University		
	Ya-iun Deng	Shanghai Maritime University		
	Meifeng Luo	The Hong Kong Polytechnic University		
M168	Port Technical Efficiency Evaluation at	nd Forecasting in ASEAN		
111100	Chukiat Chaiboonsri	Chiang Mai University		
	Pairach Piboonrungroj	Chiang Mai University		
M12	Shipping Connectivity for East Asia and	d the Indian Ocean Region in Relation to the		
	21 st Century Maritime Silk Road			
	Wei Yim Yap	Singapore University of Social Sciences		
M82	82 Vertical Integration of Shipping and Port under Emission Regulations: Competitive Equilibrium and Social Welfare			
	Mari Ito	Tokyo University of Science		
	Yuichiro Takegawa	Tokyo University of Science		
	Ryuta Takashima	Tokyo University of Science		

Session 20	Shipping Marketing			
		Day	y 3 (23 May): 11:00 – 12:30	
Session Chair:	Professor Wei-Ming Wu		Room: DE309	
M120	The Values of Mobile Mar	keting in Ocean Freight Logistic	cs Services	
	Wei-Ming Wu	National Kaohsiung Univer	sity of Science and Technology	
	Ching-Chiao Yang	National Kaohsiung Univer	sity of Science and Technology	
	Chang-Wei Li	National Kaohsiung Univer	sity of Science and Technology	
M114	The Effects of Marketing C	ompetence on Customer Satis	faction and Loyalty in Container	
	Shipping Services			
	Chih Wen Lee	The Hong Kong Polytechnic	c University	
	Chin-Shan Lu	The Hong Kong Polytechnic University		
	T. C. Edwin Cheng	The Hong Kong Polytechnic University		
	Kuo-Chung Shang	National Taiwan Ocean University		
M49	Maritime Shipping Digitali	Maritime Shipping Digitalization: Blockchain-based Technology Applications, Future		
	Improvements, and Intent	Improvements, and Intention to Use		
	Chung-Shan Yang	Chang Jung Christian University		
M16	Global Shipping in Asia in t	Global Shipping in Asia in the 21 st Century		
	Mariner Wang	Ritsumeikan Asia Pacific U	niversity	
M141	Adoption of Blockchain in	Taiwan's Major Manufacturing	g Firms: A Technology-	
	Organization-Environment	Organization-Environment Framework		
	Su-Hao Chang	National Taiwan Ocean Un	niversity	
	Kuo Chung Shang	National Taiwan Ocean Un	liversity	
	Chin-Shan Lu	The Hong Kong Polytechnic University		

Special Issues



Maritime Policy & Management

Special Issue on "Artificial Intelligence & Big Data in Shipping"

Guest Editors:

Dr Kum Fai Yuen Dr Gangyan Xu Dr Jasmine Siu Lee Lam

Technology is advancing rapidly nowadays and leading the transformation of the shipping industry. A huge amount of data regarding every aspect of shipping could be collected that provide rich avenues and vast opportunities to improve the business and operation processes of shipping. Meanwhile, the booming of Artificial Intelligence (AI) makes it possible to effectively reap the benefits of big data and create huge impacts to the industry. It has been widely acknowledged that AI and big data play an ever more important role in driving efficiency and coping with upcoming regulations as well as mounting market pressure in the shipping industry.

The application of AI or big data is gaining grounds in various segments of the shipping industry and has pushed the productive efficiency boundaries of maritime firms. Nevertheless, new challenges and concerns over their wide usage have also surfaced. It changes the ways in which shipping firms make decisions and challenges their traditional management strategies and operation modes. More importantly, it demands new AI methods, big data analytics algorithms, and optimisation models to facilitate the decision-making processes at each phase of the shipping industry.

This special issue at **Maritime Policy & Management** aims to bring together recent technological and methodological advancements concerning AI and big data in the shipping industry. It also welcomes submissions related to improving human-AI interface or AI-ergonomics in the shipping industry. Both research and review papers are welcomed. Topics include, but are not limited to, the following:

- Data-driven optimisation for operations management in shipping
- Internet of Things (IoT) technologies and applications
- Maritime network optimisation
- Autonomous ships: technologies and applications
- Predictive modelling and analysis using big data
- Large-scale multi-dimensional maritime data mining
- Data-driven maritime risk management
- Data security and privacy issues in shipping
- Human-AI interface and AI-ergonomics in shipping
- Critical success factors of AI and big data in shipping
- Sustainability in Shipping
- Inland transportation optimisation

Special Issues



Maritime Policy & Management Special Issue on "Cruise and Shipping"

Guest Editors: Meifeng Luo Chin-Shan Lu

While shipping has long been regarded as the conveyer for the global trade, cruise shipping provides services for passengers that is one of important sector in maritime studies. As they all involve the use of ships, they do share some common interests, such as safety, environmental concerns, demand analysis, economic and operation efficiency, pricing, revenue management, interaction with port and terminals, and the service cluster to the ships, and that to the cargo/people.

However, cargo and passenger are different. In cruise, passenger will value the experiences and satisfactions on board the ship, but not for cargo. The quality of services on the ship, as well as the attractiveness and experiences in the calling port, will all affect the level of satisfaction of the users. Therefore, there should be different strategies for cruise shipping business to attract customers, make them happy and build up the market position.

Therefore, taking advantage of the IFSPA 2019 (www.polyu.edu.hk/lms/icms/ifspa2019/), MPM would like to organize a special issue on this topic, gather together the interests of the scholars all over the world, and contribute on the emerging area of cruise shipping, and its relationship to the current shipping study. Considering the importance of cruise shipping in the economic development of many countries, and the lack of existing research in cruise shipping compared with that in cargo shipping, such a special issue will not only bridge the gap in academic research of these two areas, but also contribute to the development of cruise shipping industry.

Topics include, but are not limited to, the following:

- Socio-economic factors for the regional development of cruise shipping;
- Analysing the economic impact for the development of cruise shipping industry;
- Comparison of cruise and cargo shipping;
- Market analysis for cruise shipping and market entry/exist decisions;
- Marketing strategies and sales channels;
- Revenue management and financial performance in cruise shipping;
- Competition for home ports;
- Logistics management for cruise operation;
- Environmental considerations in cruise shipping.

Special Issues



Journal of Air Transport Management Special Issue on "Air Transport Management"

Guest Editor: Achim Czerny

Journal of Air Transport Management is indexed in the Social Sciences Citation Index (SSCI)

The Journal of Air Transport Management (JATM) sets out to address, through high quality research articles and authoritative commentary, the major economic, management and policy issues facing the air transport industry today. It offers practitioners and academics an international and dynamic forum for analysis and discussion of these issues, linking research and practice and stimulating interaction between the two.

The refereed papers in the journal cover all the major sectors of the industry (airlines, airports, air traffic management) as well as related areas such as tourism management and logistics. Papers are blind reviewed, normally by two referees, chosen for their specialist knowledge.

Topics include, but are not limited to, the following:

- Policy, regulation and law
- Strategy
- Operations
- Marketing
- Economics and finance
- Sustainability

For any enquiry, please email: <u>achim.czerny@polyu.edu.hk</u>.



Transportation Research Part E: Logistics and Transportation Review Special Section on "Decarbonization and Digitalization in Shipping and Transport Logistics"

Guest Editors: Dong Yang Dongping Song Gang Chen Yulai Wan

Shipping is an important driver of global economic growth, but it is estimated to burn 250 million tons of fuel and emitted CO_2 equivalent to 2.2% of the global emissions in 2012; if left unregulated, its contribution to global emission could increase up to 17% by 2050 (3rd IMO GHG study, 2014). To decarbonize the industry, the IMO implemented new regulation such as Energy Efficiency Design Index and Ship Energy Efficiency Management Plan in 2013, and in April 2018 set a target to reduce total annual GHG emission by at least 50% before 2050 compared with 2008 levels. As carbon emission from shipping will not be regulated before 2023, IMO approved a programme in November 2018 to call for short-term measures to reduce GHG emissions from ships up to 2023. The challenge is what measures are effective to help achieve the emission reduction goal in short-term and mid/long-term? Conventionally, the industry focuses on improving energy efficiency in the design phase by choosing the right hull shape, engines, propellers etc.; however, it is believed that considerable inefficiency is generated by decisions made in operations. For example, a recent study shows that CO₂ emissions in the crude-oil tanker segment could be reduced up to 16.8% only by minimizing delay time at port, if related decisions are made optimally with digitalized solutions. It is challenging for the industry to solve such inefficiencies in a broad sense, which calls for more digitalization research support.

Digitalization has been broadly recognized as the third revolution in shipping history, next to diesel propulsion and containerization. Major maritime countries and giant shipping companies are heavily investing on digital and autonomous solutions. For example, the world's largest container shipping company, Maersk Line, is now trying to cut costs and improve efficiency by pioneering digital transformation solutions. Maersk Line has recently built 'Connected Vessel' programme which focuses on state-of-the-art IoT solutions with the purpose of digitalizing the operations and improving operational efficiency. In the meantime, all ships over 300 gross tonnage are required to install the Automatic Identification System (AIS) equipment, which provides real time ship positioning and sailing status information every few seconds. With the increasing data quality and completeness, the application of AIS data has widened out from navigation safety to many aspects, in particular, ship operation efficiency analysis. Furthermore, about 4% global ship fleet have installed auto logging sensor system for vessel condition monitoring, and one of its initial benefits is a substantially improved understanding of vessel performance management, on top of the conventional wisdom and theories of naval architecture.

It is now time to utilize the new knowledge and data resources to explore solution to further improve energy efficiency.

The aim of this issue is to promote the decarbonization and digitalization research in transportation through the attraction and presentation of high-quality papers. The research is not limited to operational level but also can be extended to tactical and strategical levels. The beneficiaries of this issue include academic researchers, shipping companies, terminal operators, government policy-makers and so on.

These topics include, but are not limited to, the following:

- Environmental focus of shipping sustainability
- Digitalization-driven business model innovation
- Application of big data analytics in shipping
- Shipping operation optimization
- Innovation in liner shipping service networks
- The economic implication of emerging maritime/aviation technology
- Innovative ship management and operational strategies
- Transportation innovation networks
- Shipping enterprise reorganization
- Transition to a sustainable and resilient shipping company
- New growth drivers for the shipping industry
- Digitization and IT solutions in shipping
- Energy efficient design of ship equipment
- Block chain application in transportation

All submissions will go through the journal (TRE)'s standard peer-review process (the revised and extended papers will be submitted via TRE EVISE for a paper review process, handled by the co-Guest Editors reporting to the co-Editor-in-Chief). To meet the TRE publication criteria and requirement, these papers should clearly present their incremental contribution against related literature in the areas of Transportation and Logistics by clarifying: (a) the importance of the issue addressed and problem solved, (b) novelty and distinctive features of proposed methodology/models/approaches against published methods, and (c) important findings/ managerial insights drawn from analytical results.

Key Dates

Submission of revised and extended manuscripts: 30th of September 2019 Notification to authors: 31st of December 2019 Final versions due: 31st of March 2020 Publication (estimated): April-May 2010 Selected papers will be recommended for publication in the issues of Maritime Business Review (MABR) journal and other journals. The online submission of MABR, please visit: http://www.emeraldgrouppublishing.com/services/publishing/mabr/index.htm



Supporting Special Issues:



Research in Transportation Business and Management

Special issue on "Data Analytics for International Transportation Management"

https://www.journals.elsevier.com/research-in-transportationbusiness-and-management/call-for-papers/call-for-papers-dataanalytics-international-transportation



Sustainable Maritime Transportation Management and Policies

https://www.mdpi.com/journal/sustainability/special_issues/Sustainable_Maritime_Transport ation_Management_Policies

Technical Tour

Hong Kong–Zhuhai–Macau Bridge (HZMB)

The Hong Kong-Zhuhai-Macao Bridge (HZMB) was opened on 24 October 2018, It is 55km long and the longest bridge-cum-tunnel sea crossing in the world, comprising the 12km Hong Kong Link Road, 29.6km Main Bridge and 13.4km Zhuhai Link Road. Operating 24 hours a day, HZMB puts major cities in the Pearl River Delta within a three hours' commute from Hong Kong; and it will take only 40 minutes to travel the distance of approximately 42km from Hong Kong Port to Zhuhai Port and Macao Port. The relevant information please visit:

https://www.hzmb.gov.hk/en/index.html









Zhuhai Jinwan Airport¹

Zhuhai Jinwan Airport (IATA: ZUH, ICAO: ZGSD) is the airport serving the city of Zhuhai City in Guangdong Province, China. It is located some 50 km (road distance) southwest of the Zhuhai city center in Sanzao Town, Jinwan District, and 25 km southwest of the Special Administrative Region of Macau.

The airport hosts the largest air show in mainland China, the China International Aviation & Aerospace Exhibition.



History

The airport began construction in December 1992 and opened in June 1995. In 1996, the first China International Aviation & Aerospace Exhibition was hosted. In October 2006, the airport official began to co-operate with Hong Kong International Airport, forming the operator company Hong Kong-Zhuhai Airport Management Co., Ltd.

Future Expansion

In September 2017, the CAAC and the government of Guangdong Province announced an expansion plan of Zhuhai Airport, including expansion of the eastern corridor, the 3rd and 4th floor of the terminal and the western VIP lounge. The terminal will be expanded to an area of 122,000 square metre. The plan started in November 2017 and is expected to finish in October 2019.

A new terminal and a 2600-metre runway is also planned.

Statistics

Traffic by calendar year						
	Descenders	Change from	Cargo	Change from	Aircraft	Change from
	rassengers	previous yr	(tons)	previous year	operations	previous year
2005	657,117	N/A	7,980.8	N/A	22,742	N/A
2006	799,125	▲ 21.6%	8,872.7	▲ 11.2%	24,352	▲ 7.1%
2007	1,041,080	▲ 30.3%	10,750.1	▲ 21.2%	25,405	▲ 4.3%
2008	1,121,831	▲ 7.8%	11,139.3	▲ 3.7%	30,430	▲ 19.8%
2009	1,385,858	^ 23.5%	13,759.6	^ 23.5%	23,149	V 23.9%
2010	1,819,051	▲ 31.3%	17,578.8	▲ 27.8%	37,651	▲ 62.6%
2011	1,797,306	V 1.2%	16,768.3	▼4.6%	48,059	▲ 27.6%
2012	2,090,491	▲ 16.3%	16,270.4	▼3.0%	43,815	▼8.8%
2013	2,894,357	▲ 38.5%	22,667.1	▲ 39.3%	44,725	^ 2.1%
2014	4,075,918	4 0.8%	22,128.2	▼2.4%	50,939	▲ 13.9%
2015	4,708,706	▲ 15.5%	25,828.1	▲ 16.7%	50,478	▼0.9%
2016	6,130,384	▲ 30.2%	31,511.6	▲ 22.0%	61,400	▲ 21.6%
2017	9,216,808	4 50.3%	37,379.0	1 8.6%	74,694	^ 21.7%

¹ Source: Wikipedia

Gree Electric Appliances Inc. of Zhuhai²

Gree Electric Appliances Inc. of Zhuhai is a Chinese major appliance manufacturer headquartered in Zhuhai City, Guangdong province. It is the world's largest residential air-conditioner manufacturer. The Company offers two types of air conditioner: household air conditioners and commercial air conditioners. The Company also provides electric fans, water dispensers, heaters, rice cookers, air purifiers, water kettles, humidifiers and induction cookers, among others. The Company distributes its products within China's domestic market and to overseas markets under the brand name of Gree.



History

Gree was established in Zhuhai City, Guangdong in 1989 with its former name of Zhuhai City Haili Cooling Engineering Company Limited (珠海市海利冷气工程股份有限公司). It was restructured and renamed to Gree Electric Appliances Inc, of Zhuhai in 1994. The Company started as a nameless factory with 200 employees and annual production of less than 20,000 units.

It was listed on the Shenzhen Stock Exchange in 1996. The Company grew 47% in 2008, notwithstanding the global recession, booking \$23 billion in contract sales. The Company is a multinational enterprise with 70,000 employees and annual production of 65.5 million units. In April 2011, Gree announced first-quarter net income rose 47 percent from a year earlier to 934.7 million RMB.



² Source: Wikipedia

IFSPA 2019 is appreciated to have Tai Chong Cheng Steamship Company (TCC Group) as Conference Sponsor for this event:

TCC Group

Tai Chong Cheang Steamship Company (TCC Group) is an internationally renowned independent shipowner of a core fleet of modern bulk carriers and tankers. A shipping enterprise of almost 100 years old, commitment to environmentally-friendly carriage of bulk cargoes around the world has been and always be of top priority.

Headquartered in Hong Kong, ship-owning and ship management remain as the Group's core business. The TCC Group also maintains offices in Shanghai, Singapore, Manila and Tokyo.

TCC Group prides itself in playing an active role in protection of the environment, whether through research and development project with the University of Southern California to improve combustion efficiency in marine diesel engines and reduce emissions or through collaborative efforts with shipyards to pioneer environmentally friendly vessels.

Website: www.tccfleet.com



IFSPA 2019 is proud to have invited the following worldwide prestigious scholars and practitioners as Keynote Speakers for this event:

Keynote Speakers

Mr. Albert Yau Hong Kong Zhuhai Airport Management Co Ltd. Hong Kong

Mr. Ting-Yi Tsai Chairman, Taiwan International Ports Logistics Corporation, Taiwan

Professor Juan de Dios Ortúzar Salas Pontificia Universidad Católica de Chile, Santiago, Chile

Professor Qiang Meng National University of Singapore, Singapore

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Professor Anming Zhang University of British Columbia, Canada

Professor Lu Zhen Shanghai University, Shanghai, China

Professor Liu Jingxian Wuhan University of Technology, Wuhan, China

Dr Shuaian Hans Wang The Hong Kong Polytechnic University, Hong Kong

Professor Ching-Chiao Yang National Kaohsiung University of Science and Technology, Taiwan

Dr Christina W. Y. Wong The Hong Kong Polytechnic University, Hong Kong The Organizing Committee would like to express its heartfelt thanks to the following supporting organizations and scholars for their invaluable inputs to the IFSPA 2019 conference.

Supporting Organizations

- Logistics Research Centre (LRC)
- PolyU Maritime Library and Research & Development Centre (PMLC)
- Shipping Research Centre (SRC)
- Hong Kong Logistics Association
- The Chartered Institute of Logistics and Transport
- Hong Kong Sea Transport and Logistics Association
- Hong Kong Logistics Management Staff Association
- Institute of Seatransport













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Tokyo University of Marine Science and Technology, Japan





Map for Conference Banquet on 22nd May



Direction:

Go to D Wing and find the footbridge towards Tsim Sha Tsui East, take around 2 minutes. Walk through the Urban Council Centenary Garden and find the Regal Hotel. The conference Banquet is set on 3/F Tivoli.

... International Forum on Shipping, Ports, and Airports (IFSPA) 2019

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Department of LOGISTICS & MARITIME STUDIES 物流及航運學系

