

Organised by:



SP Singapore Polytechnic

WORLD ENGINEERING DAY

FEATURING

THE CHARLES RUDD DISTINGUISHED GLOBAL LECTURES 2025

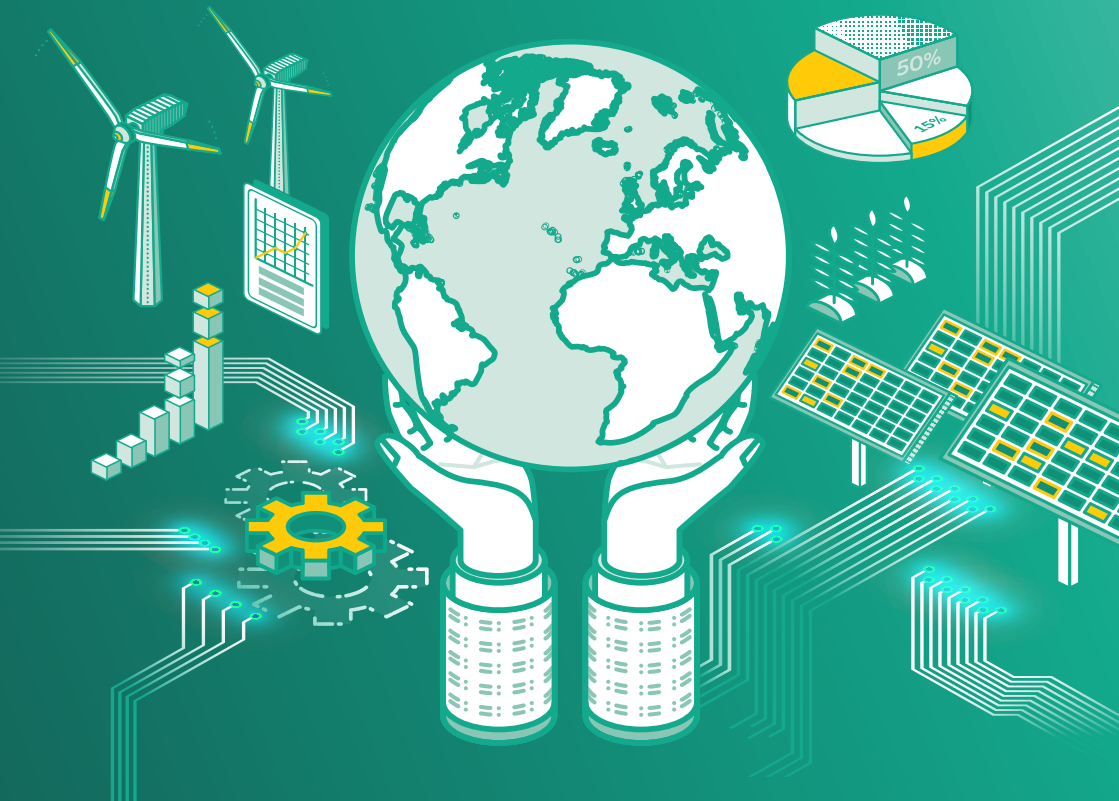
Towards A Sustainable World: Engineering The Way Forward

CIRCULAR ECONOMY | RESILIENT FUTURE

11 FEBRUARY 2025 | 9AM - 12PM (SGT)

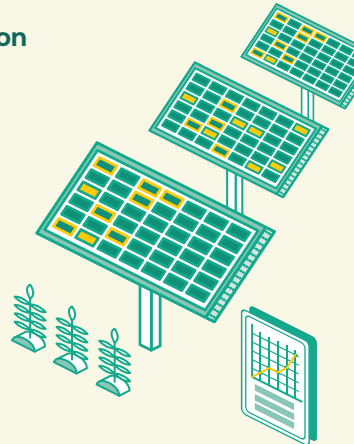
SP CONVENTION CENTRE & ZOOM (For International Participants)

PDUS FOR PE/CENG | STU (STRUCTURAL) [TO BE CONFIRMED],
2 PDUS FOR SCEM [CONFIRMED]



PROGRAMME

- 9:00 AM ● Registration & Reception
- 10:00 AM ● Welcome Address by Mr Soh Wai Wah,
Principal & CEO, Singapore Polytechnic
- 10:05 AM ● Opening Address by Er. Chan Ewe Jin,
President, The Institution of Engineers, Singapore
- 10:10 AM ● Address by Er. Tan Seng Chuan, President-Elect,
World Federation of Engineering Organisations
- 10:15 AM ● Guest-of-Honour Address by Associate Professor
Dr Muhammad Faishal Ibrahim, Minister of State
for Home Affairs & National Development
- 10:20 AM ● Launch of Built Environment (BE)
Transformation Learning Journey
- 10:25 AM ● Distinguished 1st Keynote Address by Tita Yowana Alwis,
Minister Counsellor, Head of Economy - Indonesia Embassy
- 10:40 AM ● Distinguished 2nd Keynote Address by Mr Kelvin Wong,
Chief Executive Officer, Building & Construction Authority
- 10:55 AM ● Panel Discussion “Navigation the future:
Circular Economy & Building Resilience”
- 11:50 AM ● Presentation of Token of Appreciation
- 12:00 PM ● Networking Lunch
- 1:30 PM ● Breakout Activities #1
- 3:30 PM ● Breakout Activities #2
- 5:00 PM ● End of Conference



GUEST OF HONOUR



**Associate Professor
Dr Muhammad
Faishal Ibrahim**

Minister of State for Home Affairs
& National Development



Tita Yowana Alwis

Minister Counsellor, Head of
Economy - Indonesia Embassy



Kelvin Wong

Chief Executive Officer
Building and Construction
Authority

PANEL DISCUSSION

NAVIGATING THE FUTURE: CIRCULAR ECONOMY AND BUILDING RESILIENCE

This panel explores how the circular economy, driven by engineering, innovation, and education, can eliminate waste, tackle climate challenges, and achieve net-zero goals. Learn how to build resilience, develop sustainable solutions, and equip future engineers for a greener, more sustainable future.



MODERATOR



**Professor Seeram
Ramakrishna**

Chairman, Circular Economy Taskforce,
National University of Singapore
Chairman, Sustainable Manufacturing
Technical Committee, The Institution of
Engineers Singapore



Ms Karina Cady

Chief Executive Officer
Nandina REM



Ms Violet Chen

Director, Energy Capabilities
Development Department
Energy Market Authority



Ms Kate Drews

Regional Head, Australia & New Zealand
Surbana Jurong Group



Ms Suzy Goulding

Head of Sustainability, APMEA, MSL /
Publicis Groupe; Asia Lead, Salterbaxter

Vice-President and Business Committee
British Chamber of Commerce Singapore



Mr Loh Yew Chiong

Deputy Principal (Academic)
Singapore Polytechnic



Mr Gan Boon Jin

Group Chief Sustainability Officer,
SMRT Corporation



BREAKOUT ACTIVITIES

Advanced Manufacturing Learning Journey @W1313

Session 1:

1:30PM-3:00PM

Learn how SMEs can adopt Industry 4.0 technologies through digitalisation, integration, and smart transformation, with tools like the Singapore Industry Readiness Index (SIRI) to future-proof businesses.

Session 2:

3:30PM-5:00PM

Artificial Intelligence Learning Journey @T1A310

Session 1:

1:30PM-3:00PM

Explore AI solutions to streamline business processes and drive digital transformation. This session focuses on practical AI applications and upskilling employees for future success.

Session 2:

3:30PM-5:00PM

Built Environment Transformation Learning Journey @W132

Session 1:

1:30PM-3:00PM

Learn how SMEs can thrive using innovative technologies and sustainable practices. Explore ITM's pillars and access training and funding to achieve growth in the Built Environment sector.

Session 2:

3:30PM-5:00PM

HR Learning Journey & Building Companies of Good - People @T18B206

Session 1:

1:30PM-3:00PM

Discover how First-Line Managers foster mental wellness, flexible work, and employee well-being. This session highlights strategies that boost engagement, retention, and sustainability.

Session 2:

3:30PM-5:00PM

HR Learning Journey & Building Companies of Good - Profit @T18B208

Session 1:

1:30PM-3:00PM

Learn strategies to tackle SME HR challenges and upskill workforces for transformation. Gain insights from SP and IHRP on practical solutions to strengthen human capital and drive success.

Session 2:

3:30PM-5:00PM

Sustainability Learning Journey @Library (Level 3A)

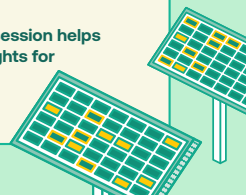
Session 1:

1:30PM-3:00PM

Through zones on Awareness, Baseline, and Commitment, this session helps organisations craft sustainability roadmaps with actionable insights for achieving measurable results.

Session 2:

3:30PM-5:00PM





BREAKOUT ACTIVITIES

Building a Climate-Resilient Future: Sustainable Horizons for the Built Environment @LT18A

1:30PM-3:00PM

Explore innovative engineering solutions for resilient, low-carbon infrastructure. Learn strategies to address climate challenges and create sustainable environments for the future.



Mr Chen Wenjie
Associate Director
Climate Asia Pte Ltd



Mr James Lam Pei Wei
Executive Director, Coastal Engineering & Management
Surbana Jurong



Dr. Tamilselvan Thangayah
Director
Research & Development
Joe Green Pte Ltd



Mr Rama Venkta
Chief Operating Officer
Civil Infrastructure
Chp Eng Seng Construction



The Future of Digital Learning: Trends, Tools and Technologies @LT12A

Session 1:

1:30PM-3:00PM

Session 2:

3:30PM-5:00PM

Discover how AIoT and Generative AI are transforming education. Gain practical insights into leveraging these technologies to enhance teaching and learning experiences.



Mr Joe Yang
Programme Manager,
School of Electrical and
Electronic Engineering
Singapore Polytechnic

The Future of Sustainability of Global Smart Solutions Seminar @LT17A

1:30PM-3:00PM

Learn about sustainable technologies and global strategies for success. Explore energy-efficient solutions, water conservation, and green initiatives, along with strategies for navigating international challenges.



Dr Alex W.H. Cheung
Director, Environmental & Sustainability, North Asia
SMEC Asia Limited



Mr John Chew
Retired Engineer



Mr Obie Vetter
Principal Project Manager
Surbana Jurong
Singapore



Mr Philip Chan Kok Leong
Director
Ting Heng Energy
Consultancy Pte Ltd



Dr Sam Man Keong
Founder
Singapore Institute of
Engineering Technologies

What is INCOSE and How We Apply Systems Engineering to Create a Framework for Modelling Industrial Symbiosis @LT12B

1:30PM-3:00PM

Learn about INCOSE certifications and explore a case study on how Model-Based Systems Engineering advances industrial symbiosis systems. Gain insights into systems engineering for sustainability and efficiency.



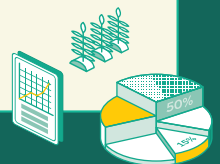
Robert Ong
President-Elect for INCOSE
Singapore Chapter



Tham Ming-Wah
Chapter President for
INCOSE Singapore Chapter



Yip Yew Seng
Founding Management
Committee Member for
INCOSE Singapore Chapter



EVENT SPONSORS

GOLD



College of Design
and Engineering

SILVER



BRONZE



SUPPORTING ORGANISATIONS



Scan the QR code to register now
or visit: <https://for.edu.sg/wedcrdgl25>

For more information visit, www.charlesrudd.com



As a global leader in low-carbon concrete technologies, Pan-United is reimagining and reshaping the future of concrete spaces. We use concrete innovation and digitalisation to decarbonise the built environment, creating a greener and safer world for future generations.

Decarbonising The World With Concrete

panunited.com.sg

*This image shows a microscopic 3D-rendered shot of ice layered with concrete aggregates.

SHAPE THE FUTURE OF MOBILITY WITH US

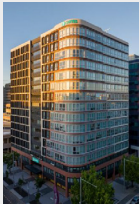
At the Land Transport Authority, achieving our goal of delivering faster, safer and more inclusive journeys for commuters in Singapore takes more than just engineering and technology.

We need talented, driven and passionate individuals to join our dedicated team in shaping the future of mobility. It is more than just a job, it is a purpose we commit to.

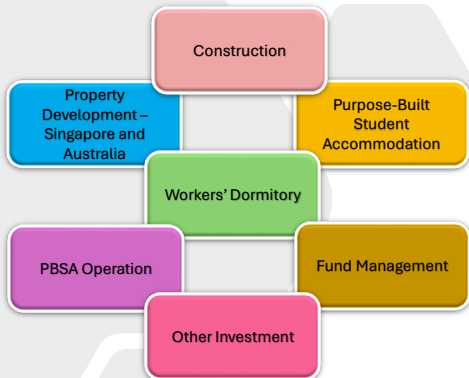
Join us in bringing our visions to life.

Apply now at lta.gov.sg/careers





Our Businesses includes...





Research with IMPACT

Through the exploration and application of engineering, architecture, and design, CDE is committed to solving some of the world's most complex problems.

Meet Assistant Professor Iris Yu from the Department of Civil and Environmental Engineering, whose research in microwave-assisted processing converts biomass and organic waste into energy and other high-value products.

She is one of many dedicated researchers striving to make our world a better place.

Connect with us at CDE and join us in our mission to inspire, innovate and transform!

cde.nus.edu.sg



nus-cde



nus_cde_sg



nus.cde.sg



nus.cde



nus_cde

We solve challenges
to realise the dreams
of a smart nation.

You can play
a big part.

As Singapore rises to become a force in the global digital economy, JTC is powering our aspirations.

As the nation's industrial master planner and developer, we are building the smartest districts in Singapore that are home to the latest technologies. They are also living labs where cutting-edge concepts and future industry solutions are nurtured.

Join us and make a big impact.
At JTC, we all can.

Apply at www.jtc.gov.sg/careers

