Detailed Schedule

Day 1, 18 October 2018 (Thursday)

Registration (starts at 08:15), Foyer, S420 Series, Level 4, Phase One (Old Wing), Hong Kong Convention & Exhibition Centre (HKCEC)
Exhibition (09:00 - 18:00), Foyer, S420 Series, Level 4, Phase One (Old Wing), HKCEC 1) **MTR Corporation Limited** 2) **Microsoft** 3) **ESRI China (Hong Kong) Limited** 4) **Hongkong International Terminals Limited** 5) **Suffice Industrial Technology Limited**
Opening Session (<mark>08:45</mark> - 10:00), S421, Level 4, Phase One (Old Wing), HKCEC <u>Welcome Messages</u> **Professor Becky P.Y. LOO**, *Chair, Conference Organizing Committee* **The Hon Mrs. Carrie LAM CHENG Yuet-ngor**, GBM, GBS, *Chief Executive of the Hong Kong Special Administrative Region* **Professor ZHANG Xiang**, *President and Vice-Chancellor, The University of Hong Kong* **Mr. Keith NEWTON**, *International Secretary General, The Chartered Institute of Logistics and Transport* **Mr. CHAN Fan, Frank**, JP, *Secretary for Transport and Housing, The Government of the Hong Kong Special Administrative Region*

Keynote Session 1 (10:00 - 10:30), S421, Level 4, Phase One (Old Wing), HKCEC

<u>Towards Smart Cities of the Future I: Setting the Scene</u>

Session Chair: **Professor Anthony G.O. YEH**
Chan To-Hann Professor in Urban Planning and Design and Chair Professor, Department of Urban Planning and Design, The University of Hong Kong

The Three Transportation Revolutions and How They Will Be Transformational
Professor Daniel SPERLING, *Founding Director, Institute of Transportation Studies, The University of California, Davis, U.S.A.*

Coffee Break (10:30 - 10:45)

Keynote Session 2 (10:45 - 12:15), S421, Level 4, Phase One (Old Wing), HKCEC

<u>Towards Smart Cities of the Future II: Some Guiding Thoughts</u>

Session Chair: **Professor Becky P.Y. LOO**
*Professor and Head, Department of Geography &
Director, Institute of Transport Studies, The University of Hong Kong*

Mobility in Future Cities - Sustainable and Smart?
Professor David BANISTER, *Professor Emeritus of Transport Studies, School of Geography and the Environment, The University of Oxford, U.K.*

Geospatial Technologies for Smart Mobility
Professor Mei-Po KWAN, *Department of Geography and Geographic Information Science, The University of Illinois at Urbana-Champaign, U.S.A.*

MTR's "Rail Plus Property" Business Model
Mr. Lincoln LEONG, *Chief Executive Officer, MTR Corporation Limited*

Lunch (12:15 - 13:30), Chancellor Room, Level 4, Phase One (Old Wing), HKCEC

Luncheon Sponsor - Microsoft

Artificial Intelligence and its Role in Our Society
Mr. Fred SHEU, *National Technology Officer, Microsoft Hong Kong*

Showcases (13:30 - 16:30), S421, Level 4, Phase One (Old Wing), HKCEC

1) **MTR Corporation Limited**
2) **ESRI China (Hong Kong) Limited**
3) **Hongkong International Terminals Limited**

Parallel Session 1 (13:30 - 15:00), S423, Level 4, Phase One (Old Wing), HKCEC

Sustainable Mobility I

Session Chair: **Mr. W.L. TANG**
Deputy Commissioner (Planning and Technical Services), Transport Department, The Government of the Hong Kong Special Administrative Region

Short to Medium Distance Urban Mobility in the 3rd Dimension: 'Elevated Connectors' - a Comparison of Skywalks, Gondola Lifts, People Movers and their Effects on Land Use and Transportation Efficiency in the Urban Realm
Arnd BAETZNER
University of St.Gallen, Switzerland
ETH Zürich, Switzerland

Challenges and Opportunities of Developing Smart Mobility in Macao: Perspectives of Government Departments and Agencies
Kuok Hou NG[a], Weng Keong KU[b], Kun Peng KOU[b], Soi Hoi LAM[b], Ka Io WONG[c]
[a]*The Chartered Institute of Logistics and Transport in Macao*
[b]*University of Macau, Macau*

[c]*National Chiao Tung University, Hsinchu*

Satellite-based Environmental Monitoring System of Smart Cities
C.K. SHUM[a], Lei ZHANG[b], Tarig ALI[c], Becky P.Y. LOO[d], Rosana W.M. WONG[e]

[a]*The Ohio State University, U.S.A.*
[b]*The Hong Kong Polytechnic University*
[c]*American University of Sharjah, U.A.E.*
[d]*The University of Hong Kong*
[e]*Smart City Consortium, Hong Kong*

Parallel Session 2 (13:30 - 15:00), S424, Level 4, Phase One (Old Wing), HKCEC

Smart Transport Policies

Session Chair: **Dr. Winnie TANG**
Founder and Chairman, ESRI China (Hong Kong) Limited

The Smart Mobility Roadmap for Hong Kong
S.C. WONG, Y.C. LI, S. XIE
The University of Hong Kong

Achieving a Fossil-free Commercial Transport System in the Timeframe of the Paris Agreement Target is not only Possible, but also Financially Attractive from a Societal Perspective
Alexander MASTROVITO
Scania Group

Promotion of In-vehicle Units in Hong Kong by the Transport Department
Andy CHAN[a], **Michael LAW**[b], Joe HSIE[b]
[a]AECOM Asia Company Limited
[b]Transport Department, The Government of the Hong Kong Special Administrative Region

Parallel Session 3 (13:30 - 15:00), S425, Level 4, Phase One (Old Wing), HKCEC

E-commerce & Urban Logistics I

Session Chair: **Professor Stefan MINNER**
Professor, Chair of Logistics and Supply Chain Management, TUM School of Management, Technical University of Munich, Germany

A Case Study of Smart Locker Networks in Asia As a Method of Improving Smart Movement Within Cities
Jared POOLE, **Christian SECCI**
Pakpobox Hong Kong Limited

Logistics Market Spatial Structure and Inter-city Freight Mobility in China: A Geographical Perspective
Mengyao REN[a], Zuopeng XIAO[b], James J. WANG[a]
[a]City University of Hong Kong
[b]Harbin Institute of Technology (Shenzhen)

Sailing Speed and Fleet Deployment Optimization Under a Time-based Freight Rate Strategy
Yuwei XING, Hualong YANG, Wei SONG, Xuefei MA
Dalian Maritime University, Dalian

Parallel Session 4 (13:30 - 15:00), S426, Level 4, Phase One (Old Wing), HKCEC

Public Transport Management

Session Chair: **Mr. Morris CHEUNG**
Vice Chairman and Board Director, Key Direction Limited

Enabling Key Decision-makers to Embrace New Technologies - Innovation to Implementation in the Realm of Public Transport
Neville BINNING[a], Marie VERSCHUER[b], Peter NEWMAN[c]
[a]EDAB Consulting Pty Limited
[b]Bodhi Alliance Pty Limited
[c]Curtin University, Australia

Exploring the Interaction Mechanism of Dockless Bike-sharing and Public Bicycle System
Yiling SUN[a], De TONG[a], Xiaoguang WANG[b]
[a]Peking University, Beijing
[b]Central Michigan University, U.S.A.

How MTR's Rail + Property Model Contributes to Smart Mobility
Steve YIU
MTR Corporation Limited

Parallel Session 5 (13:30 - 15:00), S427, Level 4, Phase One (Old Wing), HKCEC

<u>Transport & Environment I</u>

Session Chair: **Mr. W.H. TSANG**
Immediate Past President, The Chartered Institute of Transport and Logistics in Hong Kong

Electronic Road Pricing - A Smart Way to Travel
Simon LAU, King-man TSANG, **Nana SHIU**
Transport Department, The Government of the Hong Kong Special Administrative Region

Real-Time Integrated Re-scheduling for Public Transit
Yong-Hong KUO[a], Henry K.F. CHEUNG[b], David S.W. LAI[c], Janny M.Y. LEUNG[d]
[a]The University of Hong Kong
[b]The Chinese University of Hong Kong
[c]Vrije Universiteit Amsterdam, The Netherlands
[d]The Chinese University of Hong Kong (Shenzhen)

Parallel Session 6 (13:30 - 15:00), S428, Level 4, Phase One (Old Wing), HKCEC

Vehicle-sharing I

Session Chair: **Professor Hong K. LO**
Chair Professor and Head, Department of Civil and Environmental Engineering, The Hong Kong University of Science and Technology

An Artificial Bee Colony Algorithm for the Dynamic Taxi Sharing Problem
Xingbin ZHAN[a], **W.Y. SZETO**[ab]
[a]*The University of Hong Kong*
[b]*The University of Hong Kong Shenzhen Institute of Research and Innovations*

Predicting Shared-car Use and Examining Nonlinear Effects Using Gradient Boosting Regression Trees
Songhua HU, **Peng CHEN**, Hangfei LIN, Xiaohong CHEN
Tongji University, Shanghai

Numerical Simulation on the Feasibility of Ride-Sharing System in Rural Areas of Japan
Takatoshi MORIWAKI, Makoto CHIKARAISHI, Akimasa FUJIWARA
Hiroshima University, Japan

Coffee Break (15:00 - 15:30)

Parallel Session 7 (15:30 - 17:00), S423, Level 4, Phase One (Old Wing), HKCEC

Big Data Applications I

Session Chair: **Professor FUNG Tung**
Researcher (APVCFT), Associate Vice-President's Office
Professor, Department of Geography and Resource Management, The Chinese University of Hong Kong

Nature and Causes of Urban Traffic Congestion - A Data Analytic Approach
Andy H.F. CHOW
City University of Hong Kong

Building Individual Travel Chains Using Traffic Surveillance Data
Yun YUE, **Zi YANG**, Xin PEI, Danya YAO
Tsinghua University, Beijing

Riding on Mobile and Big Data Applications: New Railway Customer Experience
Annie LEUNG
MTR Corporation Limited

Parallel Session 8 (15:30 - 17:00), S424, Level 4, Phase One (Old Wing), HKCEC

Resilience

Session Chair: **Professor P.C. LAI**
Professor, Department of Geography, The University of Hong Kong

Characterising Traffic Collision Hotspots with Weibo Data: A Case Study of Haining, China
Jinzi WANG, Shenjun YAO, Jianping WU
East China Normal University, Shanghai

Installation of Traffic Detectors on Strategic Routes in Hong Kong
Shirley LEUNG, **Gary LEUNG**
Transport Department, The Government of the Hong Kong Special Administrative Region

Criticality of Cyber Security to Smart Railway Operations
H.W. CHAN, Joyce CHAN
MTR Corporation Limited

Parallel Session 9 (15:30 - 17:00), S425, Level 4, Phase One (Old Wing), HKCEC

Smart Traffic Management I

Session Chair: **Dr. Albert LAM**
Chief Scientist and Acting Chief Technology Officer, Fano Labs

An Intelligent Pedestrian Detector at Traffic Light Junctions Based on Depth Cameras for Pedestrian Count and Classification
Kin Ho HUNG
Vocational Training Council, Hong Kong

Digital Transformation with AI for Transportation and Logistics Industry
Fred SHEU
Microsoft Hong Kong

Parallel Session 10 (15:30 - 17:00), S426, Level 4, Phase One (Old Wing), HKCEC

Electric Vehicles I

Session Chair: **Professor Daniel SPERLING**
Founding Director, Institute of Transportation Studies, University of California, Davis, U.S.A.

Electric Vehicle (EV) Charging Infrastructure to Support Green Motoring in Hong Kong
John CHAN
CLP Power Hong Kong Limited

A Journey of Electric Vehicle Development Since Time Zero
K.M. LAW
The Institute of The Motor Industry Hong Kong

Alternative Fuel Vehicles for Future
Andrew CHAN
The Committee of New Energy Automobile

Parallel Session 11 (15:30 - 17:00), S427, Level 4, Phase One (Old Wing), HKCEC

Sustainable Mobility II

Session Chair: **Ms. Rosana W.M. WONG**
Executive Director, Yau Lee Holdings Limited

Job Accessibility and Commuting Travel: A Spatio-Temporal Analysis and a Case Study in Hong Kong
Becky P.Y. LOO, **Ka Ho TSOI**
The University of Hong Kong

Light Rail Smart Mobility Solutions
Kevin KIANG
MTR Corporation Limited

Challenges and Opportunities of Developing Smart Mobility in Macao: Perspectives of Residents and Visitors
Ka Man LOI[a], Weng Keong KU[b], Kun Peng KOU[b], Soi Hoi LAM[b], Ka Io WONG[c]
[a]*The Chartered Institute of Logistics and Transport in Macao*
[b]*University of Macau, Macau*
[c]*National Chiao Tung University, Hsinchu*

Parallel Session 12 (15:30 - 17:00), S428, Level 4, Phase One (Old Wing), HKCEC

E-commerce & Urban Logistics II

Session Chair: **Mr. Alfred LAM**
Transport Specialist, Transport Department, The Government of the Hong Kong Special Administrative Region

Smart Mobility - Greening HK's Urban eCommerce Logistics
Eric M.S. WONG
The Chartered Institute of Logistics and Transport in Hong Kong

Smart E-shopping and Travel Behaviour Modelling in Selected Areas of Lagos, Nigeria
O.O. AGUNLOYE, Suliat Ifedolapo ADEGOKE
University of Lagos, Nigeria

E-commerce and the Demand for Shopping Trips
Pengyu ZHU
The University of Hong Kong

Break (17:00 - 18:00)

Gala Dinner (18:00 - 21:00), Concord Room, 8/F, Renaissance Harbour View Hotel

Reception: 18:00
Dinner starts: 18:30