



30th 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

Supporting Organisation:

HKIE THE HONG KONG
INSTITUTION OF ENGINEERS
香港工程師學會
Environmental Division
環境分部

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

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

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

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綫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 巴士路綫

Green Minibus Routes 綠色專綫小巴路綫

* 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 (公共交通交匯處) 前往北門巴士站 (香港科技大學)