



MEMBRANE SOCIETY  
OF AUSTRALASIA

Annual Meeting and  
Conference

# Program

msa-agm.org

The Membrane Society of Australasia (MSA) was founded in 2009 with the goal of bringing together key academics, industrial professionals, and emerging membranologists to further membrane science and technology within Australasia. The MSA Board of Directors encourage current and potential members of the Membrane Society of Australasia to join the AGM to hear more about the Society, the benefits of membership, and how you can get involved.

In 2020, the Board of Directors established the MSA Annual Meeting as an extension of the AGM to celebrate successes across the Australasian membrane field and help strengthen the connection between academic and industry professionals. On behalf of the Board of Directors, we look forward to welcoming you online.

Dr Stefan Smith  
Dr Zongli Xie  
Dr Nicholas Low

9:50AM	<b>Opening &amp; Welcome</b>
10:00AM	<b>Prof Wojciech Kujawski</b> – Nicolaus Copernicus University <i>"Pervaporation - from dehydration to desalination"</i>
10:25AM	<b>Dr Jing Guan</b> – Origin Water <i>"MBR and Membrane Technology Development"</i>
10:50AM	<i>Break</i>
11:00AM	<b>Mark Forbes</b> – Akvotek <i>"40 years in membranes – how the world has embraced the technology"</i>
11:25AM	<b>Dr Sam Martin</b> – NematiQ <i>"High performance graphene oxide nanofiltration membranes by scalable roll-to-roll process"</i>
11:50AM	<i>Break</i>
12:00PM	<b>Annual General Meeting for the Membrane Society of Australia (MSA)</b>
12:50PM	<i>Break</i>
1:00PM	<b>Prof Benny Freeman</b> – University of Texas at Austin <i>"Revisiting Water and Ion Transport in Nafion and Related Ionomers"</i>
1:25PM	<b>Dr Jonathan Schmidt</b> – Southeast Water <i>"The trials and tribulations of UF membranes in recycled water"</i>
1:50PM	<i>Break</i>
2:00PM	<b>Dr Myoungjun Park</b> – University of Technology Sydney, <i>"Inkjet Printed Ingle Walled Carbon Nanotube as an Interlayer for High Performance Thin Film Composite Nanofiltration Membrane"</i>
2:10PM	<b>Dr Xing Wu</b> – CSIRO, <i>"Scalable Ti3C2Tx MXene Interlayered Forward Osmosis Membranes for Enhanced Water Purification and Organic Solvent Recovery"</i>
2:20PM	<b>Dr Jue Hou</b> - CSIRO <i>Lithium Extraction by MOF-Based Membranes</i>
2:30PM	<b>Paul Turner</b> – Advanced Material Solutions <i>"The worlds only 100% pure titanium metal membrane"</i>
2:55PM	<b>Close of Day 1</b>

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# Program - Day 2

9:50AM	<b>Opening &amp; Welcome</b>
10:00AM	<b>Professor Vicki Chen</b> – University of Queensland <i>“MOF based membranes: New approaches and application”</i>
10:25AM	<b>Mr Muhammad Irshad Baig</b> - University of Twente, <i>“Sustainable Polyelectrolyte Complex membranes prepared by a pH-induced Aqueous Phase Separation technique”</i>
10:30AM	<b>Mr Wouter Nielen</b> - University of Twente, <i>“Aqueous phase separation of responsive copolymers for sustainable and mechanically stable membranes”</i>
10:35AM	<b>Ms Elif Nur Durmaz</b> - University of Twente, <i>“Polyelectrolyte Complex Membranes via Two Distinct Aqueous Phase Separation Approaches”</i>
10:40AM	<b>Mr Misgina Tilahun Tsehaye</b> - University of Grenoble Alpes (UGA), <i>“Anion-exchange ionomer coated porous membrane for Zinc slurry-air flow battery”</i>
10:45AM	<b>Prof Rachida Chemini</b> - University of Science and Technology Houari Boumediene, <i>“Simulation of the membrane filtration process for industrial wastewater”</i>
10:50AM	<b>Break</b>
11:00AM	<b>Dr Pengrui Jin</b> - KU Leuven <i>“Zero-calorie sweetener-based polyester loose nanofiltration membrane with fast water transport for efficient dye/salt separation”</i>
11:10AM	<b>Ms Selina Hube</b> - University of Iceland, <i>“Direct membrane filtration of municipal wastewater: linking periodical physical cleaning with fouling”</i>
11:15AM	<b>Miss Withita Cha-umpong</b> - University of New South Wales, <i>“Brine enrichment using GO composite pervaporation membrane for lithium recovery”</i>
11:20AM	<b>Mrs Munirah Mohammad</b> - UNSW, <i>“Metal-Phenolic Network Assisted MOF Membrane Fabrication for Monovalent Ion Extraction”</i>
11:25AM	<b>Mr Hadi Ahmadi</b> - Macquarie University, <i>“Investigation on In-plan Membrane’s Selectivity Through Intercalation of Natural Lithium-ion Trapper into Graphene Oxide Nanosheets”</i>
11:30AM	<b>Dr Jia Ding</b> - University of Sydney, <i>“Designing Co3O4/silica catalysts and ultrafiltration membrane-catalysis process intensification for wastewater treatment”</i>
11:35AM	<b>Ms Beenish Imtiaz</b> - The University of Melbourne, <i>“Direct Ink Writing of Dehydrofluorinated Poly(vinylidene difluoride) to Fabricate Porous Membranes”</i>
11:40AM	<b>Mr Moataz El Okazy</b> - University of Melbourne, <i>“The effect of polymer composition based on two perfluorinated monomers on penetrant diffusivity”</i>
11:45AM	<b>Mr Gholamreza Vahedi Sarrigani</b> - University of Sydney, <i>“A new generation of tubular PEI interfacial diffusion membrane for efficient gas separation”</i>
11:50AM	<b>Break</b>
12:00PM	<b>Poster Session</b>
12:50PM	<b>Break</b>
1:00PM	<b>Dr Qiang Fu</b> - University of Technology Sydney <i>“Overcoming Geomatic Restriction Effect of the Composite Membranes”</i>
1:10PM	<b>Ms Nawshad Akther</b> - University of Technology Sydney, <i>“Employing the synergistic effect between aquaporin nanostructures and graphene oxide for enhanced separation performance of thin-film nanocomposite forward osmosis membranes”</i>
1:15PM	<b>Miss Priyanka Kumari</b> - Deakin University, <i>“Photo-electrocatalytic membranes prepared via Atomic Layer Deposition for degradation of persistent organic pollutants”</i>
1:20PM	<b>Mr Mostafa Dehghani</b> - Monash University <i>Sun-flow photocatalytic set-up with CNF/ZnO composite for persistent organic pollutants degradation</i>
1:25PM	<b>Mr Zulqarnain Fida</b> - University of Wollongong, <i>Reduction of excess sludge production and removal of trace organic contaminants by a membrane bioreactor system equipped with external anoxic tanks</i>
1:30PM	<b>Mr Truong Minh Vu</b> - University of Technology Sydney, <i>“A novel membrane microalgal reactor to recover nutrient from anaerobically digested sludge centrate for algal biomass production”</i>
1:35PM	<b>Miss Chen Wang</b> - University of Technology Sydney, <i>“Inkjet Printing of Graphene Oxide and Dopamine on Nanofiltration Membranes for Improved Anti-fouling Properties and Chlorine Resistance”</i>
1:40PM	<b>Ms Shixin Zhang</b> - Chongqing University, <i>“Role of Au@AgNPs on PVA based mixed matrix membrane for enhancing antifouling property and fouling detection via Surface-enhanced Raman Spectroscopy”</i>
1:45PM	<b>Mr Yu Jie Lim</b> - Nanyang Technological University, <i>“Feasibility and performance of a thin-film composite seawater reverse osmosis membrane fabricated on a highly porous microstructured support”</i>
1:50PM	<b>Break</b>
2:00PM	<b>Prof Mikel Duke</b> - Victoria University <i>“Solar illuminated porous glass supported titanium dioxide photocatalytic MF membrane for remote low-maintenance/high-performance clean water recovery from impaired sources”</i>
2:10PM	<b>Mr Umakant Badeti</b> - University of Technology Sydney, <i>“Impact of source-separation of urine on the biological and membrane treatment processes of a decentralized wastewater treatment plant”</i>
2:15PM	<b>Miss Qiuyue Wang</b> - University of Melbourne, <i>“The behaviour of organic acids in anion-exchange membranes”</i>
2:20PM	<b>Dr Yilin Xu</b> - Nanyang Technological University, <i>“A thermo-sensitive draw solute based forward osmosis process in zero-liquid discharge: Feasibility study for treatment of cooling tower blowdown wastewater reverse osmosis brine”</i>
2:25PM	<b>Mr Han Zheng</b> - Nanyang Technological University, <i>“Incorporation of core-shell structured zwitterionic carbon dots in thin-film nanocomposite membranes for simultaneously improved perm-selectivity and antifouling properties”</i>
2:30PM	<b>Dr Noel Kaleekkal</b> - National Institute of Technology Calicut, <i>“Development of Novel Thin-film Nanocomposite Membranes for Water Recovery”</i>
2:35PM	<b>Dr. Ludo Dumeé</b> - Khalifa University (UAE) <i>“Blood apheresis – a review and prospects on current membrane separation technologies”</i>
3:00PM	<b>Closing and Awards Ceremony</b>