

MEI Symposium 26

WEDNESDAY 28 OCTOBER

Melbourne
Energy
Institute



THE UNIVERSITY OF
MELBOURNE

Date:	Wednesday 28 October 2026	Time:	8:00am – 4:30pm
Venue:	B117 Theatre (Basement), Melbourne School of Design, The University of Melbourne, Parkville		
Registration:	https://events.humanitix.com/mei-symposium-26		
Cost:	Free	Enquiries:	mei-info@unimelb.edu.au

Program

08:00-8:25	REGISTRATION AND COFFEE	
08:30-8:40	Welcome and opening of MEI Symposium 26	Prof. Richard Sandberg <i>Director, Melbourne Energy Institute, University of Melbourne</i>
08:40-9:30	OPENING PLENARY The Demand Dividend: How Data Centres Can Help Build Australia's Future Grid	Mr. Herb Moore <i>Senior Manager Energy & Utilities AirTrunk</i>
Power Generation and Transport		ACTING CHAIR: A/Prof. Shiaohuey Chow
09:30-10:00	KEYNOTE ACES (Advanced Clean Energy Storage) Project, how seasonal energy storage support sustainability, affordability and security	Mr. Ryo Nishida <i>Senior Regional GM, Business Development Group Mitsubishi Heavy Industries Asia Pacific</i>
10:00-10:30	MORNING TEA	
10:30-10:45	Achieving Affordable, Clean Shipping by Integrating Ship Designs, Operations and Clean Fuels	Mr. Nguyen Cao <i>PhD Student Department of Mechanical Engineering, Faculty of Engineering and IT</i>
10:45-11:00	Holistic Design of Suction Bucket Foundations for Emerging Offshore Wind in Australian Waters	Dr. Jude Perera <i>Research Fellow Department of Infrastructure Engineering and IT, Faculty of Engineering and IT</i>
11:00-11:15	Geothermal Pavements: Transforming Transport Infrastructure into Clean Energy Systems	Dr. Annie Gu <i>Research Fellow in Geotechnical Engineering Department of Infrastructure Engineering, Faculty of Engineering and IT</i>

Energy Materials		CHAIR: A/Prof. Wallace Wong
11:15-11:45	KEYNOTE Critical Minerals for a Critical Industry	Mr. Anthony Vippond <i>CEO and Director</i> Lotus Recycling
11:45-12:00	Resolving Ultrafast Light–Matter Interaction Dynamics in Next-Generation Organic Photovoltaics with Laser Spectroscopy	Ms. Stella (Xinyue) Xu <i>PhD Student</i> School of Chemistry, Faculty of Science
12:00-12:15	Recovery of Critical Metals from E-waste using Advanced Microwave Technology	Dr. Alex Duan <i>Trace Chemical Analysis Specialist and Manager of TrACEES</i> School of Chemistry, Faculty of Science
12:15-12:30	Turbostratic Carbon Films: Advancing Fast-Charging Battery Materials for the Energy Transition	Dr. Mehrdad Parsa <i>Research Associate in Graphite Processing</i> Department of Chemical Engineering, Faculty of Engineering and IT
12:30-13:30	LUNCH AND POSTER COMPETITION – B115 foyer (Basement), Melbourne School of Design	
Heavy Industry and Resources		CHAIR: Dr. Tim Werner
13:30-14:00	KEYNOTE Connecting copper to the Renewable Energy Transition	Prof. Damian Giurco <i>Circular Economy Chair</i> Faculty of Engineering and IT The University of Melbourne
14:00-14:15	Responsible Mining for the Energy Transition: How Chinese Mining Companies Navigate ESG and Governance in Australia	Ms. Jessie (Zhanran) Xu <i>PhD Student</i> School of Geography, Earth and Atmospheric Sciences, Faculty of Science
14:15-14:30	Catalytic Membranes for CO2 Capture	Mr. Pravin Bolne <i>PhD Student</i> Department of Chemical Engineering, Faculty of Engineering and IT
14:30-14:45	Global Transition, Location Transformations: Governance Challenges for the Energy Transition at the Sites of Extraction	Dr. Ana Carballo <i>Honorary Research Fellow</i> School of Geography, Earth and Atmospheric Sciences, Faculty of Science; <i>Head of International Programmes, Transparency International Australia</i>
14:45-15:15	AFTERNOON TEA	
Energy Systems		CHAIR: Prof. Pierluigi Mancarella
15:15-15:45	KEYNOTE From Automatic to Agentic Control for Power?	Prof. David J Hill <i>Professor of Electrical Power and Energy Systems</i> Monash University
15:45-16:00	Using Electric Vehicles as Home Batteries: Smart Energy Management for Solar Homes Under Uncertainty	A/Prof. Joyce Zhang <i>Associate Professor, Operations Research</i> School of Mathematics and Statistics, Faculty of Science
16:00-16:15	How Much Solar PV Can Our Neighbourhoods Handle? Teaching AI the Physics of the Grid	Mr. Orlando Pereira Guzmán <i>PhD Student,</i> Department of Electrical and Electronic Engineering, Faculty of Engineering and IT
16:15-16:30	Balancing Lifetime and Economic Performance in Switchable PEM Electrolyser Stacks	Ms. Pauline Thuene <i>PhD Student</i> Department of Electrical and Electronic Engineering Faculty of Engineering and IT