



Re-inventing Urban Space – From Green Deck to Elevated Cities Webinar at The Hong Kong Polytechnic University on 23 February 2022

Organisers: Green Deck Project Management Office, and

Research Institute for Land and Space
The Hong Kong Polytechnic University

Chairs of Organising Mr. Alex Lui

Committee: Director of Green Deck Project Management Office

Prof. Xiaoli Ding

Director of Research Institute for Land and Space

Supporting Chartered Institution of CIVIL ENGINEERING SURVEYORS

organisations: Hong Kong Green Building Council Limited
(In alphabetical order) The Hong Kong Institute of Architects
The Hong Kong Institution of Engineers

The Hong Kong Institution of Engineering Surveyors

The Hong Kong Institute of Landscape Architects

The Hong Kong Institute of Planners The Hong Kong Institute of Surveyors Hong Kong Institute of Urban Design

(More to be confirmed)

Location: Online via Zoom

Registration link: https://us02web.zoom.us/webinar/register/WN_Q8FFq51mRey7NC-

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Organisers

























Abstract

It is well known that cities in many parts of the World, especially those in Asia are becoming increasingly crowded because of population increase. This is often accompanied by issues such as increased levels of air pollution, noise and traffic jams. Optimal use of the limited land and space resources to accommodate the ever increasing urban population while maintaining high-quality environment is a key to make the cities sustainable in a long term.

Proper use of green decks in some busy city areas may significantly enhance the living environment by reducing the noise and air pollution while offer more convenience to citizens living in the areas. The concepts of 3D cities, elevated cities, future proof cities and bridge cities are good examples how our future cities may become. We are very delighted to have four distinguished guest speakers from both the academia and the industry to offer their insights into these important concepts.



Biography of Guest Speakers



Prof. Xiangsheng Chen

Prof. Xiangsheng Chen, Member of the Chinese Academy of Engineering (since 2017) and specially-appointed Professor at Shenzhen University, is Dean of College of Civil and Transportation Engineering and Director of Underground Polis Academy, Shenzhen University. He is also Chairman of the Technology Committee of Shenzhen Metro Co. Ltd. (Group) and Director of the Branch of Shaft Construction, Central Coal Mining Research Institute (CCMRI) based in Beijing.

After graduating in 1982 from Huainan College of Mining, he worked continuously as an Engineer, Senior Engineer and Res. Prof. successively, in research on shaft construction and tunnelling in soft ground until 2001. He undertook research for the Shanghai Metro Co., Ltd. on the cross-river passage construction in soft ground for his study for PhD at Tsinghua University and graduated with a "Distinguished PhD these" as evaluated by the Ministry of Education of China. He shifted to Shenzhen Metro Co., Ltd. in Feb. 2001 and was appointed Chief Engineer in Jan. 2003. He had taken charge of the construction from Phase 1 to Phase 4 and used many large underground spaces in the most difficult complex strata in Shenzhen, China since 2001. He has been specially appointed Professor since March 2018 and the Dean of the College of Civil and Transportation Engineering and Director of Underground Polis Academy of Shenzhen University since March 2019. His main interests are tunnelling, underground engineering, geotechnical engineering and shaft construction, especially ground freezing technique, ground movement control technology and safe environment synergism technology for engineering work adjacent to subway structures. He is the author of 9 monographs and more than 100 academic papers and has been awarded by the State 3 Prizes of National Scientific and Technological Progress and etc.

Biography of Guest Speakers



Prof. Chunan Tang

Prof. Chunan Tang, Chair Professor (funded by Cheung Kong Scholar Programme from State Education Ministry), is Director of Deep Underground Research Center (DURC), Dalian University of Technology, and Chief Professor of Structural Geology (Part-time), University of Geosciences (Wuhan), China. He was Vice President of the Chinese Society of Rock Mechanics and Engineering CSRME, and Chairman of China National Group of International Society of Rock Mechanics. In 1984, he started his Ph.D research, in Northeastern University, Shenyang, P.R. China, and got his Ph.D in 1988. In 1991, he continued his post-doctoral work at Imperial College, UK. He has had significant work experience in Canada, Sweden, Singapore, Switzerland and Hong Kong. He leads several major research projects in rock mechanics, especially on rock failure process analysis, and is the chief scientist for a National 973 program for fundamental research. His work is funded by the "Trans-Century Training Programme Foundation for Outstanding Young Scholars in China" from the State Education Ministry and by the "Special Natural Science Foundation for Outstanding Young Scholars in China" from National Nature Science Foundation. He has published over 300 papers on rock failure mechanisms and civil engineering, and is the author of five Chinese books on rock mechanics and principle author of "Rock Failure Mechanism" published by CRC (Taylor & Francis Group, 2010, UK).

He has recently proposed a new conceptual model of Elevated Cities for urban planning and construction by elevating the living space and lowering the infrastructure which may cause inconvenience to human activities through constructing three-layer space structures, human activity layer (elevated layer), transportation layer (surface layer) and underground infrastructure layer (underground layer). This new model can provide an effective solution for solving current urban "syndrome" including traffic congestion, shortage of human living space, air pollution and so on.

Biography of Guest Speakers



Mr Wilfred Lau

Mr Wilfred Lau is a Director of Arup, the global planning and engineering consultant. He is a Fellow of Institution of Civil Engineers, UK; Fellow of Hong Kong Institution of Engineers; and Registered Professional Engineer of Hong Kong. He has over forty-years' experience in managing and delivering large scale multi-disciplinary planning and engineering projects in Asia. He has led Arup's consulting activities across East Asia for 15 years. He was a board member of Arup East Asia Region Board and was Chief Executive of Arup Vietnam 2008 - 2017. He was Arup Global Transport Planning Leader from 2001 to 2016.

Mr Lau was the Chairman of the Association of Consulting Engineers of Hong Kong and has represented the consulting industry on committees and expert panels. He was involved with major commercial and retail property development in Canada in the 80s and large scale private sector infrastructural development, such as, deep sea port, toll roads and industrial parks in Mainland China through concession and PPP in the 90s.

In recent years, Mr Lau focuses on development of cities and new towns in Asia, advising governments on development and delivery of future generation of cities. He developed the smart green resilient urban planning philosophy and is author of the book "Smart Green Resilient".

Biography of Guest Speakers



Mr Freddie Hai

Mr Freddie Hai graduated from the University College London and is professionally qualified in both Hong Kong and the UK. He returned to the Rocco Design Architects Associates Ltd. in 2007 and became a Director in 2018. He has since been Project Team Leader for a number of high profile projects, such as the Hong Kong Palace Museum, Kerry Hotel Hong Kong, and China Unicom (HK) Global Center. His past experience includes No.1 Peking Road, the IFC, and several stations along the West Rail. He is also active in the local architectural and institute matters and has been appointed for several committee posts by the government.

Full Programme

Time	Title
6:00pm – 6:10pm	Welcome Address
	Prof. Qingyan Chen
	Director of PolyU Academy for Interdisciplinary Research
6:10pm – 6:20pm	Opening Speech
	Mr Alex Lui
	Director of Green Deck Project Management Office
6:20pm – 6:40pm	Three-dimensional Resilient City - The Cornerstone of Urban Security
	(English slides and presented in Pu Tong Hua)
	Prof. Xiangsheng Chen
	Shenzhen University
6:40pm – 7:00pm	Conceptual Model of Elevated Cities for Urban Space Development
	Prof. Chunan Tang
	Dalian University of Technology
7:00pm – 7:20pm	Future Proof Cities
	Mr Wilfred Lau
	ARUP
7:20pm – 7:40pm	Bridge Cities
	Mr Freddie Hai
	Rocco Design Architects Associates Ltd.
7:40pm – 7:50pm	Closing Remarks
	Prof. Xiaoli Ding
	Director of Research Institute for Land and Space
7:50pm – 8:00pm	Q&A Session
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