



THE HONG KONG  
POLYTECHNIC UNIVERSITY  
香港理工大學



CY TUNG  
International Centre for Maritime Studies  
董浩雲國際海事研究中心

## C.Y. Tung International Centre for Maritime Studies



Annual Report 2009/2010  
2010/2011

Maritime Education | Research | Consultancy

[www.icms.polyu.edu.hk](http://www.icms.polyu.edu.hk)





## “Integrated Transportation Logistics: From Low Cost to High Responsibility.”

The Fourth International Forum on Shipping, Ports and Airports, IFSPA 2010



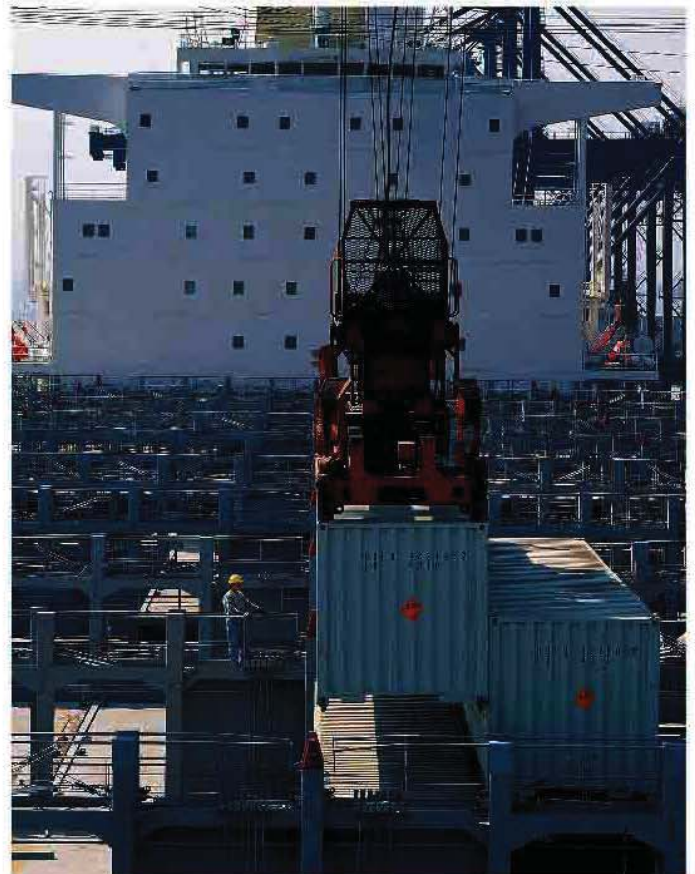
# C.Y. Tung International Centre for Maritime Studies

With a passion for creating a world-class heartland of maritime studies, education and consultancy in the Asian region, the Department of Logistics and Maritime Studies (LMS) at The Hong Kong Polytechnic University (PolyU) established the International Centre for Maritime Studies (ICMS) in 2005.

The founding of ICMS also underlines the determination of PolyU and the Department to play an essential role in supporting China's 11th Five-Year Plan which has identified logistics as a major strategic direction of the national economy and its commitment to the development of three major logistics and portal regions (i.e. Pearl River Delta, Yangzi River Delta, and Bo-Hai Gulf). At the same time, ICMS strives to support Hong Kong as it reinforces its role as a world-renowned international maritime Centre.

Since its establishment, ICMS has actively conducted various activities in well-defined strategic areas, including research, teaching and consultancy, with encouraging results having been accomplished. In 2007, ICMS was named after the late Mr C.Y. Tung as the C.Y. Tung International Centre for Maritime Studies (董浩雲國際海事研究中心), in appreciation of a pledge of HK\$10 million from The Tung Foundation for the Centre's further advancement.

With this generous donation, ICMS undertook an expansion in the academic year of 2007/2008. Located on the PolyU campus, the renovated Centre covers an area of approximately 530 square metres on the 4/F of CD Wing. With enhanced facilities, it is geared towards providing maritime resources and support for the Department's students, academics, industrial partners and the maritime community as a whole.





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# Introduction





# This

Report aims to outline the development and performance of C.Y. Tung International Centre for Maritime Studies (C.Y. Tung ICMS) in 2009-2011 (July 2009 to June 2011).





## Chairman's Message



### Welcome to C.Y. Tung International Centre for Maritime Studies!

I am delighted to present this Annual Report as the Centre embarks on new challenges as we move into 2012. Over the past two years, the Centre completed research outputs and spearheading a wide range of cutting-edge projects, allowing the Centre to focus on its mission and reinforce its role as a world-class maritime centre in Hong Kong.

The Centre has been industrious in its pursuit of excellence in maritime research and education since its inception on 9 March 2009. Highlights have included advanced research and consultancy projects for the maritime industry, the release of multiple issues of academic journals in shipping and port research, quality teaching and learning activities for undergraduates and postgraduates, and expanding its network and collaboration with Mainland and overseas universities.

In the past two years, completed research projects include "The Development Policy Study on Shenzhen Port-Logistics Service" and "Low-carbon Shipping & Green Logistics Studies"; both studies were initiated by

the Centre and claimed fruitful results and recognition by the China Government and regional associations. To strengthen the ties with the industry, the Centre conducted "Independent Marine Impact Review on LNG Terminals" and the verification of the web-based "OOCL Carbon Calculator". The Centre will continue to strive to promote academic and industrial collaborations.

The Centre has continued its efforts in expanding the IFSPA international conference. Indeed, the Conference is now an anchor event for the Centre. In recognition of the increasing importance of the logistics and transportation development in the Mainland China, the Centre took the IFSPA to Chengdu, Sichuan, an emerging transportation hub 2011. The IFSPA provides a platform for academic experts and industrial practitioners to share views and to discuss issues for the maritime and logistics sector. This IFSPA further strengthened our networking with the Mainland China.

Going forward, the C.Y. Tung International Centre for Maritime Study will continue to work towards achieving excellence in maritime research and education. With support from the University and The Department of Logistics and Maritime Studies, the Centre can and will continue to strive towards contributing professional expertise in serving the maritime industries, promoting and building up international as well as mainland networks through education, research, training, conferences, meetings, industrial collaborations, consultancy services and visits.

In the coming year, we have the honor to have new Steering Committee members from the University including Prof. Philip Ching Ho Chan, Deputy President and Provost, Prof. Howard Davies, Acting Dean, and Professor Chung-Lun Li, Head of Department of Logistics and Maritime Studies (LMS). Under the leadership of Acting Director Professor Li, the Centre will play an important part in continuing IFSPA and various research projects together with the Department in an array of areas including container port productivity, regional port alliance formation, empty container repositioning, and ship chartering decision making.

Looking to the future, I hope that together with the University and the Department, the Centre will further advance its development and contribution to serve the maritime logistic industry in Hong Kong, China and Beyond.

Dr C. C. Tung  
Chairman of Steering Committee





## Director's Review

This has been a busy and fruitful year. Under the auspices of the Department of Logistics and Maritime Studies and the Tung Foundation, the C.Y. Tung International Centre for Maritime Studies has flourished and grown to become a key platform to support the development of the logistics and maritime industries in Hong Kong and Mainland China. Highlights of our work include the implementation of a wide range of groundbreaking applied research and consulting projects, the release of multiple editions of Maritime Policy & Management, special issues of Transport Policy and Research in Transportation Economics, and the new journal entitled China Oceans Law Review, as well as the success of hosting the International Forum on Shipping, Ports and Airports in October 2010.

C.Y. Tung ICMS's efforts to expand the research scopes have helped to build a strong research portfolio. Major research projects including "Port Benchmarking" and "Harmful Algae Bloom Forecasting" offer the latest results on port productivity and precise forecasting services for the occurrence of red tide. The Centre also initiated several consultancy studies for the Shenzhen Government, and our contribution was recognised by the government agencies in Mainland China.

We are also gratified that the Centre has strengthened its partnership with the industries by conducting an independent verification of the web-based Carbon Calculator for the Orient Overseas Container Line (OOCL). This significant achievement was widely covered by a number of trade publications around the world.

### Hosted by C.Y. Tung ICMS, the International Forum on Shipping, Ports and Airports (IFSPA)

has experienced a major success over the years. Themed "Integrated Transportation Logistics: From Low Cost to High Responsibility", we have taken the IFSPA to Chengdu, an important logistics and transportation hub in western China, for the first time. IFSPA 2010 was



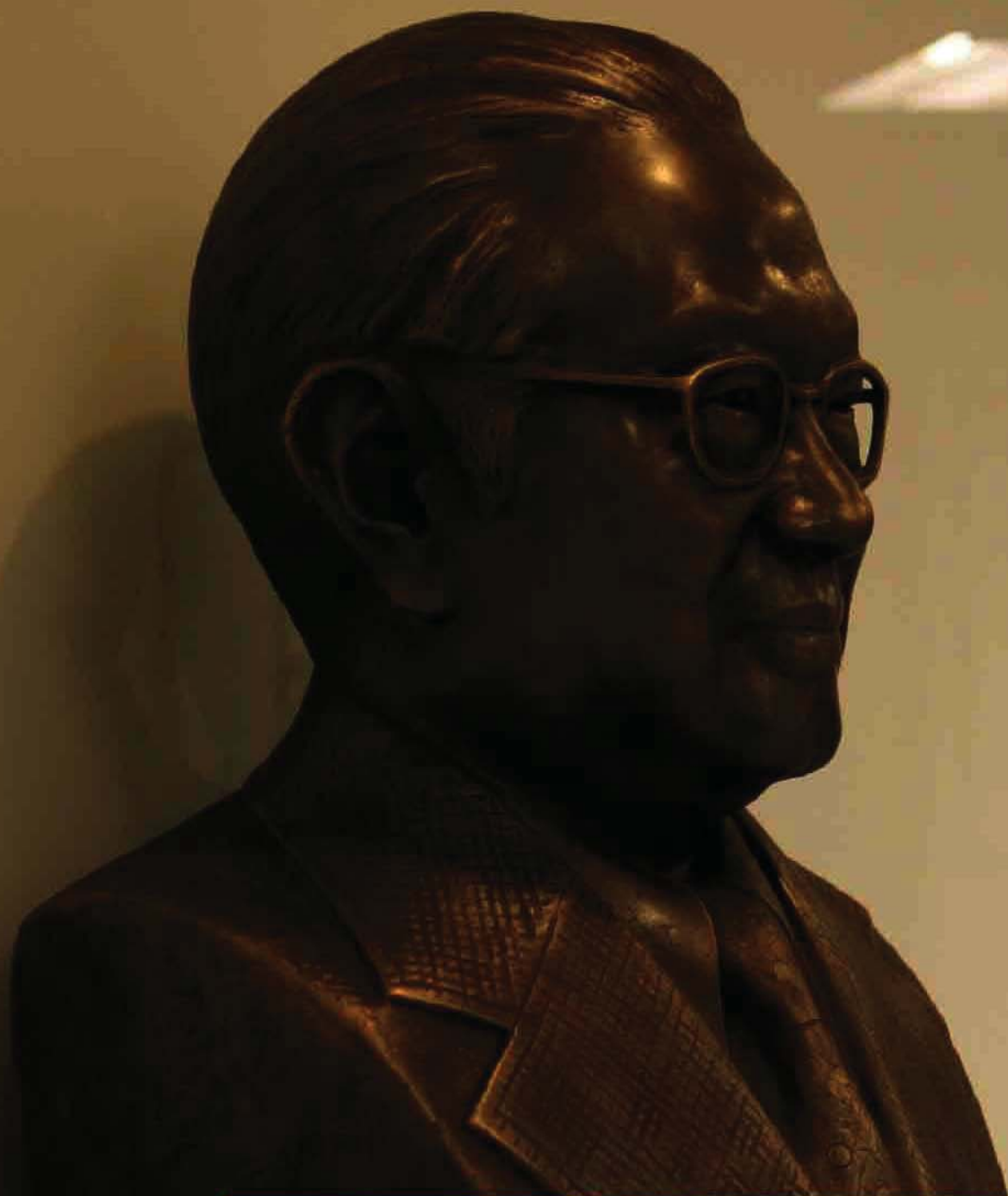
programmed with one industrial forum, three academic keynote sessions, and fifteen parallel sessions, and gathered eminent academics and influential industry practitioners locally and internationally. We were delighted to receive an overwhelming response from the participants, and this filled the Centre with pride and encouragement.

In the years to come, C.Y. Tung ICMS will continue to strive to be the leading world-class centre for maritime research, education, and consultancy. We will further promote academics and industrial collaboration and actively forge partnerships to benefit the region and our nation.

With the solid foundation built and the unceasing strength gained from the Tung Foundation, the stakeholders, the University, and our dedicated staff, we are expecting yet another spectacular year. I am thankful for our achievements, and the Centre looks forward to conquering new challenges ahead.

Prof. Chung-Lun Li  
Acting Director





"a lone Chinese who made the world his classroom, his place of business and his home, and became a legend in his own lifetime."

C.Y. Tung, his vision and legacy, 1984, page 101





## Mission & Objectives

C.Y. Tung ICMS was established under the Area of Strategic Development (ASD) Scheme in 2005 and is hosted in the Department of Logistics and Maritime Studies (LMS) of The Hong Kong Polytechnic University (PolyU). Since its inception, the Centre has had a very clear mandate to establish itself as world-class centre for maritime studies, education and consultancy by:

- Providing quality comprehensive maritime education for Hong Kong, the Chinese Mainland and Asia
- Engaging in application-oriented research in shipping, maritime and supply chain logistics, with a particular focus on:
  - Port/airport and transport policy research
  - Marine risk and insurance
  - Maritime and logistics environmental protection
  - Maritime and integrated transport systems
  - Maritime law and legal service
- Conducting professional training and consulting activities in the field of shipping and supply chain logistics from both management and economic perspectives; as well as promoting and strengthening PolyU's relationship with the maritime community.





# → Steering Committee

The Centre is governed by the Steering Committee (chaired by Dr C.C. Tung, The Tung Foundation's Representative) which also serves to provide guidance and direction on its development.

The 3rd Steering Committee was held on 12 October 2011. The Terms of Reference and Membership of the Committee was further discussed and finalised. It was deliberated that three members shall be nominated by the Tung Foundation and three members shall be nominated by PolyU, of which one shall be Director of C.Y.Tung ICMS (the Chair Professor of Maritime Studies). In the event that the Head of LMS is not the Chair Professor of Maritime Studies, he/she shall be another nominee for the Committee. Moreover, one of the three members nominated by The Tung Foundation shall serve as Chairman.

Mr Andy Tung, representing the Tung Foundation, was appointed to the Committee in September 2009 bringing in with him a wealth of expertise in the maritime and shipping area.

Mr Alexander Tzang stepped down from the Committee as he retired from his position of Deputy President at PolyU in December 2009. The Committee expressed a sincere vote of thanks to Mr Tzang for his outstanding contributions to the establishment and development of the Centre in the past few years.

Prof. Philip C.H. Chan, Deputy President & Provost and Prof. Edwin T.C. Cheng were appointed by PolyU to the Committee in 2011, providing advice on the Centre's performance and future development.



## Membership 2011/2012.

### Chairman

Dr Chee-chen Tung, SBS, JP 董建成博士 SBS 太平紳士  
(Donor Representative, The Tung Foundation)

Mr Alan Tung 董立新先生  
(Donor Representative, The Tung Foundation)

Mr Andy Tung 董立均先生  
(Donor Representative, The Tung Foundation)

Prof. Philip C.H. Chan 陳正豪教授  
(Deputy President and Provost, PolyU)

Prof. Howard A. Davies  
(Acting Dean, Faculty of Business, PolyU)

Prof. Chung-Lun Li 李仲麟教授  
(Acting Director of C.Y.Tung ICMS;  
Chair Professor of Logistics Management;  
and Head of LMS, PolyU)



# Organization & Operational Management



The organisational structure and operational management of the Centre in principle followed that of the previous year for stable growth and development. The Acting Director (Prof. Chung-Lun Li) continued to oversee the strategic development and implementation of the Centre, with Dr T.L. Yip as Associate Director responsible for academic and industrial frontiers. The administrative and technical staff of the Centre (including Senior Engineer, Manager, Executive Officer and technical team) supported its daily operations, encompassing research and training initiatives, funding

bidding, marketing activities, events organisation and laboratories administration.

Further to the recommendation of the Campus Development and Space Allocation Committee of PolyU on enhancing campus spacing utilisation, the project room of the Centre underwent renovation and was developed into a 4-workstation office to accommodate more research personnel and/or invited fellows working on the collaborative research projects of the Centre.







# The Year in Review







**It** was a busy and fruitful year for the Centre. While there were an array of ongoing projects and activities, the Centre spearheaded studies and projects in new areas with its expertise and connections. Most of these new endeavours involved collaboration with various national and international networks and institutions, and also considerable effort was expended in seeking out funding applications for these initiatives.





# Teaching & Learning



With a view to further augmenting the teaching and learning activities of LMS, the Centre's laboratories (Marine Simulation Laboratory, GMDSS Simulation Laboratory and Maritime Information Technology Laboratory) supported more classes, tutorials, demonstrations and/or orientations arranged for the following subjects, on top of the regular computing services offered to LMS students. Compared with the previous year, the usage of the laboratories for these classes and tutorials showed an increase of 255%, from 80 to 284 sessions.

- "Economics for Shipping" (LGT2512)
- "Foundation Year Seminar" (LGT1 202)
- "Marine Navigation and Meteorology" (LGT3022 and LGT3522)
- "Maritime Introduction" (LGT2509)
- "Navigation and Communication Systems" (LGT3004)
- "Navigation and Shipboard Communication" (LGT3504)
- "Quantitative Method for Logistics Students" (LGT2510)
- "Port Economics & Applications" (LGT3517)
- "Shipbroking and Chartering Practice" (LGT4003)

## 1. Marine Simulation Laboratory

The laboratory, equipped with the technology to project of realistic visual on plasma display and the installation of a set of ship-handling simulator comprising a wide range of navigational controls, aims to create a virtual marine environment for ship handling training, manoeuvre rehearsal, ship performance and operational assessment. Software installed encompasses: Navigation simulator, Port simulation, Maritime traffic risk simulation, Maritime environment/pollution protection simulation, Maritime search and rescue simulation and Simulation-facilitated red-tide indexing technology (patentable).

## 2. GMDSS Simulation Laboratory

The laboratory is equipped with Poseidon Global Maritime Distress and Safety System (GMDSS) simulation software which facilitates students to acquire a broad concept of navigation and communication systems that are applied to the effective management of vessel.

## 3. Maritime Information Technology Laboratory

The IT laboratory provides computer facilities and maritime related software for the enhancement of students' computer literacy and knowledge in maritime research methodology and information technology including Flexsim, Shipping software, IMO publications, Fairplay Shipping Encyclopedia, MathCad and SPSS.

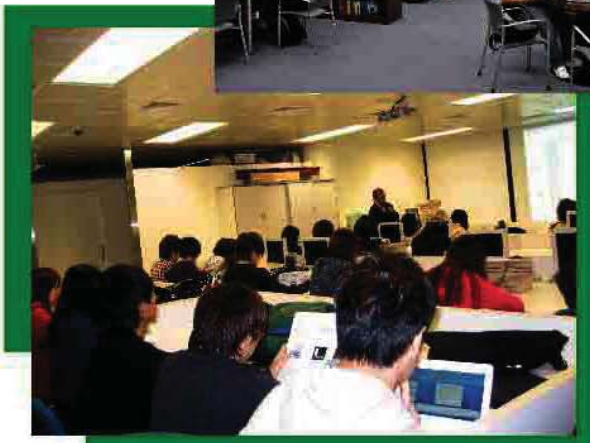




Periodically, there are research initiatives pursued under the auspices of the Centre and LMS. Furthermore, the Centre provides the Department with IT and Simulation Laboratory services to augment its maritime teaching and research activities as well as technical and administrative support (including purchasing and inventory management).

The Centre and the IMC-Frank Tsao Maritime Library and Research & Development Centre (IMCC) continue to serve as a bridge between LMS and the industry.

As the year progressed, the Centre had established good rapport and direct connections with other parties at PolyU. It supported a number of events organised by other units to open the Centre to the public and delegations for promoting PolyU and itself.







## Research Initiatives



The progress of major research projects on a continuous basis were as follows:

**(a) Port Benchmarking** - the latest research results on port productivity and policy evaluation were submitted to prestigious journals, conferences and governmental officials for consideration/release:

- "Heterogeneous and Nonlinear Frontier Analysis: Supply-Chain Transaction Cost Perspective" (working paper)
- "Evolution of Global Container Operator Efficiency: A DEA approach" (conference paper)
- "Group and Individual Heterogeneity in Stochastic Frontier Model: Container Terminal Operators" (journal paper)
- Study and analysis of Shenzhen ports (基於異方差技術效率的深圳港口評估與提升對策研究) (proposal to the Shenzhen Government for funding).

**(b) Harmful Algae Bloom Forecasting** - a funding proposal has been submitted to the Guangdong Science and Technology Department for developing a "Diffusion-Embedded Harmful Algae Indexing System" with an enhanced database and platform for offering more precise forecasting service.

An application of the "Harmful Algae Harmful Indexing (HAIDEX) System Method" for the US Patent was filed to the United States Patent and Trademark Office in 2008. The Office published the Patent Application Publication in September 2009 (No. US2009/0228516 A1).

**(c) Regional Container Cargo Equilibrium Analysis and How Hong Kong Prospers with a Sub-40% Market Share (PolyU Niche Area Development Grant: \$1.15M, 2008-2012)** - based on collected data and constructed econometric models, TEU forecasts of Hong Kong, Shenzhen and Guangzhou ports were made and the relevant monthly reports were posted to the ICMS website.





**New applied-research projects during the year:**

**(d) The Development Policy Study on Shenzhen Port-Logistics Services**

Built on the solid research capacity in the area, the Centre initiated a relevant project (深圳港口物流服務業發展對策研究) to study how to enhance the competitive edge and sustain the growth of Shenzhen by developing port-logistics facilities and services to cope with the changes ahead. This one-year project, initiated in a joint effort with the Xi'an Jiaotong University, was successfully listed in the 2010 Research Project Scheme (中國物流學會研究課題計劃) by the China Society of Logistics (中國物流學會).

The project finished at the end of November, 2010. Fruitful research results were obtained and policy suggestions for Shenzhen port logistics service were made. This innovative contribution has been commended by Ministry of Education of PRC and China Logistics Association.



**(e) Low-carbon Shipping & Green Logistics Studies -**

combined with its academic expertise and scientific knowledge, the Centre commenced studies to support carbon emission reductions. The focus was on establishing common standards, methodology and framework for carbon emission measurement, database development, monitoring and management for the logistics industry.

The detailed research output including scholarly books, journal publications, conference papers and presentations will be set out in the ICMS Annual Report 2009/2010 (printed version) to be produced in late 2010.





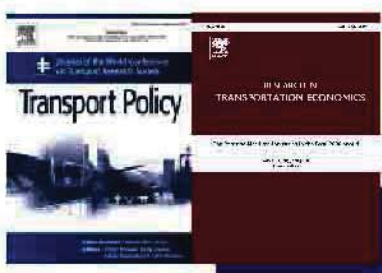
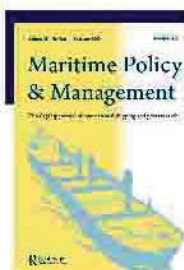
# Journals and Publications



## (a) Maritime Policy & Management (MPM)

Since the handover of the Editorial Office to the Centre in 2009, the academic journal MPM had achieved tangible progress as highlighted below:

- Submissions have increased with papers contributed from 25 countries and territories with Hong Kong, UK, Greece and Norway topping the list.
- The online platform for paper submission and review was launched in November 2009. This has helped enhance operational efficiency and provided more convenience and transparency to authors and reviewers.
- The online subscription of the Journal has achieved a substantial increase in 2009, with major growth in Africa, Asia and Latin America. The Journal experienced a high increase in online readership as well, reaching 23,502 downloads.
- With both an increase in subscription and submission, MPM had increased from 6 to 7 issues per year in 2010.
- The Journal sponsored the "International Forum on Maritime Security 2010" in Taiwan in April 2010.



## (b) Transport Policy (TP)

TP is an international journal aimed at bridging the gap between theory and practice in transport. Its subject areas reflect the concerns of policymakers in government, industry, voluntary organisations and the public at large, by providing independent, original and rigorous analysis to understand how policy decisions have been taken, monitoring their effects, and suggesting how they may be improved. The journal treats the transport sector comprehensively, and in the context of other sectors, including energy, housing, industry and planning.

In September 2009, the Centre published a special issue in TP dedicated to IFSPA 2008 (vol. 16, no. 5). This issue served as the focus of the International Forum on Shipping, Ports and Airports (IFSPA) 2008, consisting of selected papers from more than 70 articles submitted to the conference. The final list of papers in this issue also reflects the objectives of IFSPA - to nurture cross-fertilisation within the fields of transportation and logistics, as well as the publication and promotion of high quality papers representing different aspects within the indicated fields. The papers in this issue investigated a number of challenging topics, including economics, operational research, personnel development, policies, urban and regional development, within the aviation, logistics and maritime industries in both developed and developing economies.





### (c) Research in Transportation Economics (RTE)

RTE is an international journal devoted to the dissemination of high quality economics research in the field of transportation. The content covers a wide variety of topics relating to the economics aspects of transportation, government regulatory policies regarding transportation, and issues of concern to transportation industry planners. The unifying theme throughout the papers is the application of economic theory and/or applied economic methodologies to transportation questions. The ultimate goal for RTE is to provide transportation researchers a valuable source of information useful in the formulation of transport policy and for industry decision making. Each volume has a unifying theme within transportation economics.

In January 2010, the Centre published a special issue in RTE dedicated to the International Forum on Shipping, Ports and Airports (IFSPA) 2009 (vol. 27, no. 1). Themed as "The Port and Maritime Industries in the Post-2008 World", this issue investigates the challenges that the maritime industries may need to tackle in the post-2008 world, as well as the way forward, as we strive to turn the economic turmoil of 2008 into new opportunities, in addition to how the maritime industries should cope with the challenges and opportunities ahead.

### (d) China Oceans Law Review (COLR)

With a passion for advancing ocean law research and studies, the Centre had worked together with three leading universities in Shanghai (Centre for Oceans Law and Policy, KoGuan Law School, Shanghai Jiao Tong University), Xiamen (Center for Oceans Policy and Law, Xiamen University Law School, Xiamen University) and Taiwan (Institute of Marine Affairs, Sun Yat-sen University in Taiwan) to issue "China Oceans Law Review" (中國海洋法學評論). This bi-annual periodical is the first of its kind in the Chinese mainland. Its 10th issue published in May 2010 was the first issue produced after the establishment of the cross-strait academic collaboration in 2009.



### (e) Conference Publications

To promote high-quality papers representing different aspects in the field in a sustainable manner, the following were issued during the year.

- IFSPA 2009 Conference Proceedings (ISBN code: 978-962-367-653-3)
- Special Issue for IFSPA 2008, Transport Policy, Vol. 16, Issue 5, September 2009
- Special Issue for IFSPA 2009 themed "The Port and Maritime Industries in the Post-2008 World", Research in Transportation Economics, Vol. 27, 2010







## Collaborations, Consultancy and Con

### i. Consultancy Project for Shenzhen Government

The one-year project "How to Construct a Modern Industrial System in Shenzhen" funded by the Shenzhen Bureau of Science Technology and Information was successfully completed in June 2010. Three comprehensive sets of reports and presentations mapping out the strategies and plans for promoting and implementing modern industries in Shenzhen were presented.

Independent Marine Impact  
Reviews on LNG Terminal at  
Shenzhen



### ii. Independent Marine Impact Review on LNG Terminal at Shenzhen

Dr T. L. Yip (Associate Director) conducted an independent review of marine risk aspects of the proposed LNG terminal at Shenzhen. In this consultancy study, Dr Yip reviewed the transit of LNG carriers to the proposed LNG terminal, identified the risk issues in the context of international and regional shipping practices, and provided comments to the China Government. The project is valued at several hundred thousand Hong Kong dollars.

### iii. Cross-boundary and International Collaborations

#### (a) Collaborative Projects with Xi'an Jiaotong University

To pave the way for future collaboration with the Xi'an Jiaotong University to establish a State Key Laboratory, the Centre had been making a concerted effort with its counterpart in a number of projects on different frontiers in the past year.

- Produced two comprehensive reports on the development of logistics industry in China (中國物流地產業2009年發展回顧與2010年展望 和中國港口物流2009年發展回顧與2010年展望) published in the "Chinese Logistics Development Review" (中國物流發展報告) in May 2010.
- Conducting "The Development Policy Study on Shenzhen Port-Logistics Services" - built on its solid research capacity in the area, the Centre initiated a relevant project (深圳港口物流服務業發展對策研究) to study how to enhance the competitive edge and sustain the growth of Shenzhen by developing port-logistics facilities and services to cope with the changes ahead.
- Together with the China Society of Logistics submitted a proposal to the Organizing Committee of International Bidding of the Development Strategy Xi'an International Logistics & Trade Park (XILTP) to solicit funding to sponsor the Initiative (西安國際港務區在亞歐大陸橋上"大通道"物流便利性研究) which aims to study the strategies, key success factors and implementation for developing XILTP as an intentional dry port and logistics centre, a major project in the "11th Five-Year Plan" of the Shaanxi Province.
- Submitted a proposal to the National Development and Reform Commission, PRC, for funding to sponsor a project on carbon emission measurement and management (物流業碳排放量評測與管理體系研究).





## **(b) Partnership with International Centre for Decision and Risk Analysis (ICDRiA) of The University of Texas at Dallas**

Promising progress has been made in the past year. C.Y. Tung ICMS and ICDRiA extended the collaboration network by signing a Trilateral Agreement with the World Class University Project and Graduate Department of Financial Engineering (WCUP-GDFE) of the Ajou University, Korea. Joint research in the domains of "Risk and Decision Analysis", "Financial Engineering" and "Supply Chain" will be performed by scholars of the three parties under the auspices of ICDRiA. The Agreement provided a framework for more extensive cooperation amongst the three universities and paved the way for the network extension.

The first event organised under the Trilateral Agreement was a conference on "Optimal Theory, Financial Mathematics and Financial Engineering" held in July at the Ajou University. An International Research Forum was held on 15-17 December 2010 on PolyU campus, which provided a platform for discussing the new research directions and training initiatives taking into account of the lessons learnt from the global economic crisis.

## **(c) Participation in Maritime Industry/Educators Academic Working Group**

C.Y. Tung ICMS endeavours to promote maritime education and maintain its global network with maritime industries and institutions. The Centre has recently accepted the invitation to participate in the Maritime Industry/Educators Academic Working Group of the project "Academic Web Resource" initiated by the Maritime Industry Foundation. The

Foundation was established by the Round Table (BIMCO, ICS, Interargo, INTERTANKO) and endorsed by the International Maritime Organization in 2005.

The "Academic Web Resource" aims at providing a platform for maritime innovation, research, development and information sharing. It also promotes the maritime career to young students and professionals at all levels. The Working Group comprising institutions from various countries such as the UK, Germany, The Netherlands, Finland and Russia, will discuss and deliberate the setup and development of the project.

## **(d) External Appointments**

Associate Director Dr T. L. Yip was appointed as Visiting Professor of Maritime and Supply Chain Management, College of Business and Public Administration, Old Dominion University, USA. Dr Yip visited the University in June-July 2010.





# → Industrial Partnership with OOCL

The Working Team of LMS and the Centre conducted an independent verification of the web-based Carbon Calculator of Orient Overseas Container Line (OOCL) launched in April 2010. The Calculator, designed to assist OOCL customers in measuring the carbon dioxide emissions in their supply chain, is the first of its kind to offer multiple shipment searches, and full intermodal data using actual emissions figures from OOCL ships.

As there was no reported means for systematically testing an end-to-end multiple shipment calculator, the Working team developed a scientific methodology to verify the materiality, completeness and accuracy of the processes, data and methodology underpinning the Calculator of OOCL, from three aspects including quality and operations management, shipping management, and database analysis. The initiative and the partnership were widely covered by the press as well as shipping and trade portals.

The Centre strives to use the applicable experience in other similar applications in the air shipping, aviation transportation and supply chain sectors, and to play a role in new initiatives regarding low-carbon economy where third party verification is required.





# Media Highlights - OOCL Carbon Calculator

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# → Conferences and Seminars

## (a) International Forum on Shipping, Ports and Airports (IFSPA) 2010



Running for its fourth consecutive year, IFSPA was held in Chengdu from 15 to 18 October 2010. It was the first time the conference met outside of Hong Kong, and Chengdu is an important logistics and transportation hub in China. The Conference was approved as one of the events in the 11th Western China International Fair (第十一屆中國西部國際博覽會) held from 17 to 20 October 2010.

To address the global concern on green logistics and low-carbon economy, the conference took the theme "Integrated Transportation Logistics: from Low Cost to High Responsibility", to provide an interactive platform for academics and industry practitioners to exchange views and network.

## (b) Participation in Seminars and Workshops

The Centre participated in various conferences and seminars overseas for exchange and sharing of its research outcomes. Major seminars and presentations given during the year included:

- Joint seminars with Xi'an Jiaotong University, "Idiosyncratic-risk characteristics of port-focal logistics", "Group competition of global ports" and "The effect of risk aversion on manufacturer promotion in a two-stage supply chain", 7-9 July 2009.

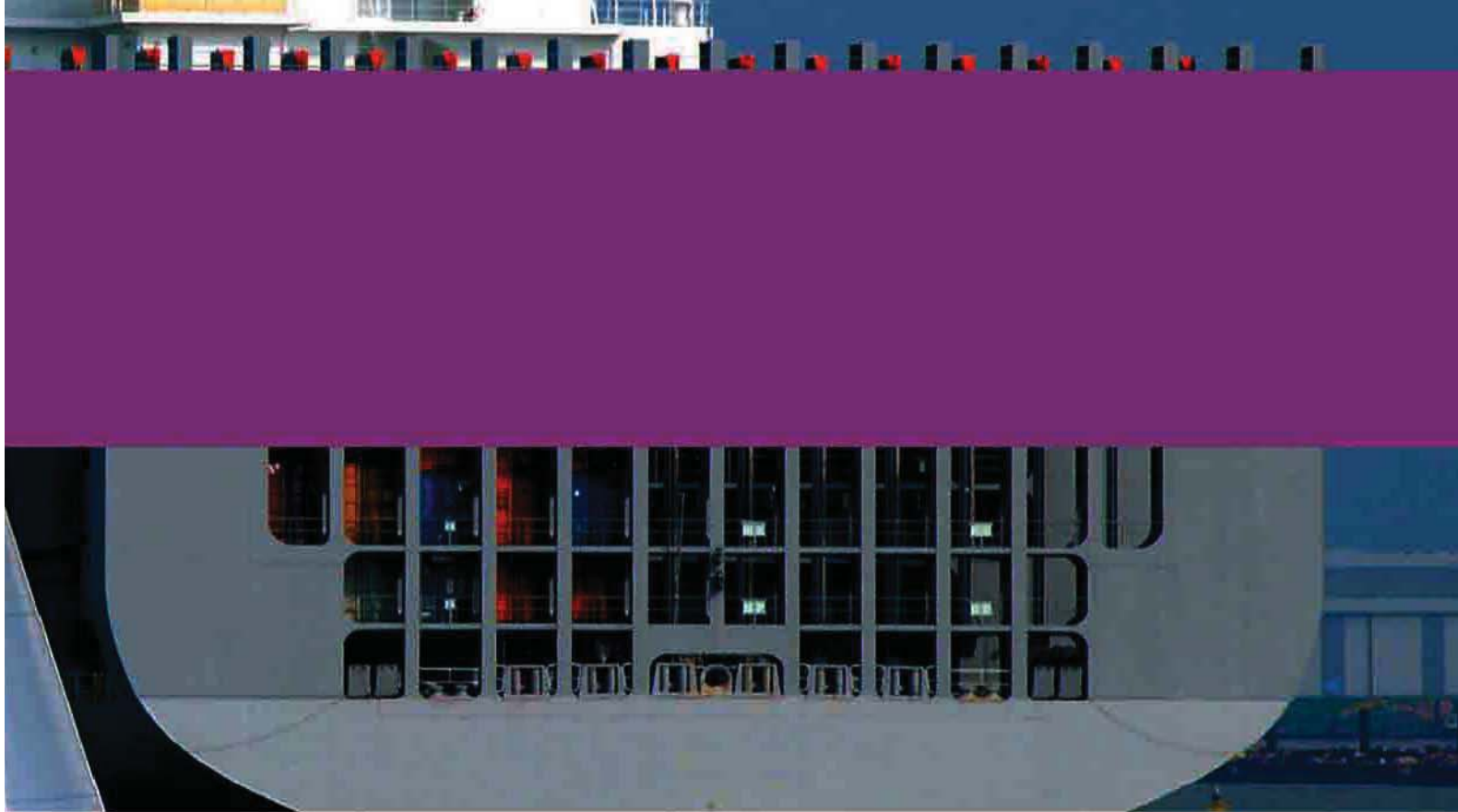


- Presentation "Low Carbon Economy and Green Logistics" at the joint forum with Nankai University "Summit on Transportation Logistics and Regional Economic Development", Shenzhen, 25 October 2009.



- Invited talk on the development of shipping and logistics industry, Huazhong University of Science and Technology, 6 April 2010.
- Invited speech at the "International Forum of Wuhan New Ports", HK, 18 May 2010.





- C.Y. Tung ICMS welcomed the delegation from Chung-Ang University (CAU) on 2 February 2010. Two seminars, themed "Port Management in the Pearl River Delta" and "Maritime Law", were respectively delivered by Dr TL Yip, Associate Director of C.Y. Tung ICMS and Dr Kevin Li, Director of IMC-Frank Tsao Maritime Library and Research & Development Centre, for the 24 delegates led by Professor Yeon Hur, Head of Department of International Logistics Management of Chung-An University, South Korea.

CAU, one of the prestigious universities in Korea with a long history in providing quality education, is a close partner of LMS in developing exchange initiatives for students of the two institutions. The signing ceremony of the agreement on student exchange between two parties was also made on the visit day at C.Y. Tung ICMS.



- Dr T. L. Yip, Associate Director of C.Y. Tung ICMS, presented two seminars at Korea Maritime University (KMU) on 4 November 2009.

The seminars were organised by KMU's Department of Logistics Systems Engineering, College of Engineering. Upon invitation by Professor Hwan Seong Kim, Dr Yip spoke on "Port Benchmarking - A focus on Hong Kong and South China Region", a major research topic of C.Y. Tung ICMS. This sustainable project aims at examining major container ports in the world to identify the best practices to improve port efficiency for the consideration of the port business community and regulators.

Both presentations were well received by the undergraduates and the postgraduates of the Department. It was a fruitful exchange between the two parties and marked a further step in building up the Centre's global networking.





# Media Highlights - IFSPA 2010



“Opening Ceremony, IFSPA 2010”

16 October 2010, Chengdu, China





#### **The Fourth International Forum on Shipping, Ports and Airports (IFSPA 2010)**

The Fourth International Forum on Shipping, Ports and Airports (IFSPA 2010) attracted more than 150 academics and industry practitioners for an exchange of views and experiences on the relevant issues facing the sectors, further advancing academia-industry cooperation in relation to the theme "Integrated Transportation Logistics: From Low Cost to High Responsibility".

This fourth annual event, jointly organised by the Department of Logistics and Maritime Studies and the C.Y.Tung International Centre for Maritime Studies of PolyU and the Southwest Jiaotong University, was held from 15 to 18 October 2010 in Chengdu, Sichuan, China. Keynote Speakers and participants came from 16 countries and territories including the USA, Canada, The Netherlands, Italy, Greece, India, Japan and South Korea.







# International Maritime Statistics Forum 2011 Hong Kong



"IMSF 2011"

31 May - 1 June 2011, Hong Kong Poly U





From 31 May to 1 June 2011, the campus of PolyU was packed with conference participants to the International Maritime Statistics Forum (IMSF) 2011. Jointly organised by the C.Y. Tung International Centre for Maritime Studies, Department of Logistics and Maritime Studies, and the International Maritime Statistics Forum, United Kingdom, the two-day Forum was well received with over 100 industry stakeholders attending. These included participants from Hong Kong, the United Kingdom, Canada, Finland, and more.

At the opening ceremony, welcoming speeches were delivered by Prof. Howard A. Davies, Acting Dean and Associate Dean of the Faculty of Business and Dr T. L. Yip, Associate Director of C. Y. Tung International Centre for Maritime Studies at PolyU, Mr. Francis Liu, Acting Director of the HKSAR Marine Department, Mr. Arthur Bowring, Managing Director of the Hong Kong Shipowners Association, as well as Mr John Dowden, Senior Manager of the United Kingdom Chamber of Shipping.

Held for the first time in Hong Kong and covering a range of topics related to the maritime and shipping industry, the conference established its relevance to today's Asia and Global perspective. Comprising 19 keynote sessions and 3 status reports to address the challenges and solutions in the field of shipping and trading, the conference closely discussed the security, safety, energy outlook, and environmental issues of the industry, and explored the economic contribution of shipping and ports.





# → ICASL 2011



Jointly organised by the College of Management, Department of Transportation and Communication Management Science of the National Cheng Kung University, Chinese Maritime Research Institute (Taiwan), School of Business Administration of the Southwestern University of Finance and Economics (China), and the Korean Association of Shipping and Logistics Inc., the Fourth International Conference of Asian Shipping and Logistics (ICASL 2011) was held from 5 to 6 May 2011, in Tainan City, Taiwan.

The theme of 2011 conference was "Toward Efficient and Sustainable Transport Logistics on Supply Chains". Dr T. L. Tip, Associate Director of C.Y. Tung ICMS was invited as Honorary Guest to deliver a presentation on "High-end Maritime Services and their Education in Hong Kong."

The presentation was well received by the attendees and there was a wide range of industrial discussions on maritime business and education direction in Hong Kong.





# ICMS Lecture Series



C.Y. Tung International Centre for Maritime Studies was honoured to have the following speakers giving lectures at PolyU:

1. Professor Jia-An Yan, Academy of Mathematics and Systems Science Chinese Academy of Sciences, Beijing, was speaker at the lecture series on "Introduction to Mathematical Finance." (4-5 January 2011)

2. Professor Alain Bensoussan, Ashbel Smith Professor and Director of ICDRIA at University of Texas at Dallas, Chair Professor of Risk and Decision Analysis at the Hong Kong Polytechnic University, and World Class University Distinguished Professor at Ajou University, gave a lecture titled "REAL OPTIONS, Competition, Incomplete Markets." (4 April 2011)

3. Professor Pierre Raphaël Bertrand, Senior Researcher at the French National Institute for Research in Computer Science and Control (INRIA) and Professor of Statistics at Clermont- Ferrand University, France, gave a lecture titled "Analysis of Wind Power Uncertainties." (4 April 2011)

4. Dr Hua He, Managing Director at Nomura Securities, Hong Kong, gave a lecture on "Opportunities and Challenges for Chinese Financial Institutions Post the 2008 Global Financial Crisis." (11 June 2011)





# Visitations

As one of the leading maritime centres in Asia, the Centre received about 30 delegations from home and abroad for exchange and networking during the year. Major overseas visiting parties included the Panama Canal Authority, Hamburg Logistics Initiatives, The Chartered Institute of Logistics and Transport Nigeria, Old Dominion University, Inha University, Chung-Ang University, China Center for International Economic Exchanges, Shanghai Maritime University and Wuhan National Laboratory of Optoelectronics.

Furthermore, the Centre supporting LMS received a number of visiting scholars including Prof. Michael Taksar from University of Missouri, Prof. Pierre Bertrand from Université Blaise Pascal (Clermont-Ferrand II), Prof. Yunzeng Wang from University of California at Riverside and Prof. Nanjing Huang from Sichuan University.



## **China Centre for International Economic Exchanges Visited C.Y.Tung ICMS**

A delegation from the China Centre for International Economic Exchanges (CCIEE), as led by Professor Zhang Xiang (former Vice-Ministry of the Ministry of Foreign Trade and Economic Cooperation (前外經貿部副部長), had a field trip to Hong Kong recently. Its Maritime Team led by Dr Hu Jingyan, Director General of Department of Trade in Services, Ministry of Commerce (商務部服務貿易司司長) visited C.Y.Tung ICMS on 30 March 2010.

Prof. John Liu and LMS academics warmly welcomed the 10 delegates. Mr M H Liang, Chairman of Island Navigation Corporation International Limited also attended the occasion as the representative of the Tung Foundation, the donor of the Centre. Both parties had a fruitful discussion and sharing on the opportunities, challenges and prospects of developing Hong Kong as an international maritime centre. A guided tour was also arranged after the meeting briefing the delegates on the research, consultancy and teaching activities of C.Y.Tung ICMS.





# Publicity & Community

To timely publicise the activities of the Centre, frequent update and contents enrichment of the ICMS website have been made since its launch in February 2009. According to Google Analytics, the website has recorded with almost 4,000 visits from 98 countries and territories during the review period (compared to only 38 locations in the first half of 2009). Also, the website was ranked 6/10 by the PageRank of Google, revealing its great value to visitors. New visits accounted for about 50% of the total and the top 10 visiting locations included Hong Kong, Mainland China, the US, the UK, Singapore, India, South Korea, Australia, Malaysia and Germany. Most visited webpages were the Port Benchmarking Project, the TEU Forecast Reports, followed by the Background of the Centre. The Centre published its first printed Annual Report (2008/2009) for the public in late 2009.

To further promote the Centre by highlighting its latest development and encourage traffic to visit the website, the Centre introduced its first e-Newsletter in June 2010.

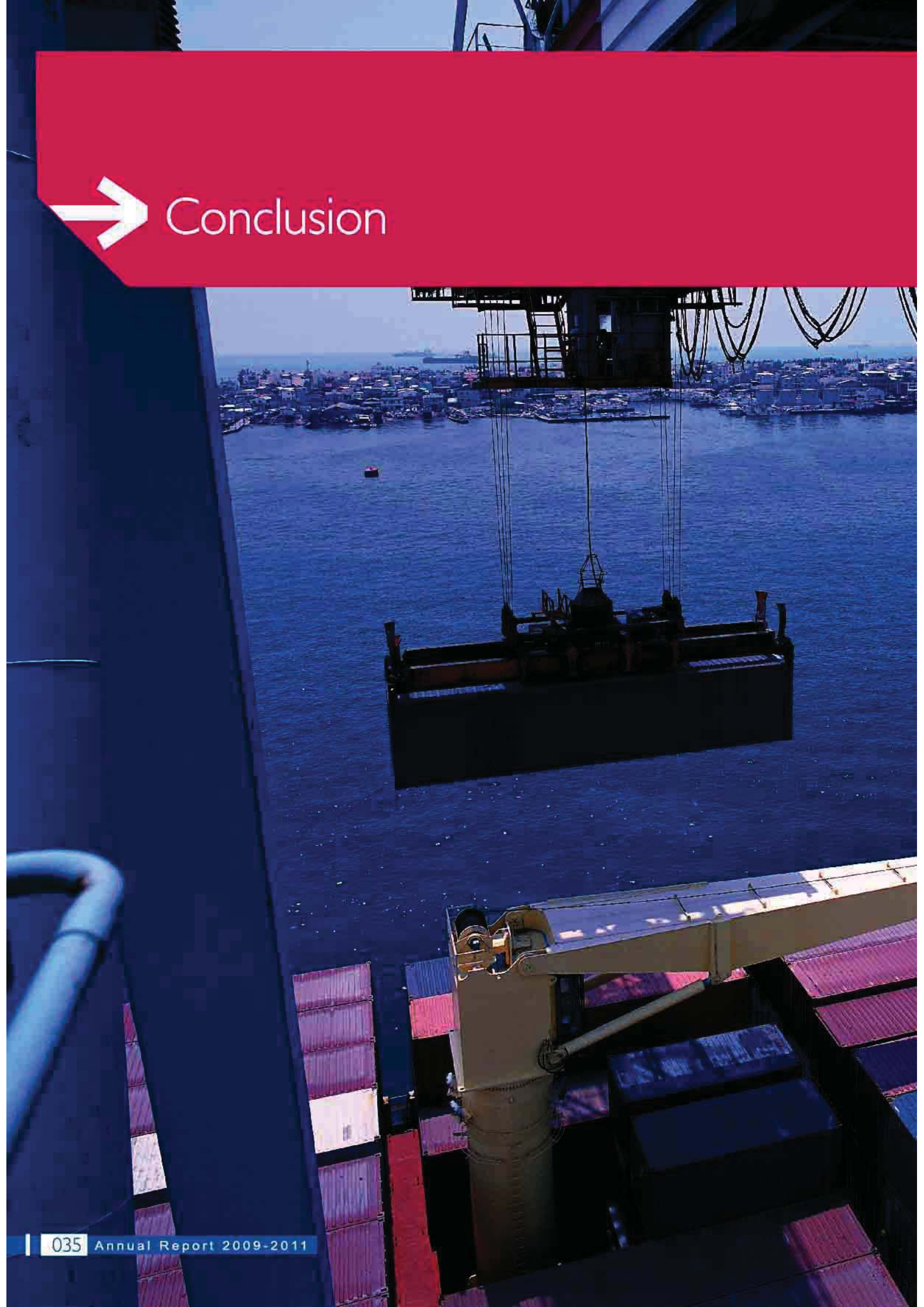
The Centre was opened to the public at the PolyU Information Day (September 2009) and the PolyU Alumni Homecoming Carnival (March 2010) with guided tours arranged, which providing good opportunities for the community to understand more about the Centre's operation and services.







## Conclusion







# The

wide range of activities and projects conducted in the review year were to support the development of the maritime and logistics community in Hong Kong and the Chinese Mainland. In line with the Strategic Plan laid down last year, the Centre had successfully forged partnerships with different institutions to further bolster its applied research capacity and expand its research scope in new frontiers and regions. With the solid foundation built and the continuous support of its stakeholders, the Centre would maintain the momentum and efforts to scale to new heights and contribute towards the sustainable development of our nation and society.



# Appendix

## Publication and Selected Research Output in 2009-10 (July 2009 to June 2010)

Selected research output under auspices of the Department of Logistics and Maritime Studies and C.Y.Tung ICMS is listed out as follows:

### Scholarly Books, Monographs and Chapters

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**Ng, A. K. Y. and Liu, J. J.** (Eds.), "The Port and Maritime Industries in the Post-2008 World". RESEARCH IN TRANSPORTATION ECONOMICS, Vol. 27, No. 1, Elsevier, Oxford, 2010

**Ng, A. K. Y. and Fu, X.** (Eds.), "The International Forum of Shipping, Ports and Airports". TRANSPORT POLICY, Vol. 16, No. 5, Elsevier, Oxford, 2009

Quan, Wei, Feng, Gengzhong, Chen, Baofeng, **Sun, X. Y. and Liu, J. J.**, "Review over 2009 area - industry logistics development and its outlook for 2010". In Lu jiang, ed., China Logistics Development Report (2009-2010), China Logistics Publishing House, Beijing, pp.5-10, ISBN 9787504733849, 2010

**Yip, T. L.** and Lun, Y. H. V., "Business risk in container shipping". In: Stephan M. Wagner, Christoph Bode, ed., Managing Risk and Security: The Safeguard of Long-Term Success for Logistics Service Providers, Haupt Berne, Switzerland, pp.153-174, 2009

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**Li, K. X.**, Wang, Yulan and Min, Jie, "Quantitative analysis of materiality in marine insurance". Maritime Policy & Management, Vol. 36, No. 5, pp.437-455, 2009

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Li, Zc, Lam, HK, Wong, SC and **Fu, X.**, "Optimal route allocation in a liberalizing airline market ". TRANSPORTATION RESEARCH PART B-METHODOLOGICAL, Vol. 44, No. 7, pp.886-902, 2010

**Ng, A. K. Y.**, "Competitiveness of short sea shipping and the role of port: the case of North Europe". MARITIME POLICY AND MANAGEMENT, Vol. 36, No. 4, pp.337-352, 2009

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Shi, D., Zhou, H., and **Liu, L.**, "A discussion of Barabási-Albert's 1999 paper", Physics Procedia 3, 1767-1774, 2010

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**Ye, H. Q.** and Yao, D.D, "Utility-Maximizing Resource Control: Diffusion Limit and Asymptotic Optimality for a Two-Bottleneck Model". OPERATIONS RESEARCH, Vol. 58, No. 3, pp.613-623, 2010

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Ho, D. C. K., Chan, E. M. H. and **Yip T. L.**, "A study of countries' logistics performance and export". 1st POMS-HK International Conference, Hong Kong, 30 December 2009, 2009

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