# Visit to the HKUST Sustainable Smart Campus



### Supported by Smart Cities Forum

Professor Hong K. LO, Dean of Engineering, Chair Professor of Civil and Environmental Engineering and Director of GREAT Smart Cities Institute, Hong Kong University of Science and Technology

Professor Jinglei YANG, Professor of Mechanical and Aerospace Engineering, Hong Kong University of Science and Technology

Dr Nirmal Kumar GALI, Manager (Engineering), Division of Environment and Sustainability, Hong Kong University of Science and Technology Ir Professor Yu-Hsing WANG, Associate Dean of Engineering (Undergraduate Studies), Professor of Civil and Environmental Engineering, Hong Kong University of Science and Technology

Yuanhui WEI, MPhil student specializing in Environmental Science and Policy Management, Hong Kong University of Science and Technology

### Visit to the HKUST Sustainable Smart Campus

This visit to the HKUST Sustainable Smart Campus will allow Britcham members to explore its cutting-edge technology and sustainable initiatives in Smart Cities. Led by Professor LO, the visit will provide an introduction to the HKUST smart cities technology, providing us with an opportunity to delve into several initiatives, including:

- Internet of Tree Things Prof. Yu-Hsing WANG
- Self-cleaning multipurpose nano-coatings Prof.
  Jinglei YANG
- Smart Campus Air Network (SCAN) for Community Environmental Awareness – Dr. GALI Nirmal Kumar, Mr Yuanhui WEI

Join us for the HKUST Sustainable Smart Campus visit and how these initiatives continue to evolve and deliver a positive impact on the HKUST campus and to the surrounding community.

About the speakers



**Professor Hong K. LO**'s expertise includes dynamic transportation system modeling, traffic control, network reliability, and public transportation analysis. He has published extensively in the transportation literature and was selected as one of the Most Cited Researchers in Civil Engineering in the Academic Ranking of World Universities (ARWU) 2016. Professor Lo is very active in the transportation community, for instance, elected as Convener of the International Scientific Committee of the conference series Advanced Systems for Public Transportation (CASPT), serves as Founding Editor-in-Chief of Transportmetrica B: Transport Dynamics, Managing Editor of Journal of Intelligent Transportation Systems, and on the editorial boards of many international journals. Locally, he served on the Transport Advisory Committee (TAC) advising the Chief Executive of the Hong Kong government, Vice-President of the Hong Kong Society for Transportation Studies, Convener of Railway Objections Hearing Panel, Independent Review Committee on Hong Kong's Franchised Bus Service, etc.



**Professor Jinglei YANG** is a professor of the Department of Mechanical and Aerospace Engineering at the Hong Kong University of Science and Technology (HKUST). His research interests include interface science and applications in microencapsulation and green nanomaterials, sustainable composites and green smart manufacturing, and Al+robotics-enabled autonomous high throughput methods to discover novel materials. He published over 180 referred journal papers with 10k+ citations. Prof Yang is a Fellow of the Royal Aeronautical Society, the Royal Society of Chemistry, and the Hong Kong Institute of Engineers. He is taking several administrative roles at HKUST to strengthen the technology transfer ecosystem.



Dr Nirmal Kumar GALI is a Research Associate in the Division of Environment & Sustainability, HKUST, Hong Kong. Dr. GALI's research is focused in understanding the impacts of air pollutants on public health with respect to spatial and temporal heterogeneity, Hong Kong public transport systems, combustion fuels, ship plumes, odorous gases, semivolatile organic compounds, and indoor air quality. He demonstrated novel cellular mechanisms of action post exposure to pollutants. Dr. GALI also has active participation in multiple low-cost sensor-based research and has developed complex pollutant measurement strategies across multiple microenvironments. His research signifies the importance of co-existence of sensor technology and biological understanding in mitigating the health impacts of air pollution.



Ir Professor Yu-Hsing WANG received his B.S. and M.S. degrees in Civil Engineering from National Taiwan University and Ph.D. in Civil Engineering from Georgia Institute of Technology, where he received the George F. Sowers Distinguished Graduate Student Award for Ph.D. Students. Prof. Wang is a Professional Geotechnical Engineer in Taiwan and Fellow of HKIE and ASCE. Currently, he is Associate Dean at the school of Engineering, Professor at the Department of Civil and Environmental Engineering, and the founder/director of Data-Enabled Scalable Research (DESR) Laboratory, the Hong Kong University of Science and Technology (HKUST). The DESR Lab is a Makerspace, specializing in the applications of Vertical AI, integrated with Geotechnical Internet of Things (Geo-IoT), Big Data Analytics, Deep Learning, etc., on sustainable urban development and city resilience. In 2005, he received the ASTM International Hogentogler Award. In 2008 and 2017, he received the School of Engineering Teaching Award, HKUST. In 2013, he received the Distinguished Alumni Award from the Department of Civil Engineering, National Taiwan University. In addition, he has been invited for keynote and theme lectures in the international conferences and served as associated editors and editorial board members in different journals.



**Mr. WEI** is a dedicated MPhil student specializing in Environmental Science and Policy Management, HKUST, currently focused on research into indoor air quality monitoring and the implementation of interventions to mitigate indoor air pollution within educational institutions in Hong Kong. With a solid foundation in environmental psychology from his undergraduate studies at the University of British Columbia, David brings a multidisciplinary approach to his work, blending scientific inquiry with an understanding of human-environment interactions.

## Pricing

Member: Free of Charge

#### Terms & Conditions

- Reservations in advance are required. Please consider your booking confirmed unless notified otherwise.
- Cancellations must be made in writing before 3 PM on 19 January 2024. No shows will be charged.
- This event is closed to the media.
- The event will be cancelled if the No.8 Typhoon signal or the Black Rain Storm warning is in force.
- By attending this event, you agree to be photographed and/or filmed and give permission to use your likeness in promotional and/or marketing materials.
- For further information please email catherine@britcham.com
- All payments for this event need to be settled by credit card through PayPal. Please note you do not need a PayPal account to complete payment.