



# Smart Infrastructure 2021

13 - 14 May 2021, HKUST / Webinar

<https://scc.hkust.edu.hk/>

With the theme of "Smart Infrastructure", the conference enables participants to review the utilization of cutting-edge smart applications in the GBA, and how the technologies shape our cities to be more connected and sustainable. It also provides a platform for professions to discuss the possibilities of incorporating the current technologies among the 9+2 cities, fostering the region's synergic development instead of developing smart cities in silos, ultimately connecting the cities as a whole.

## SMART IDEAS



## EVENT DETAILS

- Date:** 13 - 14 May 2021 (Thursday - Friday)
- Time:** Day 1: 9:00 - 18:00; Day 2: 9:00 - 17:00 (Hong Kong Time, GMT+8)
- Venue:** Local: Citi Lecture Theater (LT-A), HKUST; Mainland/Overseas: Webinar
- Language:** English / Mandarin

## ENROLMENT REGISTRATION

- Early-bird\* / Members of Supporting Organisation:** HK\$500 (2-day pass) / HK\$350 (1-day pass)
- Standard:** HK\$600 (2-day pass) / HK\$450 (1-day pass)
- Full-time Student:** Free of Charge

\* Early Bird Registration on or before 19 April 2021 (Mon)

15 CPD hours for 2 days / 7.5 CPD hours for 1 day conference are recommended

**Registration Deadline:**  
10 May 2021 5pm



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## GUEST OF HONOUR:

**Ir LAM Sai-hung, JP**  
Permanent Secretary for Development (Works),  
Development Bureau of HKSAR



## CONFERENCE ADVISOR:

**Ir Dr Hon LO Wai-kiwok, SBS, MH, JP**  
Functional Constituency - Engineering,  
Legislative Council of Hong Kong

## KEYNOTE SPEAKERS\* (in alphabetical order)



**Ir Jimmy CHAN, JP**  
Director of Highways, HKSAR



**Ms Amy CHEUNG, JP**  
Head of Energizing Kowloon East Office,  
Development Bureau, HKSAR



**Dr Samuel CHUI, JP**  
Deputy Director of Environmental Protection, HKSAR



**Mr Andrew LAI, JP**  
Director of Lands, HKSAR



**Ir Ricky LAU, JP**  
Director of Civil Engineering and Development, HKSAR



**Ir Kelvin LO, JP**  
Director of Water Supplies, HKSAR



**Ir Eric PANG, JP**  
Director of Electrical & Mechanical Services, HKSAR



**Ms Mingmei ZHENG 郑明媚女士**  
中国城市和小城镇改革发展中心智慧低碳部主任  
及智慧城市发展联盟秘书长



**Prof Lei CHEN**  
Chair Professor, Department of Computer  
Science and Engineering, HKUST & Director,  
HKUST Big Data Institute



**Mr T.K. CHIANG**  
Managing Director, CLP Power Hong Kong Ltd.



**Ms Winnie HO, JP**  
Director of Architectural Services, HKSAR



**Mr Victor LAM, JP**  
Government Chief Information Officer, HKSAR



**Ir Ricky LEUNG**  
Executive Director, Engineering & Technology,  
Airport Authority Hong Kong



**Ir Alice PANG, JP**  
Director of Drainage Services, HKSAR



**Sr Winnie SHIU**  
Head of Spatial Data Office, Development Bureau, HKSAR



**Ms Jeny YEUNG**  
Commercial Director & Member of the  
Executive Directorate, MTR Corporation Limited

## SUPPORTING ORGANISATIONS



## PROGRAMME

**Day 1:** 13th May 2021 (Thursday)

**Venue:** Citi Lecture Theater (LT-A), HKUST

Time (HK Time, GMT+8)	Keynote Speaker	Topic / Theme
08:30 – 09:00		Registration
09:00 – 09:30		Opening Ceremony
<b>Session 1 – Shaping Smart Strategies</b>		Moderator: Dr Winnie TANG, JP, Founder and Honorary President of Smart City Consortium
09:30 – 09:55	<b>Mr Victor LAM, JP</b> <i>Government Chief Information Officer, HKSAR</i>	Smart City Blueprint for Hong Kong 2.0
09:55 – 10:15	<b>郑明媚女士</b> 中国城市和小城镇改革发展中心智慧低碳部主任及智慧城市发展联盟秘书长	中国新型智慧城市高质量发展 演讲语言: 普通话
10:15 – 10:40	<b>Ir Ricky LAU, JP</b> <i>Director of Civil Engineering and Development, HKSAR</i>	SMART, Green and Resilient Infrastructures for City of the Next Generation
10:40 – 10:45	Group Photo & Appreciation Certificate Presentation	
10:45 – 11:05		Coffee Break
<b>Session 2 – Creating Smart Environment</b>		Moderator: Ir Paul CHAN, Chairman of The HKIE - Civil Division
11:05 – 11:25	<b>Ir Jimmy CHAN, JP</b> <i>Director of Highways, HKSAR</i>	Changing the Way We Build and Maintain Highway Infrastructure Through Innovation
11:25 – 11:45	<b>Ir Kelvin LO, JP</b> <i>Director of Water Supplies, HKSAR</i>	Hong Kong's Journey towards Smart Water Management
11:45 – 12:05	<b>Ir Alice PANG, JP</b> <i>Director of Drainage Services, HKSAR</i>	Rivers in the City – Smart Drainage Application
12:05 – 12:25	<b>Dr Samuel CHUI, JP</b> <i>Deputy Director of Environmental Protection, HKSAR</i>	Applying Smart Technologies in Environmental Monitoring and Management
12:25 – 12:45	<b>Ir Ricky LEUNG</b> <i>Executive Director, Engineering &amp; Technology, Airport Authority Hong Kong</i>	Building a Smart Airport City with Smart Infrastructure to Strengthen HKIA as the Leading Aviation Hub
12:45 – 13:00		Panel Discussion
13:00 – 14:20		Lunch Break
<b>Session 3 – Embracing Smart Living</b>		Moderator: Prof Hong LO, JP, Great Smart Cities Institute, HKUST
14:20 – 14:40	<b>Ir Eric PANG, JP</b> <i>Director of Electrical &amp; Mechanical Services, HKSAR</i>	Imaginnovating Smart Infrastructure: Mezzo to Macro
14:40 – 15:00	<b>Mr T.K. CHIANG</b> <i>Managing Director, CLP Power Hong Kong Ltd.</i>	Supporting a Smart City and a Smart Environment with Smart Infrastructure
15:00 – 15:20	<b>Ms Jeny YEUNG</b> <i>Commercial Director &amp; Member of the Executive Directorate, MTR Corporation Limited</i>	Smart Mobility to Keep Cities Moving
15:20 – 15:35		Panel Discussion
15:35 – 15:50		Coffee Break
<b>Session 4 – Innovating Intelligent Infrastructure</b>		Moderator: Ir Derrick LEUNG, Civil and Environmental Engineering Alumni Association, HKUST
15:50 – 16:10	<b>Mr Andrew LAI, JP</b> <i>Director of Lands, HKSAR</i>	Geospatial Infrastructure for Smart City
16:10 – 16:30	<b>Ms Winnie HO, JP</b> <i>Director of Architectural Services, HKSAR</i>	Our Journey to Smart Building Design and Facilities Management
16:30 – 16:50	<b>Ms Amy CHEUNG, JP</b> <i>Head of Energizing Kowloon East Office, Development Bureau, HKSAR</i>	Kowloon East – An Ideal Platform for Piloting Innovation
16:50 – 17:10	<b>Sr Winnie SHIU</b> <i>Head of Spatial Data Office, Development Bureau, HKSAR</i>	Development of Common Spatial Data Infrastructure in Hong Kong
17:10 – 17:30	<b>Prof Lei CHEN</b> <i>Chair Professor of Department of Computer Science and Engineering &amp; Director of Big Data Institute, HKUST</i>	The Development of Benchmark Datasets for Smart City Application
17:30 – 17:45		Panel Discussion
17:45		Day 1 End

\* the conference will be conducted in English unless stated otherwise

\* the speakers and topics may be subject to change

## PROGRAMME

Day 2: 14th May 2021 (Friday)

### Parallel Sessions

Time (HK Time, GMT+8)	Venue: Citi Lecture Theater (LT-A), HKUST	Venue: Lam Woo Lecture Theatre (LT-B), HKUST
08:30 – 09:00	Registration	
	<b>Applications in GBA</b> <b>Moderator:</b> Mr. Gary YEUNG, M.H., President, Smart City Consortium Civil Division	<b>Smart Living</b> <b>Moderator:</b> Prof Alexis Kai Hon LAU, Head and Chair Professor, Division of Environment and Sustainability, HKUST
09:00 – 09:15	<b>张亚东博士</b> 新奥能源集团智慧城市公司董事长 <b>Topic:</b> 演讲语言: 普通话	<b>Dr Wenwei CHE</b> <i>Research Assistant Professor, HKUST</i> <b>Topic:</b> A Smart Mobile Application for Predictive Health Risk Management
09:15 – 09:30	<b>刘建平先生</b> 未来协同技术研究院执行院长、 广东工业大学智慧能源研究中心主任、 材料与能源学院教授 <b>Topic:</b> 城市与能源—如何更加智慧？ 演讲语言: 普通话	<b>Mr Noah LAM</b> <i>Business Development Manager,                      Remotec Technology Limited</i> <b>Topic:</b> Applying Privacy-aware Radar Technologies in Elderly Smart Living Fall Detection and in Gesture Control for Display Screens in Smart City Furniture
09:30 – 09:45	<b>Ms Jessie CHAN</b> <i>Solution Architect, Digital Transaction Limited</i> <b>Topic:</b> Blockchain, Sustainability, and the GBA	<b>Mr John WONG</b> <i>Director, Lik On Technology Ltd.</i> <b>Topic:</b> How to Build a Smart and Healthy Community?
09:45 – 10:00	Q&A Session	<b>Mr Richard WILLDER</b> <i>Head of Public Policy &amp; Government Affairs, Uber</i> <b>Topic:</b> Future of Transportation
10:00 – 10:10	Q&A Session	
10:10 – 10:30	Coffee Break	
	<b>Smart Built Environment</b> <b>Moderator:</b> Ir Clifford PHUNG, Chairman of HKUST Civil and Environmental Engineering Alumni Association	<b>Digital Twin for Infrastructure</b> <b>Moderator:</b> Prof Jack CHENG, Associate Professor of Department of Civil and Environmental Engineering, HKUST
10:30 – 10:45	<b>Mr Pubudu ABAYASIRI</b> <i>Associate Director, CLP Innovation Enterprises Limited</i> <b>Topic:</b> Connecting Sustainable Innovations and Digital Energy Management Needs in Buildings	<b>Sr Paul TSUI</b> <i>Managing Director, Esri China (Hong Kong)</i> <b>Topic:</b> Integrating 3D GIS with BIM for Smart City Development
10:45 – 11:00	<b>Mr Daniel CHUN</b> <i>Founder, Airxed Technology Limited</i> <b>Topic:</b> Sustainable Use of Air Conditioning with Demand Side Management of Electricity	<b>Mr Lester CHAN</b> <i>Co-founder, AAIOT Group and Aura Labs</i> <b>Topic:</b> The Possibilities of Device Orient Digital Twin in People-centric Spaces
11:00 – 11:15	<b>Ms Jacqueline LEE</b> <i>Architect</i> <b>Topic:</b> Smart Promenade Design	<b>Ir Terence Lok Lun LUI</b> <i>CEO, Varadise Limited</i> <b>Topic:</b> The Intelligent Management Platform for Smart Construction and Smart Facility
11:15 – 11:30	<b>Ir Chung Hon-hei, Matthew</b> <i>Senior Geotechnical Engineer,                      Geotechnical Engineering Office,                      Civil Engineering and Development Department, HKSAR</i> <b>Topic:</b> Application of Advanced Quadraped Robots for Geotechnical Works Inspections	<b>Mr Shanjing ZHOU</b> <i>Executive Consultant, MES Group</i> <b>Topic:</b> Digital Twinning for Urban Rejuvenation — Leveraging BIM and Infrared to Create a Better Post-covid Smart City
11:30 – 11:45	<b>Ir Dr Ken CHAN</b> <i>Chief Technology Officer, WEC Group</i> <b>Topic:</b> A Practical Framework for Smart Building Transformation	<b>Ir Dr Bruce CHONG</b> <i>Director (City Advisory and Urban Sustainability), Arup</i> <b>Topic:</b> Planning & Design of Enabling Infrastructure to Realize a Smart City
11:45 – 11:55	Q&A Session	
11:55 – 13:55	Lunch Break	

**Time**  
(HK Time, GMT+8)

**Venue:**  
Citi Lecture Theater (LT-A), HKUST

**Venue:**  
Lam Woo Lecture Theatre (LT-B), HKUST

**Big Data Analytics**

**Moderator:** Ms Rosana WONG, Vice President of Smart City Consortium

**Smart Infrastructure**

**Moderator:** Ir Paul CHAN, Chairman of the HKIE – Civil Division

**14:00 – 14:15** **Ms Rosana WONG**  
*Executive Director, Yau Lee Holdings Limited*  
**Topic:** The Latest Developments in Terms of Smart Infrastructure Like: MiC/DfMA/QAQC BIM Blockchain Platform and AI/Robotic Autonomous Vehicles

**Mr Alex WAN**  
*Director of Smart Solutions, WSP*  
**Topic:** Hong Kong Smart City Infrastructure — In the Light of Futurisation

**14:15 – 14:30** **Mr Ringo SZE**  
*Project Manager, Chun Wo Construction & Engineering Co. Ltd.*

**Ir Vincent L. F. YUAN**  
*Engineer, Bridges and Structures Division, Highways Department, HKSAR*  
**Topic:** Smart Maintenance for a Long Span Suspension Bridge - Tsing Ma Bridge

**Mr. Kevin WAN**  
*Co-Founder, Hong Kong RFID Limited*

**Dr. CHUK Tin Yim, Tim**  
*Director, Tuples*

**Topic:** Use of IoT and Engineering Management for Trees at Slopes in Hong Kong

**14:30 – 14:45** **Mr Christoph BURGDORFER**  
*Connected Technology Evangelist, Asteria Corporation*  
**Topic:** Creating a Smart City App Store for Hong Kong

**Ir Andy WONG**  
*Head of Digital G, Gammon Construction Limited*  
**Topic:** Digitally Connecting the Whole Life of a Smart Infrastructure

**14:45 – 15:00** **Prof. Shang-Hsien HSIEH, Patrick**  
*Professor and Chairman, Department of Civil Engineering, National Taiwan University*  
**Topic:** Decision Support Platform for Digital Governance of Smart City Infrastructure in Response to Environmental Changes

**Dr Ivan SHAM**  
*Director of Research and Development (Construction), Nano & Advanced Materials Institute*  
**Topic:** Collapse-Free Backfill Material for Pavement

**15:00 – 15:10**

**Q&A Session**

**15:10 – 15:30**

**Coffee Break**

**IoT & Automation**

**Moderator:** Ir Connie Chan, Committee Member of HKIE – Civil Division

**Smart Infrastructure**

**Moderator:** Prof Hong LO, JP, Chair Professor & Head of Civil and Environmental Engineering & Director of GREAT Smart Cities Institute, HKUST

**15:30 – 15:45** **Ir TANG Kai-yan, Alan**  
*Chief Engineer (Port Works), Civil Engineering and Development Department, HKSAR*  
**Topic:** Sensor-based Monitoring and Use of Innovation Technology for Pier Maintenance

**Mr Christian TINO TERRANEO**  
*Managing Director, ATC Austrian Technology Corporation*  
**Topic:** Austrian Smart Infrastructure Solutions for Hong Kong

**15:45 – 16:00** **Mr WONG Chun Fai, Jeffrey**  
*Chief Geotechnical Engineer/Planning, Geotechnical Engineering Office, Civil Engineering and Development Department, HKSAR*  
**Topic:** The Second Territory-Wide Airborne Light Detection and Ranging (LiDAR) Survey for the Hong Kong Special Administrative Region

**Dr Wendy LEE**  
*Regional Manager, HK & Macau, Autodesk Far East Limited*  
**Topic:** Future of Making Smart Cities

**16:00 – 16:15** **Mr Telmo GOMES**  
*IT Director, LiveSense*  
**Topic:** Sustainability Cup

**Mr Thomson LAI**  
*Asia Digital Leader, AECOM*  
**Topic:** Digital City

**16:15 – 16:30** **Mr Hannes SALZMANN**  
*Regional Manager, Geobrugg AG*  
**Topic:** Smart Rockfall Barriers

**Q&A Session**

**16:30 – 16:45**

**Q&A Session**

**16:45 – 16:55**

**Closing Ceremony**

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**Registration Deadline: 10 May 2021 5pm**



<https://bit.ly/31tcHJZ>

VISA / Master Card / China Union Pay Card is accepted

**Enquires:** Ms Connie KWONG  
(Minerals Creations and Communications Ltd,  
Conference Secretariat)

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