

Sunday, Feb 2		Day 0 - Registration			
12:00	19:00	Registration open			
17:00	19:00	Welcome Reception @ Aerial Function Centre			
Monday, Feb 3		Day 1			
08:00	08:30	Registration and Poster setup			
08:30	09:15	Opening Ceremony and Welcome to Country			
09:15	09:50	<i>Plenary Speaker: Prof Claus Helix-Nielsen</i> Biomimetic and Bioinspired Membranes – Challenges and Future Prospects - 285			
09:50	10:25	<i>Plenary Speaker: Prof Rong Wang</i> Development of Novel Microporous Hollow Fiber Membranes Used for Gas-Liquid Membrane Contacting Processes - 278			
10:25	11:00	Morning Tea			
Parallel Sessions		Novel membrane development, modifications and characterisation (1)	Water and Wastewater Treatment (1)	Gas separation (1)	Membrane Fouling (1)
Location		Harris	Jones	Broadway	Thomas
Session Chairs		<i>Huanting Wang - Ikuo Taniguchi</i>	<i>Judy Lee - Christopher Davey</i>	<i>Vicki Chen - Colin A. Scholes</i>	<i>Matthias Wessling - Luca Fortunato</i>
11:00	11:20	Keynote Speaker Scalable Smart Surfaces for Membrane and Purification Technologies - 177 <i>Jas Pal Badyal</i>	Keynote Speaker Sydney Desalination Plant's journey as Sydney's only non-dependent source of drinking water <i>Matt Blaikie</i>	Keynote Speaker Thin Film Nanocomposite Membranes for Gas Separation: Stability and Architecture - 291 <i>Vicki Chen</i>	Keynote Speaker Enhanced performance and anti-fouling properties in membrane distillation - 260 <i>Filicia Wicaksana</i>
11:20	11:40	Invited Speaker Pushing New Limits of Membrane Materials - 261 <i>Alexey Volkov</i>	Keynote Speaker Chemically reactive membrane crystallisation: A new method for process intensification - 276 <i>Ewan McAdam</i>	Invited Speaker Membrane contactors for efficient gas separation - 55 <i>Colin A. Scholes</i>	Keynote Speaker Advances in Biofouling of Spiral Wound Membrane Research - 290 <i>Johannes Simon Vrouwenvelder</i>
11:40	11:55	Selective Modification of Membrane Pore and External Surfaces - 117 <i>Ranil Wickramasinghe</i>	Impact of RO fouling and ageing on water recycling health risk and validation - 315 <i>Pierre Le-Clech</i>	Correlation between phase separation and gas transport properties in Polybutadiene based polyurethane membrane - 135 <i>Takuma Yamamoto</i>	Membrane Fouling Control: Practical Experience of Resolving Membrane Cleaning Issue - 165 <i>Steven Cao</i>
11:55	12:10	Application of Cross-linked Radiation-Grafted Cation Exchange Membranes for HI Concentration - 57 <i>Nobuyuki Tanaka</i>	End-caps design for gravity driven spiral-wound membrane systems. Decentralize areas case study - 34 <i>Raquel Garcia Pacheco</i>	MOF-in-MOF nanocomposite materials – an effective approach towards interfacial engineering for mixed matrix membranes? - 274 <i>Jingwei Hou</i>	Coatings made by plasma-assisted deposition processes of reverse osmosis membrane and feed spacer for biofouling mitigation - 142 <i>Andreas Heilmann</i>
12:10	12:25	HELIX – Flux enhancement technology in tubular waste water treatment membranes - 68 <i>Stefan Koel</i>	Microfiltration membrane performance, fouling and optimal operating strategies for urban water reuse - 236 <i>Andrzej Listowski</i>	Hollow Fibre Membrane Contactors under Oscillating Flow Conditions for Enhanced CO2 Separation from Flue Gas - 89 <i>Elaheh Hosseini</i>	Supersaturated CO2 backwash as novel effective method of membrane fouling mitigation - 85 <i>Alla Alpatova</i>
12:25	12:40	Simultaneous data-driven development of membranes and processes - 103 <i>Deniz Rall</i>	Pore-filled Alkaline-Stable Anion-Exchange Membranes - 252 <i>Jochen Meier-Haack</i>	Synthesis of Fluorinated Polyurethane Membrane for C2+ Hydrocarbon Separation - 114 <i>Ansori Muchtar</i>	Possibility of use of cis-2-Decenoic acid for regulating quorum sensing to reduce EPS on PVDF membrane surfaces - 96 <i>Wonjung Song</i>
12:40	12:55	The importance of porous supports in perfluorinated sulfonic acid ionomer-poly(tetrafluoroethylene) reinforced membranes for polymer electrolyte membrane fuel cells - 280 <i>Juhee Ahn</i>	Selective resource recovery from acid mine drainage by membrane distillation and adsorption hybrid system - 206 <i>SeongChul Ryu</i>	Translating Metal Organic Framework From Adsorbent Into Functional Selective Nanocomposite Membrane Layer For Ethane/Ethylene Separation - 225 <i>Muhammad Yazid Bin Zulkifli</i>	Combining persulfate-oxidation and membrane distillation process for emerging micropollutant degradation and membrane fouling control - na <i>Arbab Tufail</i>
12:55	13:55	Lunch			
Parallel Sessions		Novel membrane development, modifications and characterisation (2)	Advances in NF and RO Membranes	Pervaporation, Vapour Separation and Membrane Distillation (1)	Membrane Fouling (2)
Location		Harris	Jones	Broadway	Thomas
Session Chairs		<i>Stefan Smith - Jas Pal Badyal</i>	<i>Anne Brehant - Leonard Tijing</i>	<i>Alicia An - Gayathri Naidu</i>	<i>Filicia Wicaksana - Hans Vrouwenvelder</i>
13:55	14:15	Invited Speaker CO2 Capture by Alkanolamine-containing Polymeric Membranes: Mechanism of Preferential CO2 Permeation and Modul Preparation - 197 <i>Ikuo Taniguchi</i>	Keynote Speaker Study of the removal of emerging water contaminants by low-pressure reverse osmosis membranes using pilot tests and a predictive approach - 273 <i>Anne Brehant</i>	Keynote Speaker Industrial textile wastewater treatment by membrane distillation with patterned membrane and fouling mechanism investigation - 288 <i>Alicia An</i>	Keynote Speaker What are the microscopic events during membrane filtration and backwashing? - 284 <i>Matthias Wessling</i>
14:15	14:30	Microporous carbon membranes for liquid separation - 86 <i>Huanting Wang</i>	Pressure Retarded Osmosis: Modelling, Mirages and Prospects - 300 <i>Robert Field (Jun Jie Wu)</i>	Membrane condenser for brine concentration and organics recovery from aqueous mixtures - 262 <i>Alexey Volkov</i>	Monitoring the fouling control strategies in a gravity driven membrane bioreactor treating real wastewater - 36 <i>Luca Fortunato</i>
14:30	14:45	High performance membranes from recycled polystyrene blends for oily water purification at low driving pressures - 107 <i>Machawe M Motsa</i>	Enhanced desalination of dye solutions and imbued antibacterial properties for nanofiltration mixed-matrix membranes of polyethersulfone and polydopamine particles adorned with silver - 42 <i>Hazel Lynn C. Maganto</i>	Role of 3D Printed Spacers in Enhancing the Performance of Membrane Distillation - 257 <i>Gayathri Naidu</i>	Limiting the fouling of nanofibres on ultrafiltration membranes by surface plasma treatment - 32 <i>Marie Enfrin</i>
14:45	15:00	Porous Membranes from PSU-PDMS block copolymers for UF-applications - 247 <i>Jochen Meier-Haack</i>	Three-dimensional unsteady CFD simulations of oscillating flow mass transfer enhancement in spacer-filled membrane channels - 176 <i>Liang Yong Yeow</i>	High performance poly(vinyl alcohol)/MXene composite membrane for pervaporation desalination - 207 <i>Guang Yang</i>	Effective Removal of Perfluoroalkyl Substances by Direct Contact Membrane Distillation - 254 <i>Ludovic F. Dumée (Anbharasi Vanangamudi)</i>
15:00	16:05	Break and Poster Session (Wattle)			
Parallel Sessions		Novel membrane development, modifications and characterisation (3)	Water and Wastewater Treatment (2)	MBR (1)	Electrically Enhanced Membrane Operation
Location		Harris	Jones	Broadway	Thomas
Session Chairs		<i>Ikuo Taniguchi - Alexey Volkov</i>	<i>Ewan McAdam - Raquel Garcia Pacheco</i>	<i>Simon Judd - Jingwei Hou</i>	<i>Jinxing Ma - George Chen</i>
16:05	16:25	Keynote Speaker Development of a submerged tubular direct-contact membrane distillation system for saltwater treatment - 184 <i>Bui Xuan Thanh</i>	Keynote Speaker Membrane filtration of complex water and wastewaters - 215 <i>Judy Lee</i>	Keynote Speaker Immersed membrane bioreactor cost sensitivities - 164 <i>Simon Judd</i>	Invited Speaker Development of Electrochemical Membrane Filtration System for Removing Refractory Pollutants from Contaminated Waters - 310 <i>Jinxing Ma (Zhiwei Wang)</i>

16:25	16:40	Development of Flexible Ceramic Nano-Fibrous Membranes for Air/Water Purification - 70 <i>Jongman Lee</i>	Challenges, perspectives and opportunities for integration of membrane distillation with waste heat from combustion for decentralised sanitation: Lessons from development of full-scale systems - 138 <i>Christopher Davey</i>	Anaerobic fluidized bed membrane bioreactor using PVDF multi-channel, tubular media to control membrane fouling and organic removal efficiency - 93 <i>Jeonghwan Kim</i>	Lithium recovery by electro-membrane processes - 224 <i>Anna Siekierka</i>
16:40	16:55	Shell and lumen side flow and pressure communication during permeation and filtration in a multibore polymer membrane module - 106 <i>Denis Wypysiek</i>	Isolation and characterization of potent protease producing bacteria from waste water effluent of dairy - 25 <i>Awanish Kumar</i>	Quenching Microbial Signalling for Membrane Biofouling Control: The Sooner the Better - 153 <i>Xiaolei Zhang (Kwang-Ho Choo)</i>	Decision support system for electrodialysis reversal management in a DWTP of Barcelona - 65 <i>Lluís Godó-Pla</i>
16:55	17:10	Characterisation of Internal and External Membrane Pore Surfaces with (Solid-state) NMR Spectroscopy - 311 <i>Marianne Gaborieau</i>	Use of Clay Based Ceramic Membrane for Removal of Cr and Lead from Electroplating Effluent - 19 <i>Parmesh Kumar Chaudhari</i>	A New Generation of Sequential Enzyme Immobilization Materials and Methods for Membrane Bioreactor Applications - 81 <i>Sigrún Björk Sigurdardóttir</i>	Switchable Oxygen Depolarized Cathodes in flexible Chlor-Alkali Electrolysis - 104 <i>Kristina Baitalov</i>
17:10	17:25	Development of novel polymer membranes derived from unutilized renewable biomass - 124 <i>Shinji Kanehashi</i>	Exploiting Donnan Dialysis to Enhance Ammonia Recovery in an Electrochemical System - 98 <i>Mariana Rodrigues</i>	Membrane bioreactor coupled with anoxic sidestream reactor for enhanced sludge reduction and degradation of emerging trace organic contaminants - 79 <i>Zulqarnain Fida</i>	Silicate-induced Fouling in Capacitive Deionization (CDI) for Brackish Groundwater Desalination - 308 <i>Xiangtong Kong</i>
17:25	17:40	Anion-conducting Perfluorinated Ionomer Membranes for Polymer Electrolyte Alkaline Fuel Cells - 281 <i>Jin Pyo Hwang</i>	A Layer-by-layer Immobilization of nZVI onto Electrospun Nanofiber Membrane for Groundwater Remediation - 199 <i>Jiawei Ren</i>	Characterization of microbial communities associated with membrane fouling in a membrane bioreactor - 222 <i>Quynh Anh Nguyen</i>	Electrical Membrane Separation: Mechanism, Material and Reactor - 58 <i>Jingqiu Sun</i>

Tuesday, Feb 4		Day 2			
08:00	08:30	Registration			
08:30	09:05	Plenary Speaker: A/Prof Baoxia Mi The Promises and Challenges of 2D Nanomaterials - 216			
09:05	09:40	Plenary Speaker: Prof Maria Forsyth Novel Ionomer Membranes for Next Generation Solid State Batteries - 294			
09:40	10:15	Plenary Speaker: Prof Jeff McCutcheon Where Additive Manufacturing Meets Membrane Technology: Opportunities for Printing Membranes for Separations - 275			
10:15	10:45	Morning Tea			
Parallel Sessions		Novel membrane development, modifications and characterisation (4)	Water and Wastewater Treatment (3)	Gas separation (2)	Membrane Fouling (3)
Location		Harris	Jones	Broadway	Thomas
Session Chairs		Mainak Majumder - Amir Razmjou	Mark Mullett - Sherub Phuntsho	Sandra Kentish - Stefan Smith	Robert Field - Hans Coster
10:45	11:05	Keynote Speaker High performance polymers for a sustainable membrane technology - 49 <i>Suzana Nunes</i>	Keynote Speaker Assessing the passage of bacteria through reverse osmosis membrane process - 179 <i>Takahiro Fujioka</i>	Keynote Speaker The development of mathematical models for the transport of gases and vapours in polymeric membranes - 90 <i>Sandra Kentish</i>	Keynote Speaker Coagulation Characteristics of Colloids Indicating Irreversible Membrane Fouling in Coagulation-MF Membrane Filtration Process - 271 <i>Qing Ding</i>
11:05	11:25	Invited Speaker Size-selective Mixed Matrix Membranes containing molecular sieves for pre-combustion CO2 capture: fabrication, characterization and modeling - 187 <i>Maria Grazia de Angelis</i>	Invited Speaker Solar-powered batteryless desalination: case studies of stand-alone and hybrid OSMOSUN® plants - 286 <i>Andre Deratani</i>	Invited Speaker Effect of Blending and Thermal Rearrangement on Gas Transport Properties of Poly(benzimidazole) - 266 <i>Alexander Bridge (Benny Freeman)</i>	Keynote Speaker Monitoring of Biofouling in RO Membranes - 99 <i>Hans Coster</i>
11:25	11:40	Flower-like Copper Tin Sulfide-based Photothermal Material for Clean Water Production - 234 <i>Leonard Tijing</i>	Metal Organic Framework Membranes/Channels for Ion Transport and Separation - 248 <i>Huacheng Zhang</i>	Zirconia-based Composite Membrane for Oxygen Separation - 131 <i>Jong Hoon Joo</i>	Understanding of Membrane Fouling in Reverse Electrodialysis - 283 <i>Jin-Soo Park</i>
11:40	11:55	Preparation of electrospun nanofibers membranes with ionic liquid for air filtration - 126 <i>Ana Claudia Canalli Bortolassi</i>	The Operational Strategies of Anaerobic Self-forming Dynamic Membrane Bioreactor in Up-flow Anaerobic Sequence Batch (UASB) Reactor - 133 <i>Muhammad Ahmar Siddiqui</i>	Study on a membrane reactor equipped with the one-end-closed silica membrane for hydrogen iodide decomposition - 43 <i>Myagmarjav Odtsetseg</i>	Role of protein sources on irreversible membrane fouling in industrial water treatment: comparing protein interactions with industrially aged membranes - 220 <i>Zainab Mustafa</i>
11:55	12:10	Photo-responsive smart anti-bacterial membrane surface modification via controlled loading/release of natural quorum sensing inhibitor - 44 <i>Pritam Das</i>	Industrial water treatment using second-hand membranes. Full and pilot scale cases studies - 39 <i>Raquel Garcia Pacheco</i>	A Systematic Approach to Modelling Gas Sorption in Semicrystalline Cellulose Acetates - 109 <i>Eleonora Ricci</i>	Critical SADm evaluation in UF membranes: TIPS vs NIPS - 213 <i>Albert Galizia Jordi Suquet</i>
12:10	12:25	Photo-electrocatalytic membranes prepared via Atomic Layer Deposition for degradation of persistent organic pollutants - 211 <i>Priyanka Kumari</i>	Combined enzymatic membrane bioreactor (EMBR) and UV-photolysis for enhanced degradation of emerging trace organic contaminants - 227 <i>Arbab Tufail</i>	Experimental Study of CO2-Resistant Dual-Phase Mixed Ionic-Electronic Conducting Oxygen Permeable Membranes - 41 <i>Claudia Li</i>	Submerged module of outer selective hollow fibre membrane for effective fouling mitigation in osmotic membrane bioreactor for treating municipal wastewater - 317 <i>Van Huy Tran</i>
12:25	13:55	Lunch (optional lab tour)			
Parallel Sessions		Advances in MF and UF Membranes	Membrane Applications in Mining and Agriculture	Wine, Food and Dairy Application	Pervaporation, Vapour Separation and Membrane Distillation (2)
Location		Harris	Jones	Broadway	Thomas
Session Chairs		Qing Ding - Ludovic F Dumez	Takahiro Fujioka - Andre Deratani	Ranil Wickramasinghe - Genevieve Gesan-Guiziou	Mikel Duke - Myagmarjav Odtsetseg
13:55	14:15	Invited Speaker Modelling of Membrane Fouling: a Perspective - 301 <i>Robert Field</i>	Invited Speaker Observations from a Water Treatment Consultant in the Mining Sector - 307 <i>Mark Mullett</i>	Invited Speaker Combined Osmotic and Membrane Distillation for Concentration of Anthocyanin from Muscadine Pomace - 116 <i>Ranil Wickramasinghe</i>	Keynote Speaker Process Intensification and Integration Strategies in Designing Energy-Efficient Membrane Distillation Process - 228 <i>Xing Yang</i>
14:15	14:30	Tight ultrafiltration membranes developed for treating perfluorooctanesulfonic acid (PFOS) compounds - 209 <i>Jingshi Wang</i>	Opportunities for Membranes to Treat Water for the Agricultural Sector - 229 <i>Rahul Jadhao</i>	Pilot Scale Trials of Forward Osmosis and Electrodialysis in Dairy Systems - 145 <i>George Chen</i>	MOF incorporated PVDF hollow fibre membranes for flux enhancement in direct contact membrane distillation - 190 <i>Zongli Xie</i>
14:30	14:45	Incorporating Polydopamine Particles to Cellulose Acetate for Improved Antifouling of Mixed-matrix Membranes Applied to Oil-Water Separation - 66 <i>Charelle Rose M. Macni</i>	How can membrane technology support food production under limited water availability - 316 <i>Valeria Almeida Lima</i>	Structural organization and behaviour of casein micelles fouling layer during crossflow filtration of milk at low temperature : A Small-Angle X-Ray Scattering (SAXS), osmotic stress and rheology study - 112 <i>Genevieve Gesan-Guiziou</i>	Amphiphilic Copolymer Membranes for Gas and Vapour Permeation - 269 <i>Faheem Hassan Akhtar</i>
14:45	15:00	The role of MOF thin film as a membrane in enzymatic biosensors - 202 <i>Munirah Mohammad</i>		Membrane assisted reactive extraction of trans-aconitic acid from aqueous solutions using tri-n-octylamine in n-octanol - 22 <i>Dharm Pal</i>	Ion transport behaviour in the graphene oxide nanochannel for desalination by pervaporation - 171 <i>Withita Cha-umpong</i>
15:00	15:30	Afternoon Tea			
Parallel Sessions		Novel membrane development, modifications and characterisation (5)	Membrane for Healthcare Applications	Forward and Engineered Osmosis (1)	Pervaporation, Vapour Separation and Membrane Distillation (3)
Location		Harris	Jones	Broadway	Thomas
Session Chairs		Suzana Nunes - Maria Grazia de Angelis	Antoine Venault - Andrea Merenda	Hokyong Shon - Marshall S. Sheldon	Xing Yang - Zongli Xie
15:30	15:50	Invited Speaker Practical Membranes from Atomically-Thin Materials - 306 <i>Mainak Majumder</i>	Invited Speaker Anti-biofouling membrane designs for improving acute/chronic wound recovery - 304 <i>Antoine Venault</i>	Invited Speaker Forward Osmosis: Challenges and Opportunities <i>Hokyong Shon</i>	Invited Speaker Review of water production costs by membrane distillation: where are we today? - 267 <i>Mikel Duke</i>

15:50	16:05	The 4th Generation of Polymer Material for UF Permanent Hydrophilic Membrane Fabrication - 20 <i>Isabelle Duchemin</i>	Biocompatibility of current membrane-based apheresis methods: A review - 174 <i>Christine Bacal</i>	Exploring Dyeing Solutions as Draw Solutions against Alternative Feed Water Resources Using a Forward Osmosis Biomimetic Membrane - 180 <i>Marshall S. Sheldon</i>	Pressure-Retarded Membrane Distillation for Simultaneous Hypersaline Brine Desalination and Low-grade Heat Harvesting - 74 <i>Ziwen Yuan</i>
16:05	16:20	Li ion-selective nanostructured membranes: Design principles and Molecular Dynamic Study - 157 <i>Amir Razmjou</i>	Isolation of Sperm Cells with High Viability via Thermotaxis using Membranes - 193 <i>Roberto Katigbak</i>	Impact of FO operating pressure and draw spacers on fluid dynamics - 189 <i>Alexander J. Charlton</i>	Flue gas Condensate Cleaning via Air Gap Membrane Distillation - 9 <i>Imtisal-e-Noor</i>
18:00	21:00	Conference Dinner			

Wed, Feb 5		Day 3			
08:00	08:30	Registration			
08:30	09:05	Plenary Speaker: Prof Wanqin Jin Precisely Tuning the Interlayer Channels of GO Membranes			
09:05	09:40	Plenary Speaker: Dr Geoffrey Johnston-Hall Experiences in Low Pressure UF Membrane Design and Development - 258			
09:40	10:15	Plenary Speaker: Prof Michael Guiver Membranes designed for carbon dioxide and other gas separations - 230			
10:15	10:45	Morning Tea			
Parallel Sessions		Novel membrane development, modifications and characterisation (6)	Gas separation (3)	Membrane Applications	Pervaporation, Vapour Separation and Membrane Distillation (4)
Location		Harris	Jones	Broadway	Thomas
Session Chairs		Matthew R Hill - Yen Truong	Matteo Minelli - Tomohisa Yoshioka	Xiwang Zhang - Anna Siekierka	Norredine Ghaffour - Yun Chul Woo
10:45	11:05	Keynote Speaker Bio-inspired Zwitterionic Membrane - Design and Applications - 253 <i>Yung Chang</i>	Invited Speaker Gas sorption in ultra-high free volume glassy polymers at cryogenic temperatures - 34 <i>Matteo Minelli</i> Invited Speaker	Keynote Speaker Progresses in Membrane Assisted Condensers - 194 <i>Enrico Drioli</i> Invited Speaker	Keynote Speaker Optimization of a forward osmosis and membrane distillation (FO-MD) thermally and osmotically isolated integrated system - 186 <i>Norredine Ghaffour</i> Invited Speaker
11:05	11:25	Facile Integration of Nano Catalysts with Ceramic Membrane for Removal of Pharmaceuticals from Aquatic Environments - 238 <i>Quoc Cuong Do</i>	Gas permeation mechanisms in microporous ceramic membranes and in-situ characterization of subnano-scale porous structures - 303 <i>Tomohisa Yoshioka</i>	Constructing 2D laminar membranes for water processing - 185 <i>Xiwang Zhang</i>	Design and fabrication of novel electrospun nanofiber membranes for membrane distillation - 221 <i>Yun Chul Woo</i>
11:25	11:40	Forming Freestanding Selective Layers by Wetting Control During Polyelectrolyte Complexation - 27 <i>Anna Kalde</i>	Dynamics of unsteady-state membrane gas separation: modelling and experimental verification - 162 <i>Ilya Vorotyntsev</i>	PV-RO desalination with panel cooling/feed preheating: optimising operation at higher temperatures and its effects on biofouling - 295 <i>Gustavo Adolfo Fimbres Wehis</i>	Maximizing heat recovery efficiency in membrane distillation by module and system configuration - 110 <i>Bastiaan Blankert</i>
11:40	11:55	Flexible electrospun carbon nanofiber membranes for air filtration application - 231 <i>Andrea Merenda (Riyadh Al-Attabi)</i>	First Experimental Measurement of Ternary Mixed-Gas Sorption in a Polymeric Membrane for Gas Separation: CO ₂ /CH ₄ /C ₂ H ₆ in PIM-1 - 113 <i>Eleonora Ricci</i>	New industrial separation technology for water and gases at Pentair - 212 <i>Jens Potreck</i>	Patterned Superhydrophobic Polyvinylidene Fluoride (PVDF) Membranes for Membrane Distillation: Enhanced Flux with improved Fouling and Wetting Resistance - 182 <i>Alicia An (Jehad A. Kharraz)</i>
11:55	12:10		Ultra-selective carbon molecular sieve membranes for natural gas separations based on a carbon-rich intrinsically microporous polyimide precursor - 26 <i>Khalid Hazazi</i>	Control of biofilm formation using α -amylase/lysozyme enzyme immobilized on Polyethersulfone membrane surface - 158 <i>Amir Razmjou</i>	Pervaporation Desalination - 54 <i>Elisabeth Thomas</i>
12:10	13:25	Lunch			
Parallel Sessions		Novel membrane development, modifications and characterisation (7)	Water and Wastewater Treatment (4)	MBR (2)	Forward and Engineered Osmosis (2)
Location		Harris	Jones	Broadway	Thomas
Session Chairs		Yung Chang - Noel Peter Tan	Enrico Drioli - Jia Ding	Kaushalya (Kaushi) Wijekoon - Luong Ngoc Nguyen	Felicity Roddick - Sungil Lim
13:25	13:45	Invited Speaker Porous Materials and Their Role in the Global Challenge of Energy Storage - 169 <i>Matthew R Hill</i>	High retention membrane bioreactors: challenges and opportunities - 318 <i>Long D. Nghiem</i>	Invited Speaker Optimisation of Membrane Bioreactor Air scouring: Effect of Air Scouring on MBR Long Term Hydraulic Performance - 195 <i>Kaushalya (Kaushi) Wijekoon</i>	Invited Speaker Adventures in the Treatment of Reverse Osmosis Concentrate from Municipal Wastewater Reclamation - 292 <i>Felicity Roddick</i>
13:45	14:00	Laminated electrospun Janus membrane for oil/water emulsion separation - 218 <i>Yen Truong</i>	Optimisation of The Chemical Cleaning Process and System Design for Low Pressure Membrane Systems - 200 <i>Richard Bleach</i>	Phosphorus removal, membrane fouling, cleaning strategies and microbial community in iron-dosed submerged membrane bioreactor treatment of wastewaters - 48 <i>Muhammad Bilal Asif (Zhenqhua Zhang)</i>	Covalent organic framework embedded outer-selective hollow fiber thin-film nanocomposite membranes for osmotically driven desalination processes - 250 <i>Sungil Lim</i>
14:00	14:15	Solution blow spinning (SBS) nanofiber membrane fabrication and modification - 47 <i>Noel Peter Bengzon Tan</i>	Control of Microstructure and Heterogeneous Catalyst Dispersion of Cobalt Tetroxide Silica by Rapid Thermal Processing for Dye Wastewater Degradation - 240 <i>Jia Ding</i>	Sanitation and dewatering of human urine by membrane bioreactor and membrane distillation hybrid process - 270 <i>Sherub Phuntsho</i>	Development of Pressure Assisted -Volume Retarded Osmosis (PA-VRO) to remove Perfluoroalkyl Substances (PFASs) for Wastewater Reclamation and Reuse - 143 <i>Paula Jungwon Choi</i>
14:15	14:30	A lab-scale ultrafiltration module with embedded spacers - 147 <i>Kristina Baitalov</i>	Delamination-free and electrochemically effective double-layered perfluorinated ionomer membranes for saline water electrolysis and carbon dioxide mineralization - 279 <i>Chang Hyun Lee</i>	A hybrid anaerobic and microalgae membrane bioreactor for high-strength wastewater treatment and algal biomass production - 239 <i>Luong Ngoc Nguyen</i>	Simultaneous cooling and provision of make-up water by forward osmosis for post-combustion CO ₂ capture - 223 <i>Lei Zheng</i>
14:30	14:45	Graphene oxide membranes intercalated with Zirconium-based metal-organic frameworks - 166 <i>Xiao Sui</i>	Hybrid membrane distillation-reverse electrodialysis configuration for thermal-to-electrical energy generation and simultaneous water recovery from human urine for decentralised sanitation - 136 <i>Christopher Davey</i>	Improved Recovery of Dissolved Methane from Anaerobic Membrane Bioreactor Effluent Using Degassing Membrane Contactors - 293 <i>Perlie Velasco</i>	Outer-selective hollow fiber forward osmosis membranes doped with aquaporin polymersomes for osmotic membrane bioreactors - 92 <i>Victoria Sanahuja-Embuena</i>
14:45	15:00	In Situ Growth of Two-dimensional ZIF-L Nanoflakes on Ceramic Membrane for Efficient Removal of Radioactive Iodine - 170 <i>Huan Xiao</i>	Stable polyelectrolyte multilayer based nanofiltration membranes for produced water treatment - 17 <i>Ettore Virga</i>		Evaluation of Forward Osmosis Spacer Performance for Produced Water Treatment - 265 <i>Jawad M. AlQattan</i>
15:00	15:30	Afternoon Tea			
15:30	16:00	Closing Ceremony			