



IES CHARLES RUDD DISTINGUISHED PUBLIC LECTURES

SUSTAINABILITY: IMPACT ON OUR FUTURE LIVES

14 May 2021 | Friday SUTD Auditorium | 9am – 1pm

PDU (TBC) | 2 STU (Structural)



Speakers and Panelists



Prof Lui Pao ChuenTemasek Defence Professor



Mr Benedict Chia
Director (Strategic Issues),
National Climate Change
Secretariat (NCCS), Strategy
Group, Prime Minister Office



Dr Bicky BhanguPresident, South East Asia,
Pacific & South Korea,
Rolls-Royce



Mr Calvin ChungChief Environmental Officer,
JTC Corporation



Er. Goh Chee Tiong
Chief Engineer / Deputy Director,
Industry Regulation 1 Department,
Carbon Mitigation Division,
National Environment Agency (NEA)



Guest-of-Honour
Ms Grace Fu
Minister
Ministry of Sustainability
and the Environment



Dr Hazel Khoo
Executive Director, Singapore
Institute of Food and
Biotechnology Innovation (SIFBI),
A*STAR



Mr Manohar Khiatani Senior Executive Director, CapitaLand Group

Panel Moderator



Prof Seeram Ramakrishna, FREng Chairman, Circular Economy Taskforce NUS and Chairman, Sustainable Manufacturing Technical Committee, The Institution of Engineers, Singapore (IES)

PROGRAMME

TIME	SESSION
9:00am	Welcome Address Prof Chong Tow Chong, President, Singapore University of Technology and Design (SUTD)
9:05am	Opening Address Dr Richard Kwok, President, The Institution of Engineers, Singapore (IES)
9:15am	World Engineering Day Message Er. Tan Seng Chuan, Executive Board Member, World Federation of Engineering Organisations (WFEO) and Emeritus President, The Institution of Engineers, Singapore (IES)
9:25am	Keynote Address Guest-of-Honour Ms Grace Fu, Minister, Ministry of Sustainability and the Environment
9:45am	Presentation of IES Lifetime Engineering Achievement Award Guest-of-Honour Ms Grace Fu, Minister, Ministry of Sustainability and the Environment
10:00am	Distinguished Speaker Growing Smart Cities in Nature Prof Lui Pao Chuen, Temasek Defence Professor
10:30am	Driving Sustainability in the Built Environment Mr Manohar Khiatani, Senior Executive Director, CapitaLand Group
10:50am	Coffee Break
11:05am	A Journey Towards Clean Energy Powered Transportation Dr Bicky Bhangu, President, South East Asia, Pacific & South Korea, Rolls-Royce
11:25am	Future of Food Dr Hazel Khoo, Executive Director, Singapore Institute of Food and Biotechnology Innovation (SIFBI), A*STAR
11:45am	Climate Change Challenges and Singapore's Plans Mr Benedict Chia, Director (Strategic Issues), National Climate Change Secretariat (NCCS), Strategy Group, Prime Minister Office

Panel Discussion: Sustainability Driving Future of Engineering, Jobs, Economy and Life

Panel Moderator

Prof Seeram Ramakrishna, FREng, Chairman, Circular Economy Taskforce NUS and Chairman, Sustainable Manufacturing Technical Committee, The Institution of Engineers, Singapore (IES)

Panel Members

12.05pm

- **Mr Benedict Chia,** Director (Strategic Issues), National Climate Change Secretariat (NCCS), Strategy Group, Prime Minister Office
- Dr Bicky Bhangu, President, South East Asia, Pacific & South Korea, Rolls-Royce
- Mr Calvin Chung, Chief Environmental Officer, JTC Corporation
- **Er. Goh Chee Tiong**, Chief Engineer / Deputy Director, Industry Regulation 1 Department, Carbon Mitigation Division, National Environment Agency (NEA)
- Dr Hazel Khoo, Executive Director, Singapore Institute of Food and Biotechnology Innovation (SIFBI), A*STAR
- **Prof Lui Pao Chuen,** Temasek Defence Professor

1.00pm End of Lecture

WHY YOU SHOULD ATTEND

Today's sustainability challenges and the recent disruption brought about by COVID-19 has brought us closer together as family, community, nation and deepen determination and resolve. It has also presented opportunity for a reset to re-create our economy, businesses and our vision to be recognised as forerunner in sustainability and green industries.

SG Green Plan 2030 has revealed a comprehensive 'whole-of-nation-movement' to re-create Singapore in order to achieve a sustainable future. To succeed, it takes every intentional steps across the society, to convert awareness to conviction and to transform green ambition to reality. This lecture serves as a platform to educate, engage and inspire, not only the engineering and scientific community, but also the general public and especially our young students, the future of Singapore.

KEY TAKEAWAYS

- **Hear** from thought-leaders and topic experts on shaping the sustainable city and community of the future.
- Celebrate engineering contribution and achievement in commemoration of the WFEO's World Engineering Day for Sustainable Development.
- Join the free-of-charge event via virtual live streaming at Science Centre, IHLs and venues of convenience.
- **Learn** and **earn** professional development points.

ABOUT ER. CHARLES RUDD

Er. Charles Rudd was a Founder Member and Fellow of the Institution of Engineers, Singapore, who bequeathed \$1.23 million to IES.

Charles was born in New Zealand and obtained his BSc, MSc and BEng from the University of New Zealand. He also held an MSc from the University of London. He came to Singapore during the war and worked for Alliance Engineering before starting his consulting firm Rudd Technical Consultants. He was a registered Professional Engineer from both Singapore and Malaysia.

Er. Charles Rudd was a stalwart supporter and a staunch friend of the Institution until he suffered a stroke in 1990. He had served in the IES Council and represented IES in several SISIR technical committees. He was President of the Rotary Club in 1974/75.

Charles is remembered as a very active participant at seminars and workshops. The Charles Rudd Distinguished Lecture series is appropriately named after him to emulate his spirit of continuous professional development and active learning.











Dr Boh Jaw Woei Mr Mervyn Sirisena Er. Dr Ho Kwong Meng Prof Seeram Ramakrishna Ms Madelyn Kia Ms Charlotte Seah



The World Engineering Day for Sustainable Development was proclaimed by UNESCO at its 40th General Conference in 2019. It is celebrated worldwide on 4th March of each year since 2020. The day offers an opportunity to highlight engineers and engineering's achievements in our modern world and improve public understanding of how engineering and technology are central to modern life and for sustainable development.

The World Engineering Day 2021 (WED2021), with the theme "Engineering for A Healthy Planet- Celebrating the UNESCO Engineering Report", will focus on celebrating the launch of the 2nd UNESCO Engineering Report "Engineering for Sustainable Development: Delivering on the Sustainable Development Goals". Ten years after the publication of the 1st UNESCO Engineering Report, "Engineering: Issues, Challenges and Opportunities for Development", the new report highlights the crucial role of engineering in delivering the 2030 Agenda for sustainable development, shows how inclusive and gender equitable engineering profession can bring about new perspectives and thus respond to the shortage of engineers, showcases of engineering innovations for implementation of the SDGs, analyses the progresses in and challenges in engineering education and capacity building, and summarizes the regional trends of engineering development. Finally, it gives recommendations for developing engineering for the SDGs, and calls for global cooperation with multiple stakeholders to promote development of engineering for the SDGs.

SIDE EVENT @ SCIENCE CENTRE SINGAPORE

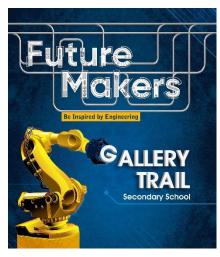
Join us at the satellite venue for live streaming of the lecture **AND** embark on a learning trail at Science Centre's **Urban Mutation** and/or **Future Makers** exhibitions!

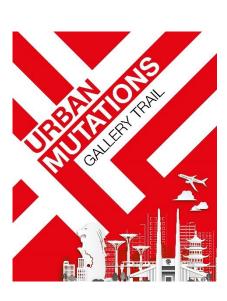
Venue: Maxwell Auditorium

Date: 14 May 2021

Registration starts from 8.30am *Limited seating capacity, pre-registration required.

For more information, email: Kee_Lek_Ee @science.edu.sg Everlyne Tan@science.edu.sg





We place sustainability at the core of everything we do

At CapitaLand, we are committed to growing in a responsible manner, delivering long-term economic value, and contributing to the environmental and social well-being of our communities.

We will leverage CapitaLand's presence in over 230 cities and over 30 countries globally to make a larger positive impact on the communities.

> Through CapitaLand's 2030 Sustainability Master Plan, we are elevating our environmental, social and governance efforts.

We aim to build portfolio resilience and resource efficiency, enable thriving and future-adaptive communities, and accelerate sustainability innovation and collaboration.



• BUSINESS PARK, INDUSTRIAL & LOGISTICS • COMMERCIAL • INTEGRATED DEVELOPMENT & URBAN DEVELOPMENT • INVESTMENT MANAGEMENT • LODGING • RESIDENTIAL • RETAIL

















Are You Onboard With Us? #GoGreenWithSMRT

JOINT ORGANISERS





SPECIAL THANKS

SILVER SPONSORS









GENERAL SPONSORS



BRONZE SPONSOR









SUPPORTING ORGANISATIONS



College of Engineering



















The Institution of StructuralEngineers





