



30<sup>th</sup> Anniversary

**HKWMA International Symposium on  
Sustainable Waste Management towards Carbon Neutrality**

# Conference Proceedings

LT-B, The Hong Kong University of Science and Technology, Clear Water Bay, Hong Kong, China

**6-7 June 2024**

**Organiser:**



香港廢物管理學會  
Hong Kong Waste Management Association

**Co-Organisers:**



THE HONG KONG  
UNIVERSITY OF SCIENCE  
AND TECHNOLOGY

**30<sup>th</sup> Anniversary HKWMA International Symposium on  
Sustainable Waste Management towards Carbon Neutrality**

***6-7 June 2024***

<b>Conference Programme</b>	
<b>6 June 2024 (Venue: Lecture Theatre B (LT-B), The Hong Kong University of Science and Technology)</b>	
08:30-09:00	Registration
<b>Opening Ceremony</b>	
09:00-09:40	<b>Opening Address: 30th Anniversary of HKWMA</b> <b>Ir Prof. Dan Tsang</b> Department of Civil and Environmental Engineering, The Hong Kong University of Science and Technology, Hong Kong
09:00-09:05	<b>Opening Address: 30th Anniversary of HKWMA</b> <b>Ir Prof. Dan Tsang</b> Department of Civil and Environmental Engineering, The Hong Kong University of Science and Technology, Hong Kong
09:05-09:35	<b>Welcome Speech: The Way Forward for Waste Management in Hong Kong</b> <b>Dr. Samuel Chui, JP</b> Director, Environmental Protection Department, Hong Kong SAR Government
09:35-09:40	Group Photo (inside Lecture Theatre B)
09:40-10:10	<b>Keynote Speech: Association of Pacific Rim Universities — Sustainable Waste Management</b> <b>Prof. Yong Sik Ok</b> Program Director and Chair, APRU Sustainable Waste Management Professor, Division of Environmental Science and Ecological Engineering, Korea University, Seoul, Korea
<b>Coffee Break</b>	
10:10-10:30	<b>Keynote Speech: Sustainable Waste Management in San Francisco and California</b> <b>Prof. William Mitch</b> Professor, Department of Civil and Environmental Engineering, Stanford Doerr School of Sustainability, Stanford University, California, USA
10:30-11:00	<b>Keynote Speech: Sustainable Waste Management in San Francisco and California</b> <b>Prof. William Mitch</b> Professor, Department of Civil and Environmental Engineering, Stanford Doerr School of Sustainability, Stanford University, California, USA
11:00-11:30	<b>Keynote Speech: Waste-to-Energy Treatment and Resource Recovery in China</b> <b>Prof. Jianhua Yan</b> Professor, State Key Laboratory of Clean Energy Utilization, Zhejiang University, Hangzhou, China
11:30-11:50	<b>Invited Speech: The Decarbonisation Journey of Converting Waste into Renewable Fuels</b> <b>Ir Norman Cheng</b> Past Chairman of HKWMA, Veolia Environmental Services Hong Kong Limited, Hong Kong
11:50-12:10	<b>Invited Speech: Opportunities from Chemical Wastes to Resources – A 30-Year Testimony from An Independent Recycling Company of Hong Kong</b> <b>Mr. Victor Li</b> Past Chairman of HKWMA, Dunwell Group, Hong Kong
<b>Lunch</b>	
12:10-13:30	<b>Keynote Speech: The Road to Carbon Neutrality in Asia Pacific</b> <b>Prof. Rajasekhar Balasubramanian</b> Provost's Chair Professor, Department of Civil and Environmental Engineering, National University of Singapore, Singapore
13:30-14:00	<b>Keynote Speech: The Road to Carbon Neutrality in Asia Pacific</b> <b>Prof. Rajasekhar Balasubramanian</b> Provost's Chair Professor, Department of Civil and Environmental Engineering, National University of Singapore, Singapore
14:00-14:30	<b>Keynote Speech: Importance of Risk Management in Sustainable Waste Management — Too Often Overlooked</b>

	<p><b>Prof. Mark Milke</b> Professor, Civil and Natural Resources Engineering, University of Canterbury, Christchurch, New Zealand</p>
14:30-14:50	<p><b>Invited Speech: Developing Hong Kong's Waste Infrastructure to Turn Waste to Treasure</b> <b>Ir Andy Chan</b> Technical Director, Binnies Hong Kong Limited, Hong Kong</p>
14:50-15:10	<p><b>Invited Speech: Engineering Design for Waste Management Facilities and Building Projects to Achieve Carbon Emission Reduction in Asia</b> <b>Ir Rex Lai</b> Chief Operating Officer, WSP Hong Kong Limited</p>
<b>15:10-15:30</b>	<b>Coffee Break</b>
15:30-16:00	<p><b>Keynote Speech: Recent Advances in Biomass and Plastic Waste Valorization</b> <b>Prof. Shurong Wang</b> Professor, State Key Laboratory of Clean Energy Utilization, Zhejiang University, Hangzhou, China</p>
16:00-16:30	<p><b>Keynote Speech: Advanced Pollution Control for Waste-to-Energy Facilities</b> <b>Prof. Yifei Sun</b> Professor, School of Energy and Power Engineering, Beihang University, Beijing, China</p>
16:30-17:00	<p><b>Keynote Speech: Green Chemistry and Sustainable Biorefinery for Value-Added Waste Recycling</b> <b>Prof. Laszlo Mika</b> Professor, Department of Chemical and Environmental Process Engineering, Budapest University of Technology and Economics, Budapest, Hungary</p>
17:00-17:20	<p><b>Invited Speech: Driving Sustainable Waste Management: Innovations &amp; Solutions for a Circular Economy</b> <b>Ir Dr. Alex Gbaguidi</b> Head of Environment and Sustainability, SMEC Asia Limited, Hong Kong</p>
17:20-17:40	<p><b>Invited Speech: Zero Waste Design Guidelines for High Density Cities — What Hong Kong Could Learn from Others</b> <b>Ms Fiona Sykes</b> Associate, Ove Arup &amp; Partners Hong Kong Ltd, Hong Kong</p>

<b>7 June 2024 (Venue: Lecture Theatre B (LT-B), The Hong Kong University of Science and Technology)</b>	
09:00-09:30	<b>Keynote Speech: Waste Management and ESG in Australia</b> <b>Prof. Ali Abbas</b> Professor, School of Chemical and Biomolecular Engineering, The University Of Sydney, Sydney, Australia
09:30-10:00	<b>Keynote Speech: Low-Carbon Treatment and Reuse of Industrial Waste</b> <b>Prof. Wengui Li</b> ARC Future Fellow, Scientia Associate Professor, School of Civil and Environmental Engineering, The University of New South Wales, Sydney, Australia
10:00-10:20	<b>Invited Speech: A World without Waste: Our Circular Economy Model</b> <b>Ir Kenny Wong</b> Past Chairman of HKWMA, ALBA Integrated Waste Solutions (Hong Kong) Limited, Hong Kong
10:20-10:40	<b>Invited Speech: Reclamation of Mineral Resources from Spent Rechargeable Batteries</b> <b>Ir Prof. Kaimin Shih</b> Past Chairman of HKWMA, Department of Civil Engineering, The University of Hong Kong, Hong Kong
10:40-11:00	<b>Coffee Break</b>
11:00-11:30	<b>Keynote Speech: Resource Circularity of Critical Metals for Electric Vehicles</b> <b>Prof. Dan Alessi</b> Professor, Faculty of Science - Earth & Atmospheric Sciences, University of Alberta, Edmonton, Canada
11:30-12:00	<b>Keynote Speech: Waste Treatment for Sustainable Product Development in Singapore</b> <b>Prof. Grzegorz Lisak</b> Director, Residues and Resource Reclamation Centre, Nanyang Technological University, Singapore
12:00-12:30	<b>Keynote Speech: Sustainable Food Waste Recycling for Hotels in Las Vegas</b> <b>Prof. Eakalak Khan</b> Professor, Civil and Environmental Engineering and Construction Department, University of Nevada at Las Vegas, Nevada, USA
12:30-12:50	<b>Invited Speech: Unlocking Synergies: Waste Management and Carbon Market for Sustainable Development</b> <b>Dr. Grace He</b> Senior Consultant, Climate and Sustainability, Deloitte China, Hong Kong
12:50-13:10	<b>Invited Speech: The Evolution of Waste Management in Hong Kong in the Past 30 Years and Our Directions Forward</b> <b>Ir Louis Chan</b> Past Chairman of HKWMA, China Harbour Engineering Company Limited, Hong Kong
13:10-14:15	<b>Lunch</b>
14:15-17:30	<b>Half-Day Site Visit</b> <b>EcoPark HK (battery, biochar, WEEE, etc.)</b>

## Keynote Speakers



**Ir Prof. Dan Tsang**



**Dr. Samuel Chui, JP**



**Prof. Yong Sik Ok**



**Prof. William Mitch**



**Prof. Jianhua Yan**



**Prof. Rajasekhar  
Balasubramanian**



**Prof. Mark Milke**



**Prof. Shurong Wang**



**Prof. Yifei Sun**



**Prof. Laszlo Mika**



**Prof. Ali Abbas**



**Prof. Wengui Li**



**Prof. Dan Alessi**



**Prof. Grzegorz Lisak**



**Prof. Eakalak Khan**

## Invited Speakers



**Ir Norman Cheng**



**Mr. Victor Li**



**Ir Andy Chan**



**Ir Rex Lai**



**Ir Dr. Alex Gbaguidi**



**Ms. Fiona Sykes**



**Ir Kenny Wong**



**Ir Prof. Kaimin Shih**



**Dr. Grace He**



**Ir Louis Chan**

# Lecture Theaters and Lift Location

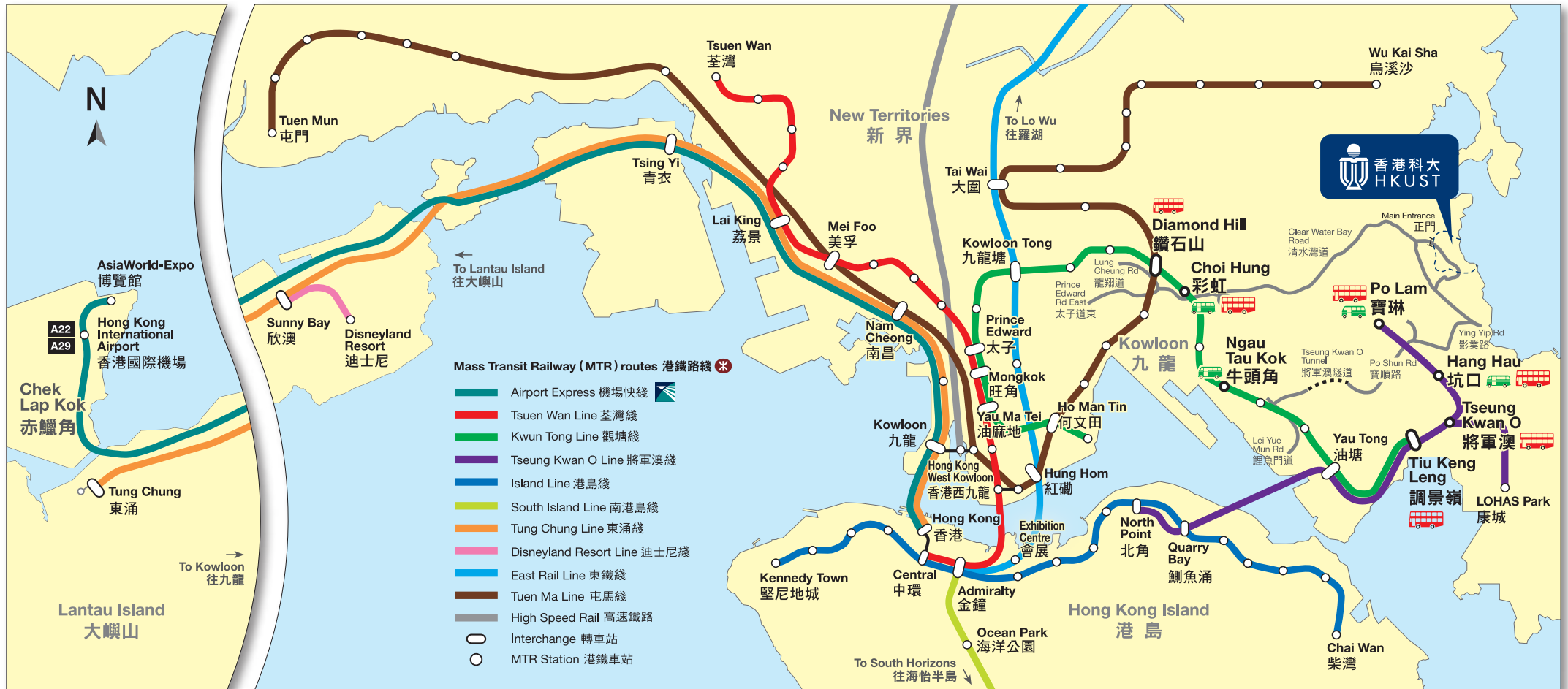
## The Hong Kong University of Science and Technology





# LOCATION MAP

## THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY



MTR Stations with bus or green minibus service to HKUST  
提供往科大巴士或綠色專線小巴服務的港鐵車站

Diamond Hill 鑽石山: 91, 91M, 91P\*

Choi Hung 彩虹: 91, 91M, 91P\* 11, 11S#

Ngau Tau Kok 牛頭角: 104

Tiu Keng Leng 調景嶺: 792M

Hang Hau 坑口: 91M 11, 11M, 11S#

Po Lam 寶琳: 91M 12, 11S#

Tseung Kwan O 將軍澳: 792M

### Transportation from airport to HKUST:

For passengers with bulky luggage, taking a taxi to HKUST direct is recommended. Those with simple luggage may take Airport Bus A22 to Lam Tin MTR station or A29 to Po Lam MTR station, and change for taxi to HKUST.

### Bus Routes 巴士路線

### Green Minibus Routes 綠色專線小巴路線

\* Departing from Diamond Hill Station at 07:55 – 08:50 to North Bus Station (HKUST) Monday to Friday (except Public Holidays)  
星期一至星期五 (公眾假期除外), 於07:55至08:50由鑽石山鐵路站前往北門巴士站 (香港科技大學)

# Departing from Po Lam (Public Transport Interchange) at midnight 12:00 to 05:00 to North Bus Station (HKUST)  
午夜12:00至05:00由寶琳 (公共交通匯處) 前往北門巴士站 (香港科技大學)