



THE UNIVERSITY OF  
MELBOURNE

—  
**Melbourne  
Energy  
Institute**

# Symposium 2018

**Wednesday 12 December, 8:00am to 4:30pm**  
**Melbourne School of Design, Basement**

The Melbourne Energy Institute is holding its inaugural Symposium, showcasing The University of Melbourne's multi-disciplinary energy research across MEI's four research programs:

- Energy Systems
- Energy Technology
- Energy, Community and the Region
- The Environment and Energy Resources

Meet our excellent graduate students and research staff working across these areas. Exchange ideas and explore collaborations.

We are delighted to have **Ms Audrey Zilberman, CEO of AEMO**, as the opening Keynote, as well as many other topical seminars that include the following:

## **Navigating the transition to the fourth revolution**

Ms Audrey Zilberman, CEO, Australian Energy Market Operator (AEMO)

## **Power system resilience and extreme weather events**

Prof Pierluigi Mancarella, Chair of Power System Engineering

## **The future of hydrogen in Australia: Some thoughts**

Prof Michael Brear, Director, Melbourne Energy Institute

## **Consumer response to road use prices**

Dr Leslie Martin, Senior Lecturer, Department of Economics

## **Coal seam gas, conflicted communities and the promise of prosperity**

Prof Fiona Haines, Professor of Criminology in the School of Social and Political Sciences

**Meet our excellent graduate students and research staff working across these areas. Exchange ideas and explore collaborations.**

[energy.unimelb.edu.au](http://energy.unimelb.edu.au)

# MEI Symposium 2018 program

Open		Location
7:30	Registration <i>coffee &amp; pastries</i>	MSD Basement Foyer
8:00	Audrey Zibelman, CEO AEMO	Singapore Theatre
Stream one (am) Energy Systems, Singapore Theatre		Speaker
9:00–9:30	Power system resilience and extreme weather events	Prof Pierluigi Mancarella
9:30–10:00	NEM: Government interventions and the evolving political economy of the Australian power system	Mr Dylan McConnell
10:00–10:30	Financial performance of generators in energy-only markets with increasing variable renewables	Dr Daniel Marshman
10:30–11:00	<i>Morning tea</i>	
11:00–11:30	Increasing PV hosting capacity in distribution networks: challenges and opportunities	Dr Andreas Procopiou
11:30–12:00	Machine Learning Techniques for time series forecasting with application to smart grids	Ms Fateme Fahiman
12:00–12:30	Frequency response constrained economic dispatch with consideration of generation contingency size	Mr Sebastian Puschel
Stream two (am) Environment and Energy Resources, Malaysian Theatre		Speaker
9:00–9:30	Cities, transport, health and the climate transition	Prof Mark Stevenson
9:30–10:00	IPCC Special Report on 1.5 degrees warming: what does it mean for Australia?	Mr Zebedee Nicholls
10:00–10:30	Nitrogen oxides in the urban environment: why we should care?	Mr Rob Ryan
10:30–11:00	<i>Morning tea</i>	
11:00–11:30	Air quality and health: causal links specific to Victoria's environment	Ms Sonya Fiddes
11:30–12:00	Mineral precipitation from CO <sub>2</sub> -saturated water in basalts and its potential for self-sealing of fractures and joints	Ms Meghalim Phuken
12:00–12:30	Reconfiguring energy, community and the region through the Copenhagen Climate Plan	Mr Stephen Pollard
Lunch		
12:30–13:30	Lunch and poster exhibition and judging	MSD Basement Foyer
Stream one (pm) Energy Technology, Singapore Theatre		Speaker
13:30–14:00	The future of hydrogen in Australia: some thoughts	Prof Michael Brear
14:00–14:30	A new solar forecasting system to assist the energy transition in Australia	Dr Victor Depoorter Ruelle
14:30–15:00	Turbine blade cooling prediction through high-fidelity simulations	Dr Javier Otero
15:00–15:30	Luminescent solar concentrator: from fluorophore synthesis to device fabrication	Mr Bolong Zhang
15:30–16:00	New singlet fission material for next generation organic photovoltaic	Ms Sagher Masoomigodiarzi
16:00–16:30	Technology innovation and the deployment of Carbon Capture and Storage (CCS)	Mr Frank Wu
Stream two (pm) Energy, Community and the Region, Malaysian Theatre		Speaker
13:30–14:00	Energy technology innovation in South Asia: implications for gender equality and social inclusion	Dr Reihana Mohideen
14:00–14:30	Coal seam gas, conflicted communities and the promise of prosperity	Prof Fiona Haines
14:30–15:00	Corporate law driving clean energy transition? Litigation and carbon risk	Dr Anita Forster
15:00–15:30	Consumer response to road use prices	Dr Leslie Martin
15:30–16:00	Energy retail price dispersion	Dr Sangeetha Chandra-Shekar
16:00–16:30	Prospects for distributed micro-grid electricity systems in India	Dr Jonathan Balls
Close		
16:30	Formal close and invitation to join BBQ to celebrate the year	Singapore Theatre