

Australia-Japan Clean Energy and Emerging Research Leaders Exchange Program Forum

21–22 November 2024

VENUE

Engineers Australia
600 Bourke Street
Melbourne VIC 3000
Australia



PRESENTED BY



Australian Academy of
Technological Sciences
& Engineering



公益社団法人
日本工学アカデミー
THE ENGINEERING ACADEMY OF JAPAN

EVENT PARTNERS



ENGINEERS
AUSTRALIA



Australian Government



豪日交流基金
Australia-Japan FOUNDATION

DAY 1 – SYMPOSIUM – THURSDAY 21 NOVEMBER

Australia-Japan Collaboration for a Clean Energy Future

9:00am – 30 mins	Registration and networking – MC: Peter Derbyshire, Director Policy and International Affairs, Australian Academy of Technological Sciences and Engineering (ATSE)	
9:30am – 15 mins	Opening remarks	<p>Australia-Japan Collaboration for a Clean Energy Future Professor Paul Wood ATSE</p> <p>Dr Yuko Harayama Professor Emeritus, Tohoku University. Secretary General, GPAI Tokyo Expert Support Center; Engineering Academy of Japan (EAJ)</p>
9:45am – 30 mins	Keynote	Professor Douglas MacFarlane, Sir John Monash Distinguished Professor School of Chemistry Monash University
10:15am – 90 mins	Panel session 1	<p>Industrial Needs for Clean Energy Solutions (Australia-Japan Focus) This session will discuss the clean energy needs of industry in both Australia and Japan, focusing on the shared goals of decarbonisation and economic growth. Topics will include large-scale renewable energy deployment, industrial energy use, and government policies.</p> <p>CHAIR: Dr John Söderbaum Director, Science and Technology, ACIL Allen Consulting</p> <p>Dr Jehan Kanga Founder & CEO RUX Energy</p> <p>Haruki Motegi Chief Researcher, Corporate Research & Development, IHI Corporation (Exchange participant)</p> <p>Waseqa Ahana Hassan Senior Sustainability Consultant, SUHO</p>
11:45am – 75 mins	Lunch and networking	
1:00pm – 30 mins	Keynote	Professor Yasushi Sekine Faculty of Science and Engineering, School of Advanced Science and Engineering, Waseda University
1:30pm – 90 mins	Panel session 2	<p>Fundamental Research in Clean Energy Technologies (Australia-Japan Focus) This session will highlight leading-edge research from Australia and Japan on clean energy solutions, emphasising cross-country collaboration. Topics will include innovations in hydrogen technology, renewable energy sources, and new materials for energy storage.</p> <p>CHAIR: Professor Ken Baldwin Emeritus Professor, Research School of Physics; inaugural Director, former ANU Energy Change Institute (now incorporated into ICEDS); founding Director, ANU Grand Challenge: Zero-Carbon Energy for the Asia-Pacific</p> <p>Professor Yasushi Sekine Faculty of Science and Engineering, School of Advanced Science and Engineering, Waseda University</p> <p>Professor Douglas MacFarlane Sir John Monash Distinguished Professor School of Chemistry, Monash University</p> <p>Professor Sandra Kentish Redmond Barry Distinguished Professor at The University of Melbourne</p> <p>Dr Takaya Fujisaki Assistant Professor, Faculty of Materials for Energy, Shimane University (Exchange participant)</p>
3:00pm – 15 mins	Break and networking	
3:15 – 60 mins	Panel Session 3	<p>Enabling Capabilities for Clean Energy Transition (Australia-Japan Focus) This session will focus on the enabling capabilities needed to advance clean energy collaboration between Australia and Japan, including the role of education, digital technologies like AI, and innovation platforms.</p> <p>Dr Yuko Harayama Professor Emeritus, Tohoku University. Secretary General, GPAI Tokyo Expert Support Center</p> <p>Distinguished Professor Baohua Jia Director, Centre for Atomaterials and Nanomanufacturing, RMIT University</p> <p>Glen Currie Program Impact Manager, Climateworks Centre</p> <p>Dr Emi Yuda Associate Professor, Graduate School of Information Sciences, Tohoku University</p>
4:15pm –15 mins	Closing Remarks	Peter Derbyshire Director Policy and International Affairs, ATSE
7:00pm – 2 hours	Reception	Rydges Melbourne, 186 Exhibition Street, Melbourne VIC 3000

DAY 2 – FORUM – FRIDAY 22 NOVEMBER

The 4th ERLEP Trans-disciplinary Forum

9:15am – 15 mins	Registration and networking – MC: David Kilham International Affairs Manager, ATSE	
9:15am – 10 mins	Opening remarks	David Kilham International Affairs Manager, ATSE Dr Yuko Harayama Professor Emeritus, Tohoku University. Secretary General, GPAI Tokyo Expert Support Center; Engineering Academy of Japan (EAJ)
9:25am – 10 mins	Brief review of previous ERLEP activities	This session will briefly review previous ERLEP activities since 2009 under the collaboration between ATSE and EAJ. A dispatch-type ERLEP activity was held from 2009 to 2016, followed by a change in the form of a forum-type ERLEP activity in 2017, which continues to the present. Professor Toshiro Ohashi Faculty of Engineering Mechanical and Aerospace Engineering Human and Mechanical Systems, Hokkaido University
9:35am – 10 mins	Brief overview of program for the second day	This session will briefly overview the program for the 2nd day and advise to proceed with the brainstorming sessions. Professor Toshiro Ohashi Faculty of Engineering Mechanical and Aerospace Engineering Human and Mechanical Systems, Hokkaido University
9:45am – 90 mins	Activity reports by three Japanese ECRs on dispatch-type ERLEP program	This session will be given by Japanese 3 ECRs on their weeklong dispatch-type ERLEP activities. MODERATOR: Professor Toshiro Ohashi Faculty of Engineering Mechanical and Aerospace Engineering Human and Mechanical Systems, Hokkaido University Haruki Motegi Chief Researcher, Corporate Research & Development, IHI Corporation Dr Takaya Fujisaki Assistant Professor, Faculty of Materials for Energy, Shimane University Dr Emi Yuda Associate Professor, Graduate School of Information Sciences, Tohoku University
11:15am – 45 mins	Self-introduction session	
12:00pm – 60 mins	Lunch and networking	
1:00pm – 30 mins	Keynote	Dr Yuko Harayama Professor Emeritus, Tohoku University. Secretary General, GPAI Tokyo Expert Support Center
1:30pm – 90 mins	Brainstorm session 1	This session will focus on clean energy cooperation between Australia and Japan and focus on challenges and opportunities that lie ahead as we prepare for this transition. The moderator will deliver a wrap-up report summarising the discussion at the end of the session and will compile it into a policy proposal to disseminate to public at a later stage. MODERATORS: Dr Kazuhide Ito Professor at Faculty of Engineering Sciences, Kyushu University Professor Jonathan Manton Future Generation Professor, University of Melbourne
3:00pm – 15 mins	Networking	
3:15 – 90 mins	Brainstorm session 2	This session will focus on “AI and engineering education” and perform trans-disciplinary discussion. The moderator will deliver a wrap-up report summarising the discussion at the end of the session and will compile it into a policy proposal to disseminate to the public at a later stage. MODERATOR: Dr Yuko Harayama Professor Emeritus, Tohoku University. Secretary General, GPAI Tokyo Expert Support Center; Engineering Academy of Japan (EAJ)
4:45pm –15 mins	Closing remarks	Professor Toshiro Ohashi Faculty of Engineering Mechanical and Aerospace Engineering Human and Mechanical Systems, Hokkaido University David Kilham International Affairs Manager, ATSE

Networking reception



It is a 20 minute walk from Engineers Australia to Rydges Melbourne.

