

IFSPA 2022

INTERNATIONAL FORUM ON SHIPPING, PORTS AND AIRPORTS

"RESILIENCE FROM ADVERSITY"

16 - 20 MAY 2022
HONG KONG

85th The Hong Kong Polytechnic University 香港理工大學
IDEAS Innovation-driven Education and Scholarship | Faculty of Business 工商管理學院
Department of Logistics & Maritime Studies 物流及航運學系
CY TUNG International Centre for Maritime Studies 董浩雲國際海事研究中心
IFSPA Hong Kong 2022

Welcome to IFSPA 2022

Welcome Message from the Dean of Faculty of Business



Welcome to the 11th International Forum on Shipping, Ports, and Airports (IFSPA) to be held in Hong Kong from 16 to 20 May 2022.

The IFSPA, hosted by the C.Y. Tung International Centre for Maritime Studies and the Department of Logistics and Maritime Studies of the Faculty of Business at The Hong Kong Polytechnic University, has grown from a workshop in 2007 to an international event. It provides a platform for practitioners, scholars, researchers, and students to interact and exchange intelligence and views on a range of topics related to transport and logistics.

The world has entered the deepest recession in decades, and international cooperation is indispensable for facilitating recovery and preparing for future risks.

COVID-19 and the corresponding mitigation measures have caused an unparalleled shock to the world with a huge and rising health and human toll, a sharp contraction of the global economy, and lasting damage to labour productivity and economic output. Earlier on, the World Bank forecasted a 5.2% contraction of global GDP in 2020, 2.5% in emerging market and developing economies (EMDEs), and 7% in advanced economies led by 9.1% in the Euro area under the baseline scenario, assuming that activity would recover later in the year. Under the downside scenario, with a more protracted pandemic and financial upheaval, the global economy could shrink by as much as 8% in 2020. Since July there have been new waves of coronavirus infections in different parts of the globe with little sign of global economic activity normalizing. The pandemic's impacts have been more diverse and severe than expected and economic recovery appears slower and weaker. While both advanced economies and EMDEs are in recession, the future looks precarious and vulnerable.

Hong Kong is highly dependent on international trade and investment. Its open economy is vulnerable not only to a slowdown caused by the pandemic but also trade tensions and global financial market volatility.

Themed "Resilience from Adversity", IFSPA 2022 will gather experts, researchers, and scholars from around the world, industry leaders, representatives from professional organizations, and international stakeholders to explore and address the technological, environmental, economics, policy, and operational management issues related to shipping, ports, and airports.

When I write this message, many countries are still struggling to fend off the threats to lives and livelihoods. As soon as the crisis subsides, the world should work together to formulate policies and take actions to cushion consequences, reform for long-term development, and navigate the next normal. Together we should ride the waves of adversity and build resilience.

I very much look forward to our discussion. Please stay safe and well.

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

Welcome to IFSPA 2022

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



I have the great pleasure in welcoming you to The International Forum on Shipping, Ports and Airports (IFSPA) 2022. Since 2008, this major event by the Department of Logistics and Maritime Studies of The Hong Kong Polytechnic University has been an important occasion for maritime and logistics academics and practitioners to exchange ideas and build up friendships. The Forum provides a valuable opportunity for scholars and executives in the global community to gather in Hong Kong, sharing their experiences and perspectives on current research developments and notable events of interests in this field.

The theme of the Forum this year is “Resilience from Adversity”. It reminds us that, in times of uncertainty and adversity, we should keep our faith and stay vigilant to overcome the difficulty. We, as researchers or practitioners in the maritime and logistics industry, have faced enormous challenges throughout the years, particularly the COVID-19 pandemic since last year. By setting clear goals and pursuing them with determination, we can succeed in our endeavors. By overcoming the challenges, we further develop our confidence and capability, making breakthroughs and developing ourselves to new heights.

I look forward to meeting you all in the Forum, and we wish all of you a fruitful event.

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

Welcome to IFSPA 2022

Welcome Message from the Conference Chairs

Conference Chair



Prof. Chin-Shan Lu

Conference Co-Chairs



Ir Dr T. L. Yip



Dr Dong Yang



Prof. Stephen Y.K. Li

Dear colleagues and guests,

On behalf of the organising committee, it is our great pleasure to sincerely invite you to participate in the 11th International Forum on Shipping, Ports and Airports (IFSPA) hosted by the Department of Logistics and Maritime Studies at The Hong Kong Polytechnic University. The conference will be held from 16 to 20 May, 2022 (Monday to Friday) in Hong Kong.

Recently, the outbreak of the Covid-19 pandemic created high uncertainties in demands and disruptions in global supply chains. This disruption has led to an increased focus on supply chain resilience, and rapid adoption of new technology and approaches to responding to the impact. The international shipping and transport logistics industry play a crucial role in the global supply chain. The forthcoming conference in 2022, particularly themed "**Resilience from Adversity**", will play a general platform and 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. This will highlight the rich diversity of approaches and initiatives to understanding current challenges and new opportunities of various issues, as well as advocating the development of innovation proficiency and technologies to increase the competitive advantages and sustainable development. We promote 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.

Hong Kong International Airport has been the world's busiest airport since 2010 and the Port of Hong Kong Port was the 8th busiest global container port in 2019. As Asia is rising and growing fast in the global market, the role of Hong Kong as Asia's hub becomes more significant. With a rich 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 certainly reinforce professional knowledge exchange, insights and provide useful strategies and resolutions for the improvement of environment.

We look forward to welcoming you in Hong Kong in May 2022.

On behalf of the Organising Committee,

Conference Chair
Prof. Chin-Shan Lu

Co-Chairs
Ir Dr T. L. Yip
Dr Dong Yang
Prof. Stephen Y.K. Li

About IFSPA 2022

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 2022

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 2022 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 2022 Organizing Committee

Conference Chair
Prof. Chin-Shan Lu

Co-Chairs:
Ir Dr T. L. Yip
Dr Dong Yang
Prof. Stephen Y.K. Li

Organizing Committee:
Prof. Petrus Choy
Dr Achim I. Czerny
Prof. Kee-hung Mike Lai
Prof. Edward Lee
Dr Meifeng Luo
Prof. Chi-to Daniel Ng
Dr Kelvin Pang
Dr Sik Kwan Tai
Prof. Shuaian Hans Wang
Dr C. L. Johnny Wan
Dr Yulai Sarah Wan
Prof. Zhou Xu
Dr Ling Zhu

Conference Secretariat
Miss Charlene Zhou
Miss Cherry Law
Miss Rachel Cheong
Mr Tsz-him Chan

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Qiang Meng, National University of Singapore, Singapore
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SuHan Woo, Chung-Ang University, Korea
Thanos Pallis, University of the Aegean, Greece
Theo E. Notteboom, Shanghai Maritime University, Shanghai/ Ghent University, Belgium/ University of Antwerp, Belgium
Vinh V. Thai, RMIT University, Australia
Wayne K. Talley, Old Dominion University, United States
Ying-En Ge, Shanghai Maritime University, Shanghai

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 thrivingeconomy.

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 Maritime.



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.

Conference Schedule

Start	End	Day 1: 16 May 2022 (Mon)
14:30	18:30	Conference and School Sessions Zoom Registration (Open for Zoom Testing)
Start	**End**	**Day 2: 17 May 2022 (Tue)**
08:30	09:00	Preparation Time
09:00	09:05	**School Session Opening (Ir Dr T. L. Yip)**
09:05	10:35	**School Session 1 (Prof. Shuaian Hans Wang)** Topic: Prescriptive Analytics for Transport System Management: State-of-the-art Development
10:35	11:00	Coffee Break
11:00	12:30	**School Session 2 (Prof. Xiaowen Fu)** Topic: Climate Change Adaptation in the Presence of Incomplete Information and Ambiguity
12:30	14:00	Lunch Break
14:00	15:30	**School Session 3 (Prof. Christina Wong)** Topic: Doctoral Consortium
15:30	16:00	Coffee Break
16:00	17:30	**School Session 4 (Dr Achim I. Czerny)** Topic: The Theory of Airport Networks
Start	**End**	**Day 3: 18 May 2022 (Wed)**
09:00	09:15	Registration (Zoom Enter)
09:15	09:50	***Opening Ceremony*** ***(Honourable Guests: Ir Prof. T.C. Edwin Cheng, Prof. Andy C. L. Yeung, Ms Carol Yuen, Hon Frankie Yick Chi-ming, SBS, JP)***
09:50	10:05	Coffee Break
10:05	10:55	**Keynote Session 1 (Prof. Anming Zhang)** Topic: COVID-19 Pandemic and Air Transportation: A Survey of Recent Research and Directions for Future Research
10:55	11:15	Coffee Break
11:15	12:05	**Keynote Session 2 (Prof. Jihong Chen)** Topic: Has China's Free Trade Zone Policy Expedited Port Production and Development?
12:05	13:35	Conference Lunch
13:35	14:35	**Industrial Session 1.1 (HKLMSA & IoS)** Topic: Smart Port Development / Parallel Session 1 / Parallel Session 2 / Parallel Session 3
14:35	15:05	Coffee Break
15:05	17:05	**Industrial Session 1.2 (HKLMSA & IoS)** Topic: Interdisciplinary Maritime Practice (IMP) – Instrument against Adversity / Parallel Session 4 / Parallel Session 5 / Parallel Session 6
17:05	17:35	Coffee Break
17:35	19:05	**Special Session 1 (NTU & THU)** Topic: Maritime Technological Development and Policy Implications (Special Issue - Transport Policy) / Parallel Session 7 / Parallel Session 8 / Parallel Session 9 / Parallel Session 10

Conference Schedule

Start	End	Day 4: 19 May 2022 (Thu)				
08:30	09:00	Preparation Time				
09:00	10:30	**Special Session 2 (SRC)** Topic: Sustainable Development of Port System and Shipping Cluster	**Special Session 5 (NKUST)** Topic: Shipping Operations and Risk Management	Parallel Session 11	Parallel Session 12	
10:30	11:00	Coffee Break				
11:00	12:30	**Special Session 3 (LRC)** Topic: Contemporary Research in Management Science	**Special Session 6 (NKUST)** Topic: Shipping Technology and Port Efficiency	Parallel Session 13	Parallel Session 14	
12:30	13:45	Conference Lunch				
13:45	14:35	**Keynote Session 3 (Prof. Hai Yang)** Topic: Emerging Research Issues in Ride-sourcing Markets				
14:35	14:50	Coffee Break				
14:50	16:20	**Special Session 4 (CMI)** Topic: Sustainable Maritime Service Supply Chains with Technology	Parallel Session 15	Parallel Session 16	Parallel Session 17	Parallel Session 18
16:20	16:30	Coffee Break				
16:30	17:15	Parallel Session 19	Parallel Session 20	Parallel Session 21		
17:15	17:30	Coffee Break				
17:30	18:00	***Closing Ceremony & Best Paper Award***				
18:00	20:00	**Industrial Session 2 - Closing Plenary Forum (HSUHK)** Topic: Emerging Extended Reality and Innovative Technologies for Smart Transport and Logistics				
Start	**End**	**Day 5: 20 May 2022 (Fri)**				
14:30	15:30	**Virtual Reality Transport and Logistics Online Tour**				

Opening & Closing Ceremony

The 11th International Forum on Shipping, Ports and Airports (IFSPA) 2022
Opening Ceremony, 18 May 2022 (Wed), 09:00 - 09:50, Zoom Online

PROGRAMME	
09:00 - 09:15	Registration (Zoom Enter)
09:15 - 09:25	**WELCOME ADDRESS by** **Ir Prof. 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 **Prof. Andy C. L. Yeung** Head, Department of Logistics and Maritime Studies Chair Professor of Operations Management The Hong Kong Polytechnic University
09:25 - 09:50	**OPENING REMARKS by** **Ms Carol Yuen** Director of Marine, Marine Department The Government of the Hong Kong Special Administrative Region **Hon Frankie Yick Chi-ming, SBS, JP** Legislative Council Member, Functional Constituency - Transport The Hong Kong Special Administrative Region Group Photos

Opening & Closing Ceremony

The 11th International Forum on Shipping, Ports and Airports (IFSPA) 2022
Closing Ceremony, 19 May 2022 (Thu), 17:30 - 18:00, Zoom Online

PROGRAMME

17:30 - 18:00 **BEST PAPER AWARD PRESENTATION by**

Prof. Chin-Shan Lu
IFSPA 2022 Conference Chairman
Director, C. Y. Tung International Centre for Maritime Studies
The Hong Kong Polytechnic University

CONCLUDING REMARKS by

Prof. Chin-Shan Lu
IFSPA 2022 Conference Chairman
Director, C. Y. Tung International Centre for Maritime Studies
The Hong Kong Polytechnic University

Keynote Sessions

Keynote Session 1

Day 3: 18 May 2022 (Wed) 10:05 – 10:55

Session Chair: Dr Achim I. Czerny

COVID-19 Pandemic and Air Transportation: A Survey of Recent Research and Directions for Future Research



Prof. Anming Zhang

Chair Professor
Air Transportation, Sauder School of Business, University of British Columbia, Canada

Full Professor
Operations and Logistics Division

Associate Editor
Transportation Research Part A: Policy and Practice

Abstract:

This paper aims to analyse and understand the impact of the COVID-19 pandemic on aviation and also the role aviation has played in the spread of COVID-19, by reviewing the recent scientific literature. We shall collect papers on the subject published mainly in the year 2021 and grouped them according to their major application domains, leading to (for example) the following categories: Analysis of the global air transportation system during COVID-19, the impacts on the passenger-centric flight experience, and the long-term impacts on broad aviation. Based on the findings aggregated from the literature, the paper will conclude with a set of recommendations for future research directions; hopefully helping aviation to prepare for a post-COVID-19 world.

Keynote Sessions

Keynote Session 2

Day 3: 18 May 2022 (Wed) 11:15 - 12:05

Session Chair: Dr Dong Yang

Has China's Free Trade Zone Policy Expedited Port Production and Development?



Prof. Jihong Chen

Distinguished Professor
College of Management, Shenzhen University, Shenzhen, China

Editor-in-Chief
Ocean and Coastal Management (OCMA)

Assistant Editor
Regional Studies in Marine Science (RSMA)

Abstract:

China's free trade zone (FTZ) policy satisfies China's objective demand to get geared to the economic globalization trend and forms an essential part of China's opening-up strategy, creating new opportunities for Chinese seaports. Seaport development is subject to its throughput and the import and export trade scale of the city where it's located, but the growth rates of the two are not synchronized. To identify the impacts of FTZ policies on China's free trade seaports, with port throughput and import and export trade scale of the city taken into consideration, this article selects four Chinese seaports, namely Shanghai Port, Tianjin Port, Guangzhou Port, and Fuzhou Port, which are located in the FTZ establishment earlier, and bases the study on the port throughputs and import and export trade volumes of their cities from 2000 to 2020 for empirical testing with the allometric growth model and linear scale factors.

The results show that the impacts of FTZ policies exhibit differences from region to region. Specifically, the FTZ promotion policies have lagging impacts on Shanghai Port and Tianjin Port. （The effect of Shanghai Port and Tianjin Port promoted by the FTZ policy shows a lagging effect）The Guangdong Free Trade Zone's policies have a short-term continuous promoting impact on Guangzhou Port's production. In contrast, Fujian Free Trade Zone's policies are a strong stimulus to the development of Fuzhou Port. The empirical test about the FTZ policies' impacts on seaport Organized By: development will provide a theoretical basis for figuring out the critical role of FTZ in promoting the high-quality development of seaports and boost the coordinated development of ports and urban economies.

Keynote Sessions

Keynote Session 3

Day 4: 19 May 2022 (Thu) 13:45 - 14: 35

Session Chair: Prof. Shuaian Hans Wang

Emerging Research Issues in Ride-sourcing Markets



Prof. Hai Yang

Chair Professor
Department of Civil and Environmental Engineering, The Hong Kong University of Science and Technology

Distinguished Editorial Board Member
Transportation Research Part B: Methodological

Member of Scientific Council
Transportation Research Part C: Emerging Technologies

Advisory Editor
Transportation Science

Abstract:

Urban mobility has undergone drastic changes in recent years with the introduction of application-based taxi and car service e-hailing systems. These systems provide timely and convenient on-demand ride services to anyone, anywhere and anytime. E-hailing is now prevalent in the traditional taxi industry by effectively mitigating information asymmetry and uncertainty between customers and taxi drivers; E-hailing in the form of ride-sourcing can efficiently match a requesting customer with an affiliated private car driver nearby for on-demand ride services. This talk highlights some emerging research issues and latest developments in ride-sourcing markets, including demand forecasting; surge-pricing; matching, pricing and ride-pooling, joint optimization of matching time interval and matching radius; customers' willingness to wait with sunk waiting time; optimal resource allocation with bundled options; impact of ride-pooling on traffic congestion; competition and third-party platform-integration; Pareto- efficient market regulations; and analysis of human mobility and network property with big car trajectory data, etc.

School Sessions

School Session 1

Day 2: 17 May 2022 (Tue) 09:05 - 10:35

Prescriptive Analytics for Transport System Management: State-of-the-art Development



Prof. Shuaian Hans Wang

Professor
Department of Logistics and Maritime Studies, The Hong Kong Polytechnic University

Editor-in-Chief
Cleaner Logistics and Supply Chain and Communications in Transportation Research

Associate Editor
Transportation Research Part E: Logistics and Transportation Review

Abstract:

With the development of machine learning algorithm, the advancement of computing equipment, and the increased availability of transportation data, the literature on data-driven optimization for transportation management has been rapidly expanding. Most studies have adopted a two-step approach: in the first step, machine learning models are used to predict the values of uncertain parameters; in the second step, the predicted values are used as input for an optimization model to derive a decision. However, such a two-step approach is flawed in several aspects. In this tutorial, we present recent methodological developments that address the deficiencies of the two-step approach.

School Sessions

School Session 2

Day 2: 17 May 2022 (Tue) 11:00 – 12:30

Climate Change Adaptation in the Presence of Incomplete Information and Ambiguity



Prof. Xiaowen Fu

Associate Dean & Professor
Engineering Management, Department of Industrial and Systems Engineering,
The Hong Kong Polytechnic University

Editor
Transport Policy

Abstract:

One major challenge in climate change adaption is the investment decision in the presence of incomplete information and ambiguity. In the port and airport industry, such an issue is further complicated if there is competition between asymmetric ports. This talk will review the recent modelling studies in this emerging literature, with a focus on the analysis of business strategy, public policy and welfare that are associated with adaptation investments. We will examine the commonly adopted regulatory polices, such as the minimum requirement regulation vs. subsidy, on port adaptation investment to mitigate the damage caused by climate change-related disasters. The modelling of ambiguity of the disaster occurrence probability, the information asymmetry between decision-makers, and the externality of adaptation investments will be discussed.

School Sessions

School Session 3

Day 2: 17 May 2022 (Tue) 14:00 – 15:30

Doctoral Consortium



Prof. Christina Wong

Professor
Institute of Textiles and Clothing, The Hong Kong Polytechnic University

Editor
International Journal of Shipping and Transport Logistics

Associate Editor
Journal of Operations Management

Abstract:

The Doctoral Consortium aims to assist doctoral students to build their research and professional network with peers and integrate into the international academic knowledge exchange. A small group of doctoral students are asked to give a short presentation (10 minutes) about their research study to peers and faculty, who would ask questions and provide feedback and guidance on the research. Preference will be given to students employing empirical research approaches.

School Sessions

School Session 4

Day 2: 17 May 2022 (Tue) 16:00 – 17:30

The Theory of Airport Networks



Dr Achim I. Czerny

Associate Professor
Department of Logistics and Maritime Studies, The Hong Kong Polytechnic University

Associate Editor
Journal of Shipping and Trade

Abstract:

This presentation describes three dimensions by which airport networks can be distinguished and developed. The first dimension captures the difference between central and local decision makers. The second dimension captures the difference between local and non-local passengers. The third dimension captures the difference between local and non-local airlines and airline profits. Examples for the research questions that can be addressed by the different types of networks are discussed by focusing on questions related to airport congestion management. It is shown that the market outcomes are extremely sensitive with respect to network specifications.

Special Sessions

Special Session 1

Day 3: 18 May 2022 (Wed) 17:35 - 19:05

Session Chair: Dr Jasmine Siu Lee Lam and Dr Xiwen Bai

Topic: Maritime Technological Development and Policy Implications (Special Issue - Transport Policy)
Co-organizers: Nanyang Technological University, Tsinghua University

Technologies have developed rapidly and affect the maritime industry tremendously. For example, AIS data assists navigation safety and security; Blockchain enhances supply chain visibility and efficiency; maritime Internet of Things facilitates simplified administration. Despite the immense opportunities brought by the advanced technologies, there may be pitfalls and limitations. For instance, automatization comes with cybersecurity concerns; the mid and long-term costs and benefits of Blockchain application are unclear; the uneven technical capability between developing countries and developed economies causes system disharmony and service fragmentation. The success of advanced technology adoption in the maritime industry lies not only in transportation management improvement but also in supporting policy formulation. Technologies have developed rapidly and affect the maritime industry tremendously. For example, AIS data assists navigation safety and security; Blockchain enhances supply chain visibility and efficiency; maritime Internet of Things facilitates simplified administration. Despite the immense opportunities brought by the advanced technologies, there may be pitfalls and limitations. For instance, automatization comes with cybersecurity concerns; the mid and long-term costs and benefits of Blockchain application are unclear; the uneven technical capability between developing countries and developed economies causes system disharmony and service fragmentation. The success of advanced technology adoption in the maritime industry lies not only in transportation management improvement but also in supporting policy formulation. The changing industry landscape powered by technology development requires changes in policies. This special session welcomes research works in maritime technological development and their policy implications.

Presentation 1: Blockchain Enabled Applications in Liner Shipping and Port Industry: Trend and Challenges

Sedat Baştuğ	Iskenderun Technical University
Fevzi Bitiktaş	Bandırma Onyedi Eylül Üniversity
Kazim Yeni*	Iskenderun Technical University
Kee-hung Lai	The Hong Kong Polytechnic University

Presentation 2: Hybrid Approaches for Container throughout Forecasting in the Context of Anomalous Events: the Case of the Yangtze River Delta Region in the COVID-19 Pandemic

Dong Huang*	Universitat Politècnica de Catalunya–BarcelonaTech
Manel Grifoll	Universitat Politècnica de Catalunya–BarcelonaTech
Jose Antonio Sanchez	Universitat Politècnica de Catalunya–BarcelonaTech
Pengjun Zheng	Ningbo University
Hongxiang Feng	Ningbo University

Special Session 1 (Continued)

Day 3: 18 May 2022 (Wed) 17:35 - 19:05

Session Chair: Dr Jasmine Siu Lee Lam and Dr Xiwen Bai

Presentation 3: Revisiting Important Ports in Container Shipping Networks: A Structural Hole-based Approach

Qiang Zhang*	Shanghai Maritime University
Shunhao Pu	Shanghai Maritime University
Lihua Luo	Shanghai Maritime University
Zhichao Liu	Shanghai Maritime University
Jie Xu	Shanghai Maritime University

Presentation 4: Gaming for Green Port Management as a Learning Tool: A Case Study of Green PorTech

Ying-Ru Liu*	National Chengchi University
Shiou-Yu Chen	National Taiwan Ocean University
Wei-Chueh Wang	National Taiwan Ocean University

*Presenter

Special Sessions

Special Session 2

Day 4: 19 May 2022 (Thu) 09:00 - 10:30

Session Chair: Dr Dong Yang

Topic: Sustainable Development of Port System and Shipping Cluster
Co-organizer: Shipping Research Centre



Maritime logistics is the invisible backbone of trade flows and global economic growth. Featuring an increasing crucial structural and functional position in maritime logistics, port and shipping capture value for manifold players of maritime logistics. In the recovering of the global economy from the COVID-19 pandemic and the pressure of the environment, the sustainable development of ports and shipping becomes an urgent issue to be addressed. This session discusses new research on contemporary development regarding maritime logistics, including port system evolution, shipping cluster analysis, sustainable technologies investment in shipping and etc. This special session aims to bring together researchers and participants in all aspects of ports and maritime worldwide to promote the exchange of new insights and research results that adapt to the current situation.

Presentation 1: Assessment of Container Terminals Competitiveness in The Brazilian Market: A Cluster Analysis

Felipe Souza*	University of São Paulo
Dong Yang	The Hong Kong Polytechnic University
Aluisio Moreira	Santos Port Excellence Center
Leandro Barreto	Solve Shipping Intelligence
Cira Pitombo	University of São Paulo

Presentation 2: Computer Visualization-based Estimation on Unit Shelter Space for Recreational Vessels

Lu Li*	The Hong Kong Polytechnic University
Yuxu Lu	Wuhan University of Technology
Dong Yang	The Hong Kong Polytechnic University

Presentation 3: Container Port System Evolution in the Great Bay Area Using Ship Data-Based Analysis

Dong Yang	The Hong Kong Polytechnic University
Xiaoxin Huang*	The Hong Kong Polytechnic University
Kee-hung Lai	The Hong Kong Polytechnic University
YH Venus Lun	The Hong Kong Polytechnic University

Presentation 4: All in One Enhancer: Toward Real-Time Maritime Low-Visibility Scene Recovery

Yuxu Lu*	Wuhan University of Technology
Lu Li	The Hong Kong Polytechnic University
Dong Yang	The Hong Kong Polytechnic University

*Presenter

Special Sessions

Special Session 3

Day 4: 19 May 2022 (Thu) 11:00 - 12:30

Session Chair: Prof. Chi-to Daniel Ng

Topic: Contemporary Research in Management Science
Co-organizer: Logistics Research Centre

LRC Logistics Research Centre 物 流 研 究 中 心
The Hong Kong Polytechnic University

The world is facing challenges, such as COVID-19, global warming, and economic crisis; and opportunities, such as Industrial 4.0, Blockchain, and IoT-based technology. As such, it is important and urgent to study the sustainability issues, which facilitate the development and usage of advanced technologies/methodologies to resolve the related problems. In this special session, some contemporary research related to the sustainability issues will be discussed. There will be four paper presentations in this session covering topics, including healthcare, Blockchain, and marketing strategy. Through the presentations and Q&A sessions, the presenters and audience will both be benefited from further improvements of the research quality and obtaining ideas for future research. All are welcome.

Presentation 1: Information Sharing and Coordination for a Vaccine Supply Chain Felipe Souza

Yuqing Pan*	The Hong Kong Polytechnic University
Chi To Ng	The Hong Kong Polytechnic University
Ciwei Dong	Zhongnan University of Economics and Law
T. C. E. Cheng	The Hong Kong Polytechnic University

Presentation 2: Marketing Strategy Choice of Durable Goods Manufacturers with Individual Depreciation

Hongru Yang*	The Hong Kong Polytechnic University
Chi To Ng	The Hong Kong Polytechnic University
T. C. E. Cheng	The Hong Kong Polytechnic University

Presentation 3: A Generalized SEIR Model with Asymptomatic Infection

Shuen Guo*	Zhengzhou University
Chi To Ng	The Hong Kong Polytechnic University
T. C. E. Cheng	The Hong Kong Polytechnic University
Jinjiang Yuan	Zhengzhou University

Presentation 4: Logistics Outsourcing: Effects of Greenwashing and Blockchain Technology

Ciwei Dong	Zhongnan University of Economics and Law
Qianzhi Huang*	Zhongnan University of Economic and Law
Yuqing Pan	The Hong Kong Polytechnic University
Chi To Ng	The Hong Kong Polytechnic University
Renjun Liu	Zhongnan University of Economics and Law

Special Session 3 (Continued)

Day 4: 19 May 2022 (Thu) 11:00 - 12:30

Session Chair: Prof. Chi-to Daniel Ng

Presentation 5: Port Berthing Decision during Pandemic Period

Hang Fa Judy Tong*	The Hong Kong Polytechnic University
Chi To Ng	The Hong Kong Polytechnic University

*Presenter

Special Sessions

Special Session 4

Day 4: 19 May 2022 (Thu) 14:50 - 16:20

Session Chair: Dr Moses Shang-Min Lin

Topic: Sustainable Maritime Service Supply Chains with Technology
Co-organizer: China Maritime Institute

The recently rapid and tremendous development of digital technology and its new application will inevitably change the driving force of the maritime industry competitiveness. At the same time, the utilization of technology will also bring various risks to this industry. This section will discuss how to pursuit a sustainable maritime industry and maritime service supply chains in the context of using new technology. There will be four studies respectively looking at the development model of the port-centric innovative maritime industry ecosystem, safety issues in the emerging smart ports, cybersecurity risks in maritime industry, and the blockchain adoption in aviation industry which can serve as a lesson to maritime industry.

Presentation 1: The Development Model of the Port-Centric Innovative Maritime Industry Ecosystem

Webandy, Luo-Yao Lin*	Ministry of Transportation and Communications
Moses Shang-Min Lin	National Taiwan Ocean University and China Maritime Institute

Presentation 2: In-Depth Exploration of Safety Issues Facing the Emergence of Smart Port: A More Proactive Approach Perspective

Chi-Chang Lin (Joseph)*	Feng Chia University

Presentation 3: Evaluating the Cybersecurity Risks in the Maritime Industry

Chia-Hsun Chang*	Liverpool John Moores University

Presentation 4: Determinants of Blockchain Adoption in the Aviation Industry: Potential Applications and Future Improvements

Po-Lin Lai*	Chung-Ang University

*Presenter

Special Sessions

Special Session 5

Day 4: 19 May 2022 (Thu) 09:00 - 10:30

Session Chair: Prof. Ching-Chiao Yang

Topic: Shipping Operations and Risk Management
Co-organizer: National Kaohsiung University of Science and Technology

國立高雄科技大學
National Kaohsiung University of Science and Technology

The covid-19 has affected the world economy. Particularly, it changed the international transportation and logistics operations. It is imperative for those operators to maintain its sustainable competitiveness in the post-covid-19 era. As such, four papers will be presented and discussed in this section covering topics, including reducing pollutant emission from vessel in port area, the impact of COVID-19 pandemic on financial risks and credit risks, risk analysis of mega-size ships at port, and crucial factors for foreign direct investment in ASEAN region for cold chain logistics. This special section aims to bring together the presenters and participants in the aspects of shipping operations and risk management to exchange their results that adapt to the post-covid-19 era.

Presentation 1: Reducing Pollutant Emission from Vessel in Port Area - A Just in Time Approach

Yun-Hua Chang	National Kaohsiung University of Science and Technology
Hui-Huang Tai	National Kaohsiung University of Science and Technology

Presentation 2: Investigating the Impact of COVID-19 Pandemic on Financial Risks and Credit Risks of Shipping and Logistics Industry – Taiwan and Hong Kong

Po-Yuk So	National Kaohsiung University of Science and Technology
Yu-Chen Wei	National Kaohsiung University of Science and Technology
Ving- Vunk Mak	National Kaohsiung University of Science and Technology
Jen-Ming Liu	National Kaohsiung University of Science and Technology

Presentation 3: Risk Matrix Analysis of Mega-sized Ships at Ports

Wen-Jui Tseng	National Kaohsiung University of Science and Technology
Thi Thu Ha	National Kaohsiung University of Science and Technology

Presentation 4: Crucial Factors for Cold Chain Logistics Service Providers Investing in the ASEAN Region

Ching-Chiao Yang	National Kaohsiung University of Science and Technology
Jen-Ming Liu	National Kaohsiung University of Science and Technology

Special Sessions

Special Session 6

Day 4: 19 May 2022 (Thu) 11:00 - 12:30

Session Chair: Prof. Yi-Chih Yang

Topic: Shipping Technology and Port Efficiency
Co-organizer: National Kaohsiung University of Science and Technology

國立高雄科技大學
National Kaohsiung University of Science and Technology

This special session mainly presents the topic of shipping technology and port efficiency in the maritime and air transportation industry. The presenters of this session will explore the critical applications of shipping technologies, including big data analytics, block-chain and port digitalization transformation, etc. In addition, this session will address the operational efficiency based on different corporate governance models at the Port of Hai Phong, and the critical successful factors of ecological efficiency in container terminals. Useful suggestions and managerial implications are suggested from the research findings for shipping practitioners and researchers.

Presentation 1: A Study of Critical Success Factors of Smart Port Digitalization Development for the International Commercial Ports Post COVID-19 Era

Yi-Chih Yang	National Kaohsiung University of Science and Technology
Yun-Hsin Hsieh	National Kaohsiung University of Science and Technology

Presentation 2: An Evaluation Model of Eco-efficiency for Container Terminals within a Port

Wen-Kai K. Hsu	National Kaohsiung University of Science and Technology
Show-Hui S. Huang	Shu-Te University
Nguyen Tan Huynh	National Kaohsiung University of Science and Technology

Presentation 3: The Impacts of Big Data Analytics Capability on Organization Performance by Mediating Logistics Service Capabilities – An Empirical Study on Container Shipping Industry in Taiwan

Wen-Kai K. Hsu	National Kaohsiung University of Science and Technology
Tzu-An Lu	National Kaohsiung University of Science and Technology

Presentation 4: The Implements of Block-Chains Technology in Airfreight

Wen-Kai K. Hsu	National Kaohsiung University of Science and Technology
Chien-Lin Kuo	National Kaohsiung University of Science and Technology

Presentation 5: Comparative Analysis of Operational Efficiency Among the Container Terminals at the Port of Hai Phong

Trung Kien Pham	Vietnam Maritime University
Yi-Chih Yang	National Kaohsiung University of Science and Technology

Industrial Sessions

Industrial Session 1.1

Day 3: 18 May 2022 (Wed) 13:35 - 14:35

Session Chair: Mr Sunny Ho

Topic: Smart Port Development
Co-organizers: Institute of Seatransport, Hong Kong Logistics Management Staff Association

The session will focus on smart port development. The Forum invited an array of panelists from different backgrounds and disciplines to join the panel discussion. Panelists will share insights on the latest global trends and actual cases.

Chair & Moderator:

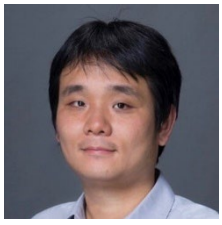


Mr. Sunny Ho, JP, MH, FCILT - Chairman of the Hong Kong Management Staff Association

Panelists:



Mr. Philip Ho, CEO, OnePort
Topics: **Smart Port – the Broader and Narrower Perspectives**



Mr. Eric Jin, Head of Investment Support, Critical Infrastructure, Asia Pacific of BMT
Topic: **Trend of Green Shipping and Smart Ports Development**



Ms. Catherine Chow, PR Director, Group Marketing and Commercial Department, China Merchants Port Holdings Company Limited
Topic: **China Merchants Smart Port Solution and Application**

Industrial Sessions

Industrial Session 1.2

Day 3: 18 May 2022 (Wed) 15:05 - 17:05

Session Chair: Mr Raymond T.C. Wong & Mr Cho Hor Wong

Topic: Interdisciplinary Maritime Practice (IMP) - Instrument against Adversity
Co-organizers: Institute of Seatransport, Hong Kong Logistics Management Staff Association

A brief introduction of the Interdisciplinary Learning & Interlink (IDL/ILI) Methodology (IDLIM) as applied to Maritime Practice on both the micro and macro level, and how the IMP is applied by experts in each profession of maritime practice in resolving problems. The IDL/ILI Methodology is modelled after the Renaissance polymath ideal of being learned in the "Arts, Letters & Sciences".

A panel of professionals will be formed, and four of them from the core professions of shipowner & ship management, marine insurance, legal service, and shipbroking, will make a quick presentation of 10 minutes in respect of the changes in their professions since 2018 to the present, and how their profession views the future in the aftermath of the Coronavirus Pandemic, the ensuing Greater Depression (as distinct from the Great Depression 1929), and changes in global political economic landscape like the Ukraine War. They will engage all participants of the session in an open forum discussion in an illustration of the application of the IDLIM, in a synthesis of theory and practice.

Chair:

Mr. Raymond T.C. WONG, Emeritus Chairman of IoS and Honorary Advisor of HKLMSA

Moderator:

Mr. WONG Cho Hor, Executive Member of HKLMSA

Panelists:

Mr.Thomas W.C.CHEUNG, Executive Chairman – CTX Special Risks Limited

Capt. ZHOU Jianfeng, Managing Director, Wah Kwong Maritime Transport Holdings Ltd

Mr. Simon D.L. CHENG, Solicitor & Chairman of Institute of Seatransport

Mr. Anthony C.P. TAI, Divisional Director Clarksons Platou Hong Kong

Prof. Chin-Shan LU, Director of ICMS & Chairman of China Maritime Institute

Richard J. GAINS, Director, Aqualis Braemar LOC Group

Mr.Manson S.M.CHEUNG, Vice Chair of HKLMSA, ICSHK & IoS

Dr.Ranjan VARGHESE, CEO Steel Ships Ltd. Hong Kong

Industrial Sessions

Industrial Session 2 – Closing Plenary Forum

Day 4: 19 May 2022 (Thu) 18:00 – 20:00

Session Chair: Dr Eugene Wong

Topic: Emerging Extended Reality and Innovative Technologies for Smart Transport and Logistics
Co-organizer: The Hang Seng University of Hong Kong

香港恒生大學
THE HANG SENG UNIVERSITY OF HONG KONG

The rapid adoption of extended reality (ER) in the worldwide logistics and transport sector has created an urgent need for technological advancement and research development to provide the solutions and support required in daily operations. All real-and-virtual combined environments and human-machine interactions generated by immersive technologies like Virtual Reality (VR), Augmented Reality (AR) and Mixed Reality (MR) are getting higher attention. Recently, the recent shift from operations sites to working from home due to the pandemic, strike incidents and security and safety precautions have accelerated the need to develop VR technologies in industrial operations. Examples of development includes low cognitive approach to the remote operation of unmanned surface vessels via VR, AR integrating with automatic identification system for visualising critical data for vessel navigation, and digital twin systems with VR and AR-based services for optimising intraterminal operations. There are also increasing research on adopting MR technologies as a tool for enhancing professional competency of sea and air transport professionals. How can leaders drive emerging innovative immersive technologies for smart transport and logistics operations in their companies? What are the latest trend and development in this aspect?

Chair:
Dr. Eugene Wong, Associate Professor, Department of Supply Chain and Information Management; Director, Virtual Reality Centre; Director, Policy Research Institute of Global Supply Chain

Panelists:
Dr. Michael GRIEVES, Chief Scientist, Executive Director, Digital Twin Institute, U.S.
Topic: **Innovations on Digital Twins: IoT, AI, ML, VR, AR**

Prof. Andrew NEE, Professor Emeritus; Director, Augmented Reality Laboratory, National University of Singapore
Topic: **Augmented Reality (AR) and Digital Twin Applications in Engineering**

Dr. Chung NG, Senior Vice President, Technology Strategy and Development, Hong Kong Telecom
Topic: **Augmented Reality-based Metaverse and 5G for intelligent service operations**

Mr. Jimmy PANG, President, Supply Chain Safety and Security Association
Topic: **Trends of VR on Logistics and Transport in post COVID-19 pandemic**

Mr. Eric POON, Head of Performance Enhancement, HACTL
Topic: **Performance Enhancement in Aviation Logistics through Extended Reality and Innovative Technologies**

Dr. Graziano TERENZI, CEO, Inglobe Technologies Sr, Italy
Topic: **Augmented Reality, Robotics and Human Factors in Logistics**

Industrial Sessions



Parallel Sessions

Parallel Session 01 Logistics Innovation and Technology Day 3: 18 May 2022 (Wed) 13:35 - 14:35		
Session Chair: Prof. Amanda Wang Yulan		
212	**Development of Vessel Accident Severity Model Using Statistical and Data Mining Techniques**	
	Sangjae Lee	Hanyang University
	Seung-oh Son	Hanyang University
	Juneyoung Park	Hanyang University
	Gunwoo Lee	Hanyang University
	Cheol Oh	Hanyang University
224	**Smart Port: A Bibliometric Review and Future Research Directions**	
	Kevin Li	Zhejiang University
	Hao Tong	Zhejiang University
	MengChi Li	Guangzhou Maritime University
254	**Yard Template Generation for Automated Container Terminal Based on Bay Sharing Strategy**	
	Mingzhong Huang	Shanghai Maritime University
	Hang Yu	Shanghai Maritime University
	Junliang He	Shanghai Maritime University

Parallel Session 02 Sustainability and Social Responsibility Day 3: 18 May 2022 (Wed) 13:35 - 14:35		
Session Chair: Prof. Peter Chiu		
228	**Resilience and Growth Strategy of International Aviation with Sustainability Concepts of Green and Social Responsibility**	
	Mundayalath Mundayat Sajith	SMT Global Logistics Limited
230	**Airport Cargo Loader Rollers from Aluminum to Composite: Environmental, Sustainability and Social Benefits**	
	Peter Chiu	Management & Technology Consultants Ltd
	Jackson Ho	City University of Hong Kong
	Yuhan Huang	University of Technology Sydney
245	**Corporate Social Responsibility Reporting for European Logistic Centers Industry: Towards a Dashboard System for KPIs' Evaluation**	
	Giovanni Satta	University of Genoa
	Marta Giannoni	University of Genoa
	Nicola Gianoni	University of Genoa

Parallel Sessions

Parallel Session 03 The Belt and Road: Impact on Transportation Day 3: 18 May 2022 (Wed) 13:35 - 14:35	
Session Chair: Dr Lequn Zhu	
208	**Efficiency Evaluation of China Ports Serving the B&R** Lequn Zhu — Tianjin Research Institute for Water Transport Engineering, M.O.T. Ran Zhou — Tianjin Research Institute for Water Transport Engineering, M.O.T. Xiaojun Li — Tianjin Research Institute for Water Transport Engineering, M.O.T.
223	**Study on the Evolution of LNG Maritime Transportation Network and the Trend of Carbon Substitution** Mei Qiang — Shanghai Maritime University & Jimei University Hu Qinyou — Shanghai Maritime University Liu Xiliang — Beijing University of Technology Yang Chun — Shanghai Maritime University Wang Peng — Shanghai Maritime University & The Institute of Computing Technology of the Chinese Academy of Sciences Qi Yuling — Shanghai Maritime University Yang Yang — Jimei University Yuan Qirui — Jimei University

Parallel Session 04 Aviation Operation and Management Day 3: 18 May 2022 (Wed) 15:05 - 17:05	
Session Chair: Dr David Lang	
186	**A Pricing Versus Slots Game When the Non-locals Have Substitute Route Choices** Hao Lang — The Hong Kong Polytechnic University
194	**Multivariate Linear Regression Analysis of the Variables that Influence the Behavior of Passenger and Air Operations Demand in Air Infrastructure. An Approach to the Global Case** Juan E. Espinel — Universidad de los Andes Álvaro Rodríguez Valencia — Universidad de los Andes
226	**Airline Reactions to High-speed Rail Entry: Rail Quality and Market Structure** Hongyi Gu — The Hong Kong Polytechnic University Yulai Wan — The Hong Kong Polytechnic University
265	**Air Passenger Data Protection: The Case of China** Shangcong Song — East China University of Political Science and Law
277	**Optimal Use-it-or-lose-it Rules for Airport Slot Management** Achim I. Czerny — The Hong Kong Polytechnic University
279	**The Future of Aviation Industry – A Public Choice Perspective** Lawrence T.C. Tse — Technological and Higher Education Institute of Hong Kong

Parallel Sessions

Parallel Session 05 Maritime Regulation and Policy Day 3: 18 May 2022 (Wed) 15:05 - 17:05		
Session Chair: Dr Sik Kwan Tai		
198	**Behaviour Analysis of Individual Shipping Company under Maritime Emission Trading Scheme**	
	Ah-Hyun Jo	Inha University & Korea Maritime Institute
	Young-Tae Chang	Inha University
	Taesung Hwang	Inha University
222	**Delivery Without Bills of Lading under Chinese Law: Possible Solution Suggested**	
	Sik Kwan Tai	The BNU-HKBU United International College
	Brian Po-wan Sun	The Hong Kong Polytechnic University
	Adolf K.Y. Ng	The BNU-HKBU United International College & University of Manitoba
233	**Effect of Emission Control Area (ECA) Regulations on the Cruise Shipping Network**	
	Maneerat Kanrak	Khon Kaen University
	Yui-yip Lau	The Hong Kong Polytechnic University
	Hong-Oanh Nguyen	University of Tasmania
	Xavier Ling	University of Tasmania
238	**Controlling Shipping Greenhouse Gas Emissions in Hong Kong: Policy Considerations**	
	Ling Zhu	The Hong Kong Polytechnic University
	Xiaojing Li	The Hong Kong Polytechnic University
	Wei Pan	The University of Hong Kong

Parallel Sessions

Parallel Session 06 Maritime Safety and Risk	Day 3: 18 May 2022 (Wed) 15:05 - 17:05	
Session Chair: Prof. Szu-Yu Kuo		
187	**Maritime Piracy: A Closer Look into Determining Factors and The Role of Deterrence**	
	Anna Triantafyllou	Deree - The American College of Greece
	Ioanna Bardaka	Bank of Greece
	George Zombanakis	Deree - The American College of Greece
	Ioannis Vrettakos	Deree - The American College of Greece
196	**Determinants of Cargo Risk Management in Domestic Maritime Transport between Taiwan and Penghu**	
	Szu-Yu Kuo	National Penghu University of Science and Technology
	Chao-Hung Chiang	National Penghu University of Science and Technology
	Chen-Yu Hsiao	National Penghu University of Science and Technology
	Hsien-Kai Chung	National Penghu University of Science and Technology
	Yu Zheng	National Penghu University of Science and Technology
216	**International Law and Cyber-risks in the Maritime Industry**	
	Suzette V. Suarez	Hochschule Bremen
	Ilknur Colmorn	Hochschule Bremen
	Anna-Lena Simon	Hochschule Bremen
259	**Proposing an Extended Causation Database to Analyse Non-Conformities at Containership Fleet**	
	Hasan Bölge	Istanbul Technical University
	Metin Celik	Istanbul Technical University
272	**Supply Chain Risk Assessment: A Study Case of the Offshore Wind Power Industry in Taiwan**	
	Hsiang-Kai Weng	Feng Chia University
	Tze-Wei Khor	Feng Chia University

Parallel Sessions

Parallel Session 07 COVID-19: Transportation and Supply Chain Disruption Day 3: 18 May 2022 (Wed) 17:35 - 19:05		
Session Chair: Prof. Edward Lee		
229	**The Impact and Solution of Coronavirus for Warehousing**	
	Ruixuan Jiang	The Hong Kong Polytechnic University
235	**An Examination of Liner Companies' Port Choices Under External Shocks Considering Firm Heterogeneity**	
	Xinyue Pu	Tsinghua University
	Xiwen Bai	Tsinghua University
	Yao Hou	Tsinghua University
	Dong Yang	The Hong Kong Polytechnic University
283	**China-Europe Freight Transportation under the First Wave of COVID-19 Pandemic and Government Measures**	
	Yang Yang	University of Hamburg
	Qing Liu	University of Hamburg
	Chia-Hsun Chang	Liverpool John Moores University
289	**A Contemporary Analysis for COVID-19 Pandemic Related Seaport Congestion in Turkey**	
	Ender Yalçın	Bandirma Onyedi Eylul University
	Serap Göksu	Recep Tayyip Erdogan University
	Can Taş	Bandirma Onyedi Eylul University

Parallel Session 08 Green Shipping (II) Day 3: 18 May 2022 (Wed) 17:35 - 19:05		
Session Chair: Dr Quazi Sakalayen		
180	**Decarboning Access/Egress Transportation for Container Terminal - Raising the Role of River Channel**	
	Zhongzhen Yang	Ningbo University
	Zhouting Lu	Ningbo University
	Feng Lian	Ningbo University
210	**Life-cycle Energy and Environmental Emissions of Cargo Ships**	
	Yiqi Zhang	The Hong Kong University of Science and Technology
	Yuan Chang	Central University of Finance and Economics
	Changbo Wang	Nanjing University of Aeronautics and Astronautics
	Alexis K H Lau	The Hong Kong University of Science and Technology
267	**Promoting Public Transportation in a Car-dominated Society**	
	Quazi Sakalayen	Universiti Brunei Darussalam
	Md Shamimul Islam	BRAC University
	Anne Teo Hui Cheng	Universiti Brunei Darussalam
	Md. Nazmus Sakib	University of Dhaka
274	**Green Transformational Leadership, Green Psychological Climate, Organisational Citizenship Behaviour for the Environment: Evidence from International Shipping Company in Taiwan**	
	Nathan Juang	National Taiwan Ocean University
	Kuo-Chung Shang	National Taiwan Ocean University

Parallel Sessions

Parallel Session 09 Human Resources and Training Day 3: 18 May 2022 (Wed) 17:35 - 19:05		
Session Chair: Prof. Shih-Liang Chao		
249	**The Impacts of Interpersonal Conflicts and Work-Family Conflicts on the Job Performance of Seafarers – The Moderating Role of Organizational Commitment**	
	Shih-Liang Chao	National Taiwan Ocean University
	Jiunn-Liang Guo	National Taiwan Ocean University
	Xin-Ru Chen	National Taiwan Ocean University
257	**Evaluating 'Kahoot!' for Maritime Higher Education Courses**	
	Po-Hsing Tseng	National Taiwan Ocean University
	Nick Pilcher	Edinburgh Napier University
	Kendall Richards	Edinburgh Napier University
269	**Longitudinal Analysis on Training and Learning Effectiveness of Freight Forwarding Operations with the Use of Enterprise Resource Planning Systems-Based Freight Operations Systems**	
	Eugene Wong	The Hang Seng University of Hong Kong
	Eko Liao	The Hang Seng University of Hong Kong
	Kaylee Kong	The Hang Seng University of Hong Kong
	Kelly To	The Hang Seng University of Hong Kong
275	**An Overview through Start-up Initiatives on HRTech in Maritime and Offshore Industries**	
	Muhittin Orhan	Maritime Faculty of Istanbul Technical University
	Metin Celik	Maritime Faculty of Istanbul Technical University

Parallel Session 10 Liner Shipping Day 3: 18 May 2022 (Wed) 17:35 - 19:05		
Session Chair: Dr Dan Annie Zhuge		
205	**Maximization of Container Slot Booking Profits for Carriers in the Liner Shipping Industry**	
	Yu Guo	The Hong Kong Polytechnic University
	Ran Yan	The Hong Kong Polytechnic University
	Hans Wang	The Hong Kong Polytechnic University
250	**Cascading Failure in Liner Shipping Network**	
	Zhu Xuebin	Dalian Maritime University
	Lv Jing	Dalian Maritime University
253	**Complex Network Analysis of the Global Liner Shipping System**	
	Mengqiao Xu	Dalian University of Technology
291	**A Comprehensive Review on the Mergers and Acquisitions between Leading Container Shipping Lines**	
	Tran Thi Phuong Thao	National Taiwan Ocean University
	Wang C.Y. Blake	National Taipei University
	Lirn Taih-Cherng	National Taiwan Ocean University

Parallel Sessions

Parallel Session 11 Logistics Innovation and Technology (II) Day 4: 19 May 2022 (Thu) 09:00 - 10:30		
Session Chair: Dr Kun Wang		
181	**Does Information Publicity of Ports' Adaptation Investments Improve Welfare?**	
	Kun Wang	University of International Business and Economics
200	**Inland-waterway-based Multimodal Transportation Network with Partial Cargo Containerization Technology**	
	Wenwei Yin	Zhejiang Ocean University
	Xuehao Feng	Zhejiang Ocean University
	Xiaowei Yin	Northeastern University
	Ruiyou Zhang	Northeastern University
234	**Evaluating the Operational and Economic Impact of the Introduction of S-100 and E-navigation within Shipping Companies**	
	Valentino Palma	University of Genoa
	Davide Giglio	University of Genoa
	Alessio Tei	University of Genoa
290	**The Data Driven Procurement Process Management (ProMag) Model for Tramp Ships**	
	Ender Yalçın	Bandirma Onyedi Eylul University
	Serap Göksu	Recep Tayyip Erdogan University
	Murat Aymelek	Izmir Katip Celebi University
	Özcan Arslan	Istanbul Technical University

Parallel Session 12 Maritime and Port Day 4: 19 May 2022 (Thu) 09:00 - 10:30		
Session Chair: Dr Meifeng Luo		
206	**LNG Bunkering Station Deployment Problem in Maritime Transportation**	
	Jingwen QI	The Hong Kong Polytechnic University
	Shuaian Wang	The Hong Kong Polytechnic University
	Jianfeng Zheng	Dalian Maritime University
219	**Impacts of Dry Port on the Container Hinterland Transportation Accessibility**	
	Jiahui Li	Inha University
	Sang-Yoon Lee	Inha University
	Hyunwoo Lim	Inha University
271	**Analysis of PM_{10} Concentration Changes and Influencing Factors in Coal Port Area Based on K-means Clustering**	
	Xiangyu Lin	Hohai University
	Yan Zhang	Hohai University
	Xuejun Feng	Hohai University
	Zhiduan Lin	Hohai University
	Xinyan Zhu	Hohai University
	Jinxing Shen	Hohai University
276	**Strategy Formulation of Shore Power in Inland Port**	
	Hui-Ling Zhong	South China University of Technology
	Jie-Hang Zheng	South China University of Technology

Parallel Sessions

Parallel Session 13 Maritime Economics and Environment Day 4: 19 May 2022 (Thu) 11:00 - 12:30		
Session Chair: Prof. Zhou Xu		
179	**The NSR/SCR-combined Shipping Competitiveness for Containership**	
	Min Tu	Wuhan University of Technology
	Chengzhi Liu	Wuhan University of Technology
209	**Bank Distress and the Blue Economy: The Effect of Non-performing Loans on Port Productivity**	
	Andreas Tsakiridis	National University of Ireland Galway
	Ingrid Mateo-Mantecón	University of Cantabria
	Stephen Hynes	National University of Ireland Galway
	Anastasios Matopoulos	National University of Ireland Galway
	Cathal O'Donoghue	National University of Ireland Galway
218	**Typhoon-induced Disruption and Losses in China's Coastal Ports**	
	Zhenshiyi Tian	Tsinghua University
	Yi Zhang	Tsinghua University
270	**Operational Productivity and Financial Performance of Pure Transhipment Hubs: An Empirical Investigation on Italian Container Ports**	
	Theo Notteboom	University of Antwerp & Ghent University
	Giovanni Satta	University of Genoa
	Luca Persico	University of Genoa
	Bianca Vottero	University of Genoa
	Alessio Rossi	University of Trento

Parallel Sessions

Parallel Session 14 Port Control and Operation Day 4: 19 May 2022 (Thu) 11:00 - 12:30		
Session Chair: Prof. Ying-En Ge		
183	**Efficient and Explainable Ship Selection Planning in Port State Control**	
	Ran Yan	The Hong Kong Polytechnic University
	Shining Wu	The Hong Kong Polytechnic University
	Yong Jin	The Hong Kong Polytechnic University
	Jiannong Cao	The Hong Kong Polytechnic University
	Shuaian Wang	The Hong Kong Polytechnic University
184	**Shipping Domain Knowledge Informed Prediction and Optimization in Port State Control**	
	Ran Yan	The Hong Kong Polytechnic University
	Shuaian Wang	The Hong Kong Polytechnic University
	Jiannong Cao	The Hong Kong Polytechnic University
	Defeng Sun	The Hong Kong Polytechnic University
203	**Evaluation on the Punctuality of Vessel Arrival: A Case Study of Hong Kong Port**	
	Zhong Chu	The Hong Kong Polytechnic University
	Ran Yan	The Hong Kong Polytechnic University
	Shuaian Wang	The Hong Kong Polytechnic University
286	**An Overview of Using Buffer Zones to Improve Container Loading/Unloading Performance at an Automated Container Terminal**	
	Ying-en Ge	Chang'an University
	Meisu Zhong	Shanghai Maritime University
	Yu-Qi Yin	Shanghai Maritime University

Parallel Sessions

Parallel Session 15 Port Development Day 4: 19 May 2022 (Thu) 14:50 – 16:20		
Session Chair: Dr Po-Hsing Tseng		
193	**Study on Ports Investment along the Maritime Silk Road Considering the Mutual Choice Behavior of Industries and Sites**	
	Dongxu Chen	Ningbo University
	Li Xuanrong	Ningbo University
	Wu Shanhua	Ningbo University
	Zhongzhen Yang	Ningbo University
195	**A Whole of Government Approach for Maritime Logistics Hub Development - Case of Singapore**	
	Daniel Seah	Singapore Cooperation Enterprise
	Wei Yim Yap	Singapore University of Social Sciences
256	**Ports, Environment and Regional Development: Panel Evidence from European Regions**	
	Longze Cong	The University of Hamburg
260	**SWOT Analysis of Offshore Wind Power Development in Taiwan**	
	Po-Hsing Tseng	National Taiwan Ocean University
	ManWo Ng	Old Dominion University

Parallel Sessions

Parallel Session 16 Port Operation and Service Day 4: 19 May 2022 (Thu) 14:50 – 16:20		
Session Chair: Dr Liquan Guo		
204	**Capacity Integration in a Port Cluster under Demand Uncertainty by Considering the Optimal Scale of the Port Cluster**	
	Liquan Guo	Hefei University of Technology
	Weilu Hou	Hefei University of Technology
214	**Combining Cruise Line and Passenger Perspective to Evaluate Quality of Passenger Port Service in Taiwan**	
	Sheng Teng Huang	National Taiwan Ocean University
247	**Investigating the Impact of Artwork Logistics Service Quality on Customer Loyalty Using Customer Service Satisfaction and Customer Trust as Mediators**	
	Jin-Long Lu	National Kaohsiung University of Science and Technology
	Shih-Liang Chao	National Taiwan Ocean University
	Ming-Tsai Lee	National Taiwan Ocean University
280	**Visualize the Hinterland Competition of the Gulf of Guinea Port Group**	
	Guangyu Huang	Hohai University
	Mili Chen	Hohai University & 3 China Harbour Engineering Company Ltd.
	Xuejun Feng	Hohai University
	Shoupeng Xie	China Harbour Engineering Company Ltd.
	Liupeng Jiang	Hohai University

Parallel Session 17 Shipping Operation and Management Day 4: 19 May 2022 (Thu) 14:50 – 16:20		
Session Chair: Prof. Stephen Li		
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	Seong-Hyun Cho	Korea Maritime Institute
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	Huiling Zhong	South China University of Technology
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	Hui-Ling Zhong	South China University of Technology
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	Dmitry Erokhin	International Institute for Applied Systems Analysis
	Nikita Strelkovskii	International Institute for Applied Systems Analysis
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220	**How Does the Northern Sea Route Affect China-EU Bilateral Trade?**	
	Ran Zhang	Dalian Maritime University
	Jasmine Siu Lee Lam	Nanyang Technological University
	Zhuo Sun	Dalian Maritime University
227	**Trade Logistics Links Between China and the World**	
	Kevin X Li	Zhejiang University
	Yi Xiao	Zhejiang University
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	Xiao Zhang	Zhejiang University
306	**The Sea Transportation of International Trade Cargo: An Empirical Analysis**	
	Wayne K. Talley	Old Dominion University
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Parallel Session 19 Maritime Regulation and Policy (II) Day 4: 19 May 2022 (Thu) 16:30 – 17:15		
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	Klaas Willaert	Ghent University
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	Yiwei Wu	The Hong Kong Polytechnic University
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Parallel Sessions

Parallel Session 20 Maritime Safety and Risks (II) Day 4: 19 May 2022 (Thu) 16:30 – 17:15		
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	Yang Yang	Jimei University
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	Yu Hu	Xiamen Data Intelligence Academy of CAS, ICT
	Qiang Mei	Jimei University, National-Local Joint Engineering Research Center, & Shanghai Maritime University
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	Congcong Zhao	Wuhan University of Technology & Wuhan University of Technology
	Bing Wu	Wuhan University of Technology & Wuhan University of Technology
	Tsz Leung Yip	The Hong Kong Polytechnic University
	Jieyin Lyu	CIMC Intelligent Technology Co. Ltd
	Junhui Zhang	China Waterborne Transport Research Institute

Parallel Session 21 Airline Innovation and Technology Day 4: 19 May 2022 (Thu) 16:30 – 17:15		
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	Eugene Y. C. Wong	The Hang Seng University of Hong Kong
	Kev K. T. Ling	The Hang Seng University of Hong Kong
	Kelly C. L. To	The Hang Seng University of Hong Kong

Online Tour

Virtual Reality Transport and Logistics Online Tour

Day 5: 20 May 2022 (Fri) 14:30 – 15:30

Co-organizer: Virtual Reality Centre, The Hang Seng University of Hong Kong

About the Online Tour

This online tour aims to demonstrate potential uses of VR technologies in operational training in the field of transport and logistics. Specifically, the latest updates of the centre on collaborative VR system development project will be shown. The project collaborates with logistics corporations to develop operational training activities in virtual environments. In addition, other VR systems developed by the centre in the recent years will be demonstrated with the use of different VR devices, including CAVE and HMDs.

Online Tour Schedule*

14:30	**Briefing** on Virtual Reality Centre and the Transport and Logistics Online VR Tour
14:40	**VR CAVE Experience Tour** on Container terminal stowage operations, Air cargo terminal, and Aircraft 747-8F
15:00	**Head Mounted Display VR Illustration** on Aircraft 747-8F, Van Gogh 3-in-1 Painting, Hang Seng Stock VR Rollercoaster
15:10	**PC Interaction Experience** on Container Terminal
15:20	**Recent development** - Cooperative multiple VR systems for air cargo screening and ULD building for team training
15:25	**Q&A Session**
15:30	**End of Tour**

About the Co-organizer

The Virtual Reality Centre (VRC) aims to support teaching, learning, research and community services through virtual reality and related technologies for the university, industry and the society. The Centre is equipped with interactive and immersive Cave Automatic Virtual Environment (CAVE)-based virtual reality system, Head-Mounted Devices (HMD) and other related equipment in its Virtual Reality and Big Data Analytics Laboratory (VRBD Lab). The Centre applies virtual reality, augmented reality, mixed reality, big data analytics, and data visualisation to various disciplines for teaching and learning through the centre's systems and simulation tools.

*The schedule is subject to change.

Maritime Business Review



Maritime Business Review is a peer-reviewed journal on maritime business environment, covering maritime business and uses multi-disciplinary approach. Published in association with Pacific Star Group Educational Foundation. It is included in Emerging Sources Citation Index (ESCI) and Scopus index.

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Transport Policy



Special Issue on "Maritime Technological Development and Transport Policy"

Transport Policy is an international refereed journal aimed at improving quality of transport policy and strategy analysis, designing and sharing innovative policy and management practices, and application bridging the gap between theory and practice in transport.

The past five years have witnessed a significant increase in advanced-technology-based decision analytics research. Digital technology can be a significant enabler of growth and innovation. For example, AIS data assists navigation safety and security; Blockchain enhances supply chain visibility and efficiency; maritime Internet of Things facilitates simplified administration. As impressive evidence, the unprecedented details about the movement of ships brought by technological development in shipping have effectively overcome the weakness of traditional economic and international trade data, such as low- release frequency or lack of enough public access. Recent research efforts have been made to construct high-frequency economic indicators using these individual ship data, for example, weekly port calls and commodity trade volume at a global level. These indicators make real-time monitoring and nowcasting world economic conditions possible.

Despite the numerous opportunities brought by the advanced technologies, pitfalls may accompany them. For instance, automatization is challenged by cybersecurity; the mid and long-term costs and benefits of Blockchain application are unclear; the uneven technical capability between developing countries and developed economies causes system disharmony and service fragmentation. The success of advanced technology adoption in the maritime industry lies not only in transportation management improvement but also in supporting administrative policy formulation. Particularly under today's uncertain environment hit by the COVID-19 pandemic, practical assessment of the real-time economic activities enabled by shipping will benefit policy makings such as disruption management and recovery planning. Such data granularity further offers new perspectives on big data-based policy-making.

Undoubtedly, the maritime industry's technical development will be further expanded in the foreseeable future. The changing industry landscape powered by technology development also requires changing policies. In this regard, we welcome papers investigating how technology affects transport policies and vice-versa. We

believe that this special issue can shed light on the extension of maritime technology research and enrich the transport policy literature.

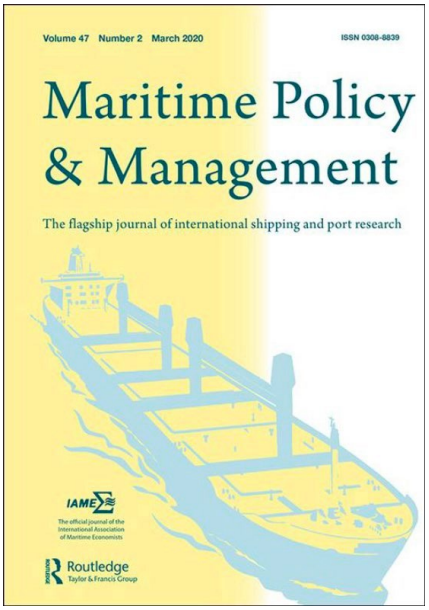
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Maritime Policy & Management



Special Issue on "Green Port and Maritime Shipping"

Maritime Policy & Management (MPM) is indexed in the Social Sciences Citation Index (SSCI). It is a multi-disciplinary and international refereed journal, it brings together papers on the different topics that concern the maritime industry.

Air emissions from maritime transportation have been one of the most discussed environmental concerns in recent years. Frequent shipping activities consume nearly 240 million tons of marine fuel per year, as reported by the International Maritime Organization (Fourth IMO GHG Study, 2020). Therefore, considerable ship emissions will be generated, including sulfur dioxide (SO2), nitrogen oxide (NOx), carbon dioxide (CO2) and particulate matter (PM). Most of these emissions (around 70%) occur within 400 km of the coastline, which have caused severe environmental and health problems. A recent report shows that shipping emissions result in at least 400,000 global premature deaths each year indirectly. Therefore, it is urgent to take measures for controlling air emissions related to shipping activities at ports and at sea.

The emissions at ports are mainly generated from the activities of ships berthing and navigating as well as the activities of cargo loading, unloading, transshipment, storing and internal container transfer operations within the terminal. To ensure environmental sustainability at ports, operators need to achieve a trade-off between port operations efficiency and emission control, while introducing the green target into the traditional port operations problems (e.g., berth allocation, quay crane scheduling, and yard crane assignment) is challenging. Green port technologies (e.g., electrification, energy storage systems, and automated container terminals) have received widespread attention and to some extent adopted in practice. For example, cold-ironing equipment has been applied at some ports for reducing fuel consumption by vessels while anchored at berthing positions. With the aim of energy saving and emission reduction in the shipping industry, the port management system should be further optimized and green port technologies deserve to be widely explored and discussed.

Traditional shipping operations and management problems focus on reducing operating cost. Typical problems in this area, including network design, fleet deployment, schedule design, and ship routing, have been investigated by large numbers of research scholars. However, considering recent emission control policies and measures, such as sulfur emission regulations (0.1% sulfur limit within international emission control areas and 0.5% global sulfur cap), existing maritime shipping networks in shipping companies should be redesigned to

achieve operating cost savings. The construction of green shipping also depends on abatement technologies (e.g., exhaust gas scrubbers) and new energies (e.g., battery, biofuel, and nuclear), some of which have been identified to be effective in reducing ship emissions and mitigating environmental problems. Liquefied natural gas containing zero sulfur content as a popular clean energy has been used in practical operations. A rapid development in maritime shipping management and technologies has been witnessed by the past decade, while the realization of green shipping is still on the way.

The special issue aims to promote the research on green port and maritime shipping. The beneficiaries of this issue include academic scholars, shipping companies, port operators, and policy makers. The Guest Editorss call for all high-quality research papers on green port management and technologies, green shipping management and technologies, and the implementation and inspection of emission reduction regulations. We welcome both research and review papers.

Guest Editors:

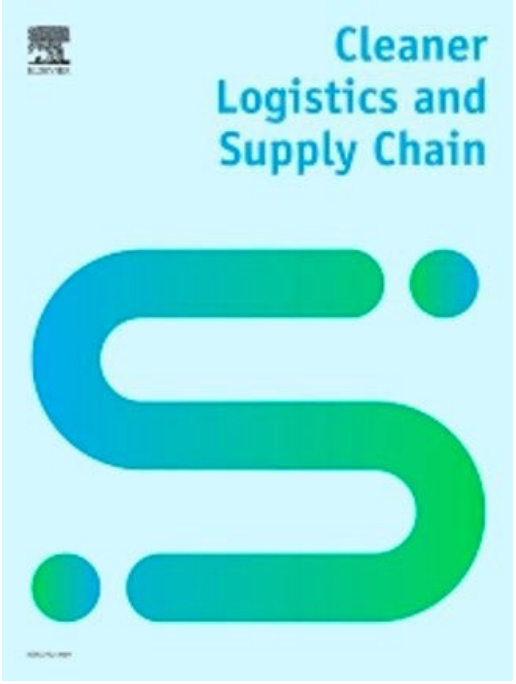
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Cleaner Logistics and Supply Chain



Special Issues on "Cleaner Maritime and Air Cargo Logistics and Supply Chain"

Cleaner Logistics and Supply Chain is an international, transdisciplinary companion journal to the Journal of Cleaner Production focusing on the domain of green, sustainable, and circular logistics and supply chain management.

The recent two decades have witnessed a significant decline in the emissions of air pollutants from all transport sectors. However, the shipping and aviation sectors are two exceptions. To reduce air pollutants and GHG emissions from shipping and aviation activities and thus to halt their adverse impact on human health and the total environment, various countermeasures are implemented globally and regionally. It is evident that sustainability is the theme of the future development of both the shipping and aviation industries. This special issue aims to promote the research on realizing cleaner maritime and air cargo logistics and supply chain.

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Supporting Special Issue:

Journal of Theoretical and Applied Electronic Commerce Research

Special Issue on "Supply Chain Digitalization"

Journal of Theoretical and Applied Electronic Commerce Research published since 2006, is an international, peer-reviewed, scientific journal of the Faculty of Engineering of the Universidad de Talca, published quarterly by MDPI from Volume 16, Issue 3 (2021).

The COVID-19 pandemic, the rise of trade conflicts, and unstable geopolitics have jointly created major disruptions to the national, regional and world economies, driving the decoupling and restructuring of global supply chains. Yet, the advancement of digital technologies has presented unprecedented opportunities for businesses to improve internal operations and integrate inter-organizational processes, seemingly with geographically dispersed partners. It is more critical than ever before to understand how digital technologies enable better management of global supply chains in a turbulent and complex business environment.

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LMS offers comprehensive and internationally recognised academic programmes ranging from undergraduate to postgraduate levels. The primary aims are to nurture highly effective logistics 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 has placed strong emphasis on innovative research in various areas covering maritime, shipping, ports, supply chain management and transport logistics. As a centre of excellence in logistics and maritime education for nurturing professional talents, the Department also strives to provide research and consultancy services for the business community. With close collaboration with the industries, application and real-world connection, the Department can bring the highest quality of teaching, research and consultancy into classes, which will bring benefits for the industry and the community as a whole. It is what LMS makes a difference in logistics and maritime education.

Special Thanks

IFSPA 2022 is proud to have invited the following worldwide prestigious scholars and practitioner as Keynote Speakers for this event:

Keynote Speakers

- Prof. Anming Zhang
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Special Thanks

The Organizing Committee would like to express its heartfelt thanks to the following supporting organizations and scholars for their invaluable inputs to the IFSPA 2022 conference.

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- China Maritime Institute
- Hong Kong Logistics Association
- Hong Kong Logistics Management Staff Association
- Hong Kong Sea Transport and Logistics Association
- Institute of Chartered Shipbrokers
- Institute of Seatransport
- Logistics Research Centre (LRC)
- National Kaohsiung University of Science and Technology
- PolyU Maritime Library and Research & Development Centre (PMLC)
- Shipping Research Centre (SRC)
- The Chartered Institute of Logistics and Transport
- The Hang Seng University of Hong Kong
- The Hong Kong Shippers' Council

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