



Day 0: Wednesday 23 September 2026

17:00	Registration University of Technology Sydney, CB02.04.150-Foyer
17:00 - 19:00	Welcome drinks University of Technology Sydney, CB02.04.150-Foyer

Day 1: Thursday 24 September 2026

Day 1 Morning Sessions

8:30 – 9:00	Registration		
9:00 - 9:30	Opening ceremony		
9:30-10:30	Plenary Session 1 (Broadway and Jones rooms) Circular Economy in Australia, Lisa McLean , Circular Australia Direct Potable Reuse: Global Lessons for Australia, Michael Storey , SUEZ Australia/New Zealand Chair: Ho Kyong Shon		
10:30-11:00	Panel discussion (Panellists include Lisa McLean, Michael Storey, and Julie Jupp; Moderated by Ho Kyong Shon)		
11:00-11:30	Morning tea break (Foyer and balcony)		
	Broadway – Circular Nutrients	Jones – Circular Mining and Rare Earth Elements	Harris – Circular Policies/AI
	Chair: Veera Koskue , University of Melbourne, Australia	Chair: Ludovic Dumee , Curtin University, Australia	Chair: Melita Jazbec , University of Technology Sydney, Australia
11:30-11:50	Keynote The deal before the deal Django Seccombe , Sydney Water, Australia	Keynote Two-dimensional Nanosheets as Membrane Building Blocks for Species Separations Nicholas Low , Nanjing Tech University, China	Keynote Public Inquiry - Australia's circular economy: Unlocking the opportunities Joanne Chong , Productivity Commissioner, Australia
11:50-12:10	Keynote Nutrient in a Circular Economy Sherub Phuntsho , University of Technology Sydney, Australia	Keynote Breaking Australia's Lithium Refining Competitiveness Cycle: Industrial, Technical, and Policy Barriers to Value-Added Processing Amir Razmjou , Edith Cowen University, Australia	Panel conversation chaired by Melita Jazbec Panellists: Mike Davis (Managing Director, Optimal Renewable Gas Australia), Joe Fowles (Director, Energy and Climate Advisory Deloitte), Emmanuelle Sloan (Department of Primary Industries and Regional Development) and J. Chong
12:10 -12.30	Panel conversation chaired by Veera Koskue Panellists: Django Seccombe and Sherub Phuntsho	*Panel conversation chaired by Ludovic Dumee Panellists: Nicholas Low, Salwan Al-Assafi and Amir Razmjou	
12.30–13:30	#28 Upscaling urine-to-fertiliser treatment systems Veera Koskue , University of Melbourne, Australia	*Invited: Closing the Loop: Circular Economy in Minerals Processing Salwan Al-Assafi , Minerals Research Institute of Western Australia, Australia	P#20 When Do Electric Vehicles Really Reduce Emissions? Ling Li , The University of Auckland, New Zealand
	#31 Impact of pH on microbial community dynamics and electrochemical performance in urine-fed bioelectroconcentration systems Vania Mendez , University of Melbourne, Australia	#37 Transforming mining waste into sustainable construction: A critical mineral tailings data repository for low-carbon concrete production Amitha Varghese , Murdoch University, Australia	P#60 Governing the circular nutrient economy: A case study of international urine-derived fertiliser networks Jordan Roods , University of Technology Sydney, Australia
	#77 Space-efficient nutrient recovery from source-separated hydrolysed urine using GAC pretreatment coupled with an integrated submerged membrane aeration–filtration system Hsin_Chieh Lin , University of Technology Sydney, Australia	#79 Transforming Lithium Refining By-products into circular economy resources John Moursounidis , Chemistry Centre, WA, Australia	P#63 Policy and regulatory pathways for circular and low-carbon healthcare in Indonesia Sri Astuti Thamrin , Hasanuddin University, Indonesia
	#12 Time-Resolved Carbon Transformation and Nutrient Assimilation During Phototrophic Treatment of Fuel Synthesis Wastewater Using Purple Non-Sulfur Bacteria Sultan Shaikh , Hamad Bin Khalifa University, Qatar	#42 Development of Spinel HTO@MXene Electrodes for Efficient Lithium Recovery from Complex Brines Mohsen Askari , University of Technology Sydney, Australia	AI#76 Waste Polymer to Purpose-Built Materials: A Machine-Learning Framework for Mapping and Upcycling Routes Pooria Pasbakhsh , University of Melbourne, Australia
13:30 -14:30	Lunch break (Foyer and balcony)		

*Oral speaker will present before the panel conversation



Day 1 Afternoon Sessions

	Broadway – Circular Water	Jones – Circular Plastics	Harris – Circular Construction
	Chair: Mikel Duke , Victoria University, Australia	Chair: Damien Giurco , University of Melbourne, Australia	Chair: Dikai Liu , University of Technology Sydney, Australia
14:30-14:50	Keynote Closing the Loop on Water: Membrane Technologies for a More Circular and Climate-Resilient Economy Geoffrey Johnston-Hall , Dupont, Australia	Keynote Material Flow Structures and Quantitative Targets for a Decarbonised Circular Economy Keisuke Nansai , National Institute for Environmental Studies Japan	Keynote Industrialised Circularity: Prefabrication, Automation, and the Future Workforce Alireza Fard Fini , University of Technology Sydney, Australia
14:50-15:10	Keynote Purified Recycled Water for drinking water customers of data centres? Stuart Khan , University of Sydney, Australia	Keynote Partnering to solve plastic waste Paul Hodgson , CEO Solving Plastic Waste CRC, Australia	Keynote Circular Construction – The essential role of structural timber in Australia’s Built Environment Keith Crews , University of Queensland, Australia
15:10-15:30	Panel conversation chaired by Mikel Duke Panellists: Geoffrey Johnston-Hall and Stuart Khan	*Panel conversation chaired by Damien Giurco Panellists: Keisuke Nansai, Rose Read, Pravin Siriwardena and Paul Hodgson	Panel conversation chaired by Dikai Liu Panellists: Alireza F. Fini and Keith Crews
15:30-16:45	Keynote Electrochemical ion-selective membrane for critical rare-earth mineral recovery Gayathri Naidu , University of Technology Sydney, Australia	#4 Recycling medical plastic *Emilie Gauthier , The University of Queensland, Australia	Invited: From Circular Concrete to Circular Mining: Developing low carbon concrete mix designs from Australia's diverse mine wastes Martin Anda , Murdoch University, Australia
	#2 Circular Resource Recovery: Functionalized Glass Resins for Selective Extraction from Seawater and Brines Carmelo Morgante , Aalborg University, Denmark	#55 Molecular Insights into the Chemical Recycling of Polyolefin Plastics, Martina Lessio , University of New South Wales, Australia	#15 Valuing sand for mineral circularity: A review of valuation frameworks as critical enabler for the transition toward sustainable materials Madhumitha Ardhanari , The University of Queensland Australia
	#29 What six decades of chemistry tells us about lithium recovery Ghaiath Almustafa , University of Technology Sydney, Australia	#57 Computational Insights into Plastic Polyolefin Pyrolysis catalysed by UiO-66 Christine Yu , University of New South Wales, Australia	#19 Circular Economy and Net-Zero Emissions: Carbon Capture and Utilization Using Waste Calcium Silicate Boards Cheng-Han Lee , National Cheng Kung University, Taiwan
	#9 Polyketone ultrafiltration membrane fabrication for drinking water treatment Hyeon-joo Lee & Yun Chul Woo* , Myongji University, Korea	#27 Mechanical recycling of polyhydroxyalkanoates via reactive extrusion with chain extenders Alia Gallet-Pandellé , The University of Queensland, (Australia)	#1 Material Revaluation Through Circular Design: Insights from Healthcare Plastics, Deconstructed Timber and Single-Use Products Angelique Milojevic , University of Technology Sydney, Australia
	#7 Low sludge metal-free Electro-Fenton treatment with nitrogen-doped rGO for semiconductor wastewater reuse Junho Lee, Myongji University, Australia	#56 Beyond Disposal: Computational Insights into Hydrogenolysis of Polyolefin Plastic Waste Sohaib Umer , University of New South Wales, Australia	#23 Development of a Buffer-free Alkali-producing Bioelectrochemical System for Mitigating Coastal Acidification Chao-Chin Chang , National Kaohsiung University of Science and Technology Taiwan
16:45-17:15	Afternoon tea break (Foyer and balcony)		
17:15-18:30	Campus tour		
18:30-21:30	Gala Dinner and CECE Awards Thomas and Wattle Rooms, Aerial Function Centre		

*Oral speaker will present before the panel conversation



Day 2: Friday 25 September 2026

Day 2 Morning Sessions

8:30	Registration		
9:00 - 10:00	Plenary Session 2 (Broadway and Jones rooms) Speakers The Big 8 – water sector challenges for research, David Bergmann , Water Research Australia Advancing circular economy for all, Damien Giurco , University of Melbourne, Australia Chair: Sherub Phuntsho , University of Technology Sydney, Australia		
10:00 - 10:30	Panel discussion (panellists include David Bergmann, Damien Giurco, and Django Seccombe; Moderated by Sherub Phuntsho)		
10:30 - 11:00	Morning tea break (Foyer and balcony)		
	Broadway – Circular Nutrients	Jones – Circular Bioeconomy and Bioecology	Harris – Circular Energy
	Chair: Andrea Merenda , Victoria University, Australia	Chair: Maja Arsic , CSIRO, Australia	Chair: Yuting Zhuo , University of New South Wales, Australia
11:00 -11:20	Keynote Living Infrastructure 2.0: Bioactive Materials, Circular Resources and the Future of the Built Environment Chris Allison , City Forest, Australia	Keynote Harvesting valuable resources from industrial wastewater Caitlin Byrt , Australian National University, Australia	Keynote Synchronising Circular Construction Data: AI-Assisted, Cross-Platform Carbon Assurance Julie Jupp , University of Technology Sydney, Australia
11:20 - 11:40	Keynote Hydraulic response of LbL nanofiltration membranes Tao He , Shanghai Advanced Research Institute, Chinese Academy of Science, China	Keynote Placed-based approaches towards a circular bioeconomy Pablo Juliano , CSIRO, Australia	Keynote Integrated Process Development and Reactor Optimisation for High-Efficiency Recycling of End-of-Life Photovoltaic Modules Yuting Zhuo , University of New South Wales, Australia
11:40 - 12:00	Panel conversation chaired by Andrea Merenda Panellists: Chris Allison and Tao He	Panel conversation chaired by Maja Arsic Panellists: Caitlin Byrt and Pablo Juliano	Q&A session facilitated by Yuting Zhuo
12:00 - 13:15	Invited Speaker: Pilot scale recovery of nutrients from human urine: challenges and perspective Andrea Merenda , Victoria University, Australia	#80 Where to next for circular bioeconomy? Maja Arsic , CSIRO Agriculture and Food, Australia	#34 Circularising Hydrogen Export Systems: Economic Advantages of Reusing Dehydrogenated Carriers Aditiya Harjon , University of Technology Sydney, Australia
	#49 Harnessing Electroconductivity in Membranes for Microbial Fuel Cells and Resource Recovery Swatantra Pratap Singh , Indian Institute of Technology Bombay, India	#24 Adaptive Reuse: a key circular design strategy for urban regeneration Valentina Petrone , University of Sydney, Australia	#44 ZIF-67-GO Quaternized Polycarbazole Membranes for High-Performance Alkaline Electrolysis Yeshi Choden , University of Technology Sydney, Australia
	#54 Development of a Nutrient-Rich Liquid Fertilizer through Combined Membrane Bioreactor and Membrane Contactor Treatment Amirhossein Shafaghat , University of Technology Sydney, Australia	#70 Utilising pre-farm gate organics to build regional circular bioeconomy Melita Jazbec , University of Technology Sydney, Australia	#30 Techno-Economic Assessment of Mainstream Biogas Upgrading Technologies: Benchmarking for Next-Generation Biological Solutions Menglin (Elin) Xie , University of New South Wales, Australia
	#11 Bioaugmentation Strategies for Mitigating Nitrite Accumulation in Urine Nitrification Systems Lu Fu , The University of Queensland, Australia		#74 Forward osmosis for concentrating lithium-enriched brine: From system design to salt diffusion control Shucheng Mo , ShanghaiTech University, China
13:15 - 14:15	Lunch break + Poster Pitches chaired by Hanwei Yu in Foyer		



Day 2 Afternoon Sessions

	Broadway – Circular Water	Jones - Environmental Impact of Circular Economy / Issues in Upscaling CE Processes	Harris – Circular Other
	Chair: Dallas Wilkinson, EPBA, Australia	Chair: Sandra Kentish, University of Melbourne, Australia	Chair: Prashant Srivastava, CSIRO, Australia
14:15-14:35	Keynote AI, Data Centres and Water: Australia’s Next Infrastructure Test Kate Dryden, Sphere Infrastructure, Australia	Keynote A smart vision for a sustainable future: SMaRT technologies and MICROfactories™ creating sustainable materials and products from waste resources. Rethinking Circular Economy of Waste by Remanufacturing Rumana Hossain, University of New South Wales, Australia	Keynote Bhutan For Life: An Innovative Conservation Financing Mechanism for Climate Resilience and Sustainable Development Pema Wangda, Bhutan for Life, Bhutan
14:35 - 14:55	Keynote Water, Data Centres, Mining and the Circular Economy Dallas Wilkinson, EPBA, Australia	Keynote Australia's Cable Recycling Crisis and the Path to Circular PVC Recovery Josh Robinson, JR Hammer, Australia	Keynote Beneficial Reuse and Disposal Options for CSG Brine Prashant Srivastava, Environment, Waite Campus, CSIRO, Australia
14:55 - 15:15	Panel conversation chaired by Dallas Wilkinson Panellists: Kate Dryden, Gayathri Naidu and Glenda Stowell	Panel conversation chaired by Sandra Kentish Panellists: Rumana Hossain and Josh Robinson	Panel conversation chaired by Prashant Srivastava Panellists: Pema Wangda, Veera Koskue and Maja Arsic
15:15 - 16:30	AI#5 Physics-Informed Generative AI for Resilient Decentralized Water Quality Management Gyuri Kim & Yun Chul Woo, Myongji University, Korea	#36 The role of thermal treatment in a circular economy using PFAS as the example Nathan Weber, University of Technology Sydney, Australia	#33 Blending Biosolids with Garden Organics: A Pathway to Safer Biochar for Land Application Nusrat Rezwana Binte Razzak, Deakin University, Australia
	#21 Preparation of Green Biomass-based Lithium Ion-Imprinted Polymers (Green Li-IIPs) and Highly Selective Adsorption Application in Desalination Brine Yi-An Wei, National Cheng Kung University, Taiwan	#59 Soft plastics and the consumption crisis: Insights from a case study on sachets in the Philippines KC Kasturi, University of Technology Sydney, Australia	#46 Catalytic Upcycling of Mixed Plastic Waste toward Circular Resource Recovery, Arshad Ali, RMIT, Australia
	#32 Circular material flows in water sector Glenda Stowell, Sydney water, Australia	#68 Plastic, Wildlife, and Communities: Addressing Plastic Pollution in Indonesia’s Coastal Communities Nurul Ichsani, Hasanuddin University, Indonesia	#6 Optimizing Cleaning Strategies for Fouled Reverse Osmosis Membranes in Industrial Wastewater ZLD Processes Minseo Kim, Myongji University, Korea
	#8 Comparative Evaluation of Commercial Nanofiltration Membranes for Selective Ion Fractionation in SWRO Brine Hae Kang Cho, Myongji University, Korea	#66 Preventive Environmental Impact Based on Local Wisdom in Indigenous Communities in West Sulawesi, Indonesia Tuti Bahfiarti, Universitas Hasanuddin, Indonesia	#40 Environmental Degradation of 3D-Printed Thermoplastics: Establishing Baselines for a Circular Plastics Economy Azra Ghasemzadegan, University of Wollongong, Australia
	#53 Engineering Pristine Biochar Adsorbents: An Activation-Free Strategy for Tuning Pore Architecture for Targeted Pollutant Removal Ojima Wada, Hamad Bin Khalifa University, Qatar	#16 Thermoeconomic Performance and Renewability Assessment of a Corn Stover Biorefinery Producing PLA, Succinic Acid, Xylitol, Adhesive, and Electricity Reza Hessampour, Queensland University of Technology, Australia	
16:30-17:00	Afternoon tea break		
17:00-17:30	Closing Remarks and Best Presentation Awards		



List of posters

Code	Name	Title
#50	Kaicheng Zhang	Recovery from Human Urine for Fertilizer Production A Systematic Review and Conceptual Process Assessment
#62	Madeleine Miyamoto	Rethinking the Life Cycle of Plastics: Polyethylene Upcycling
#67	Ibrahim El Saliby	Anthroponics: Nutrients recovery from urine and their use as fertiliser on mini green walls
#72	Tosin Famakinwa	Mechanical performance and structural stability of waste PC and HDPE during repeated direct hot-press recycling
#75	Quan Yuan	Competitive co-assembly for high-performance LbL nanofiltration
#78	Takuma Watari	Does the circular economy address material poverty
#41	Juyeon Yu	PHREEQC-XGBoost Hybrid Modeling of Mineral Carbonation from Seawater Desalination Brine considering Inhibition effects of Antiscalants8i
#73	Jacob Fry	Energy efficiency and decarbonisation pathways for Australian public hospitals
#38	Alireza Boostan	Development of a Design of Experiments to Assess the Mechanical Durability of 3D-Printed Recycled Polymers for Structural Applications

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