



13th International Congress on Membranes and Membrane Processes

Venue: Makuhari Messe, Chiba, Japan / 9-14 July 2023

Presentation Number	Date	Room	Start	End	Title
O1.BR-01(KN)	10th July 2023	Room 1	11:10	11:35	Integrating biorecognition functions in nanostructured membranes by means of ordered bio- nano-conjugates for smart biosensing
O1.BR-02	10th July 2023	Room 1	11:35	12:00	Membrane-based Biosensor Towards Highly Sensitive and Rapid Medical Diagnosis
O1.BR-03(KN)	10th July 2023	Room 1	12:00	12:25	Nanobubble-governed membrane channels for ultrafast osmosis desalination
O1.BR-04	10th July 2023	Room 1	12:25	12:50	Development of autonomous dynamic membranes using self-oscillating copolymers
O1.BR-05(KN)	10th July 2023	Room 1	14:00	14:25	Development of Bio-inspired Zwitterionic Membranes
O1.BR-06	10th July 2023	Room 1	14:25	14:50	Artificial Water Channels- toward Biomimetic Membranes for Desalination
O1.BR-07	10th July 2023	Room 1	14:50	15:15	Temperature-triggered autonomous reswelling behavior based on polymer interchain cross-linking via host-guest interaction of cyclodextrin
O1.BR-08	10th July 2023	Room 1	15:15	15:40	Model biological membrane combining patterned lipid bilayer and nanometer-sized confinement
O1.BR-09(KN)	10th July 2023	Room 1	16:10	16:35	Magneto-responsive polymer-based membranes for remotely controlled triggered release of insulin
O1.BR-10	10th July 2023	Room 1	16:35	17:00	Visible-light sensitive membranes' development for sustainable cleaning of (bio)fouling
O1.BR-11	10th July 2023	Room 1	17:00	17:25	Solar-driven membrane crystallization for Lithium extraction
O1.BR-12	10th July 2023	Room 1	17:25	17:50	
O1.AM-01(KN)	10th July 2023	Room 2	11:10	11:35	High-Performance Electrosorption, Desorption and Oxidation of Perfluoroalkyl Carboxylic Acids (PFCAs, C4&C8) using MXene-based Membrane Filtration
O1.AM-02	10th July 2023	Room 2	11:35	12:00	Removal and recovery of PFOA by adsorptive multilayer polyelectrolyte nanofiltration membrane: insights into removal mechanism
O1.AM-03	10th July 2023	Room 2	12:00	12:25	Hydrophilic microporous polymer membranes for fast ionic and molecular separations
O1.AM-04	10th July 2023	Room 2	12:25	12:50	Layer-by-layer hierarchically structured nanofibrous scaffold membranes incorporating nanoadsorbents for high-performance versatile adsorptive recovery
O1.FL-05(KN)	10th July 2023	Room 2	14:00	14:25	Low-fouling membranes modified with poly(2-methoxyethyl acrylate) by immersion in advanced oxidation water followed by AGET-ATRP
O1.FL-06	10th July 2023	Room 2	14:25	14:50	Amphiphilic PVDF-b-PEG-b-PVDF triblock copolymer as membrane additive for long lasting hydrophilic PVDF membranes
O1.FL-07	10th July 2023	Room 2	14:50	15:15	A new method to immobilize zwitterionic copolymers onto PVDF hollow fiber membrane surface for antifouling process
O1.FL-08	10th July 2023	Room 2	15:15	15:40	Better cleaning in place performance through spacer coatings of polydopamine and silver nanoparticles for biofouling control
O1.FL-09	10th July 2023	Room 2	16:10	16:35	Membrane fouling monitoring by advanced thermal conductivity sensing of the fouling layer
O1.FL-10	10th July 2023	Room 2	16:35	17:00	EIS-module: A Novel In-situ Fouling Monitor for Spiral Wound Reverse Osmosis Fouling Detection
O1.FL-11	10th July 2023	Room 2	17:00	17:25	Unraveling pH effects on UF membrane fouling by extracellular polymeric substances: Adsorption and conformation analyzed with localized surface plasmon resonance
O1.FL-12	10th July 2023	Room 2	17:25	17:50	
O1.GS-01(KN)	10th July 2023	Room 3	11:10	11:35	Polymer membranes with engineered microporosity for energy-efficient gas separations
O1.GS-02	10th July 2023	Room 3	11:35	12:00	Polymers of Intrinsic Microporosity with triptycene branches for membrane gas separations



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O1.GS-03	10th July 2023	Room 3	12:00	12:25	separation
O1.GS-04	10th July 2023	Room 3	12:25	12:50	Highly H ₂ Selective Metal-Organic Framework Membrane with Restrained Transport of CO ₂
O1.GS-05(KN)	10th July 2023	Room 3	14:00	14:25	From material to membrane: challenges and opportunities for PIMs
O1.GS-06	10th July 2023	Room 3	14:25	14:50	The effects of physical aging and plasticization on novel poly(benzimidazole) gas separation membranes for pre-combustion carbon capture
O1.GS-07	10th July 2023	Room 3	14:50	15:15	Biomimetic facilitated, gas transport polyetherimide membranes to selectively enhance gas separation performance
O1.GS-08	10th July 2023	Room 3	15:15	15:40	Microwave-assisted chemical desorption process using hollow fiber membrane contactor
O1.GS-09	10th July 2023	Room 3	16:10	16:35	Network polymer membranes for H ₂ /CO ₂ separation
O1.GS-10	10th July 2023	Room 3	16:35	17:00	Truly combining the advantages of zeolites and polymers to outperform zeolite-only membranes
O1.GS-11	10th July 2023	Room 3	17:00	17:25	Heterogeneous Nucleation on the Support Surface for Synthesis of ZIF-8 Membranes
O1.GS-12	10th July 2023	Room 3	17:25	17:50	poly(diphenylacetylene)s
O1.2D-01(KN)	10th July 2023	Room 4	11:10	11:35	Interface instability-regulated interfacial polymerization for tailoring ultrathin polyamide membranes
O1.2D-02	10th July 2023	Room 4	11:35	12:00	Development of laminar HNb ₃ O ₈ /g-C ₃ N ₄ nanosheet photocatalytic membrane reactor with two-dimensional heterostructured nanochannels
O1.2D-03	10th July 2023	Room 4	12:00	12:25	Non-covalently decorated ion-selective 2D MXene membranes enabled by nanoconfinement
O1.2D-04	10th July 2023	Room 4	12:25	12:50	separation
O1.2D-05	10th July 2023	Room 4	14:00	14:25	Ultrathin and ordered 2D conjugated-polymer-framework membranes
O1.2D-06	10th July 2023	Room 4	14:25	14:50	Engineering highly microporous sub-20 nm polymer films by interfacial polymerization of rigid units for ultrafast organic solvent nanofiltration
O1.2D-07	10th July 2023	Room 4	14:50	15:15	Tuning the interlayer channel size and orientation of 2D membranes for high performance gas separations
O1.2D-08	10th July 2023	Room 4	15:15	15:40	
O1.2D-09	10th July 2023	Room 4	16:10	16:35	Highly permeable COFs composite membranes fabricated with oligomer-triggered interfacial polymerization
O1.2D-10	10th July 2023	Room 4	16:35	17:00	Ultrathin gas sieving membranes using COF nanosheets as building units
O1.2D-11	10th July 2023	Room 4	17:00	17:25	Smart covalent organic framework (COF) membranes with self-regulating pore apertures
O1.2D-12	10th July 2023	Room 4	17:25	17:50	Fabrication of dual-phase all-polymeric membrane and its transport properties
PL.01	10th July 2023	Convention Hall	09:50	10:50	Rong Wang Nanyang Technological University, Singapore
O1.MF-01(KN)	10th July 2023	Room 5	11:10	11:35	Highly rigid triptycene branched poly(aryl-co-aryl piperidinium) for high performance anion exchange membrane fuel cells
O1.MF-02	10th July 2023	Room 5	11:35	12:00	Asymmetrically Architected Polymer Membranes for Lithium Metal Battery Applications
O1.MF-03	10th July 2023	Room 5	12:00	12:25	Multifunctional, flexible comb copolymer ionogel electrolyte membranes for solid-state supercapacitors
O1.MF-04	10th July 2023	Room 5	12:25	12:50	Effect of poly(vinylphosphoric acid) binder on improved performance of micro-SiO ₂ /graphite anode based lithium-ion secondary battery
O1.MF-05(KN)	10th July 2023	Room 5	14:00	14:25	Influence of graphene oxide nanofillers on hydroxide conductivity and methanol permeability of polyvinyl alcohol composite for alkaline alcohol fuel cells
O1.MF-06	10th July 2023	Room 5	14:25	14:50	Ion-Sieving Membranes Based on Polymers of Intrinsic Microporosity for Aqueous Organic Redox Flow Batteries
O1.MF-07(KN)	10th July 2023	Room 5	14:50	15:15	Non-Polyolefin Separator Membranes for Post Li-Ion Batteries



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	10th July 2023	Room 5	15:15	15:40	
O1.MF-09	10th July 2023	Room 5	16:10	16:35	Porous conductive ion-selectivity membrane towards energy storage and conversion
O1.MF-10	10th July 2023	Room 5	16:35	17:00	Development of All-Solid-State Lithium Ion Batteries based on Polymer Nanofiber Composite Electrolyte Membranes
O1.MF-11	10th July 2023	Room 5	17:00	17:25	Zeolite Membrane Separators with Tailored Pore Structure for Fire-Safe Lithium-Ion Batteries
O1.MF-12	10th July 2023	Room 5	17:25	17:50	Membrane Technology for Direct Lithium Extraction
O1.VP-01(KN)	10th July 2023	Room 6	11:10	11:35	Diffusion of volatile and non-volatile organics in seawater and wastewater through hydrophobic porous membranes in membrane distillation
O1.VP-02	10th July 2023	Room 6	11:35	12:00	Composite (PTFE-CNT-Fe) electrically and thermally conducting membranes for membrane distillation
O1.VP-03	10th July 2023	Room 6	12:00	12:25	Solute and virus rejection mechanisms in membrane distillation across different system scales
O1.VP-04	10th July 2023	Room 6	12:25	12:50	
O1.VP-05	10th July 2023	Room 6	14:00	14:25	Hollow fiber based membrane dehumidification for air-conditioning application – Material to prototype development
O1.VP-06	10th July 2023	Room 6	14:25	14:50	Synergistic effects of hydrophilic modification and defect engineering of UiO-66 for enhanced H ₂ O/N ₂ separation performance.
O1.VP-07	10th July 2023	Room 6	14:50	15:15	Photothermal membrane distillation for water desalination: hype or hope?
O1.VP-08	10th July 2023	Room 6	15:15	15:40	A non-thermal process to extract aroma compounds from coffee using membranes
O1.VP-09(KN)	10th July 2023	Room 6	16:10	16:35	Membranes with Enhanced Water Permeation Fluxes in Pervaporation
O1.VP-10	10th July 2023	Room 6	16:35	17:00	Highly permeable PDMS/ZIF-8 composite membrane constructed on inner-surface of PVDF hollow fiber substrate for ethanol permselective pervaporation
O1.VP-11	10th July 2023	Room 6	17:00	17:25	Tuning of solvent evaporation to prepare PEBA membrane with high separation performance for the pervaporation of phenol aqueous solution
O1.VP-12	10th July 2023	Room 6	17:25	17:50	Pervaporation and perstraction for removal of high boiling organic contaminants from water: A unified approach to mass transfer
O1.IM-01(KN)	10th July 2023	Room 7	11:10	11:35	Design and fabrication of MOF-based membranes for molecular separation
O1.IM-02(KN)	10th July 2023	Room 7	11:35	12:00	Understanding molecular transport in MOF membranes
O1.IM-03	10th July 2023	Room 7	12:00	12:25	Defect-engineered metal-organic framework membrane for desalination
O1.IM-04	10th July 2023	Room 7	12:25	12:50	Advanced MOF-based membrane towards sub-nanometer scale molecule and ion separation
O1.IM-05(KN)	10th July 2023	Room 7	14:00	14:25	Polycrystalline Metal-Organic Framework Membranes for Liquid Separations
O1.IM-06	10th July 2023	Room 7	14:25	14:50	He and H ₂ -permselective Si-based organic-inorganic hybrid membranes
O1.IM-07	10th July 2023	Room 7	14:50	15:15	Efficient oilfield produced water treatment with SiC-coated alumina ultrafiltration membranes
O1.IM-08	10th July 2023	Room 7	15:15	15:40	Preparation of ionic liquid-immobilized siloxane membranes by vapor phase transport technique
O1.IM-09(KN)	10th July 2023	Room 7	16:10	16:35	Highly Interconnected Pores in Hybrid Nanofilms for Ultrafast Solvent Transport with Precise Molecular Separation
O1.IM-10	10th July 2023	Room 7	16:35	17:00	Hydrothermally robust carbon-ceramic composite membranes fabricated from silica-zirconia-polybenzoxazine for hydrogen purification
O1.IM-11	10th July 2023	Room 7	17:00	17:25	Fluorine-induced amine functionalized silica membranes for CO ₂ separation
O1.IM-12	10th July 2023	Room 7	17:25	17:50	Facet-specific gas transport of ZIF-8 in 6FDA-DAM



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O1.MM-01(KN)	10th July 2023	Room 8	11:10	11:35	Contribution of molecular simulation to a better understanding of organic solvent nanofiltration
O1.MM-02	10th July 2023	Room 8	11:35	12:00	MD and DPD simulations of polymeric membrane formation via phase inversion processes
O1.MM-03	10th July 2023	Room 8	12:00	12:25	Understanding salt transport in reverse osmosis module: a two-dimensional modeling approach
O1.MM-04	10th July 2023	Room 8	12:25	12:50	An Evolutionary Algorithm for the Design of Functionalized Materials for Separation Membranes
O1.MM-05(KN)	10th July 2023	Room 8	14:00	14:25	Effect of different manufacturing methods on polyamide reverse-osmosis membranes for desalination: Insights from molecular dynamics simulations
O1.MM-06	10th July 2023	Room 8	14:25	14:50	Molecular Simulation of Polymer Membranes using a Machine Learning-aided Multiscale Approach
O1.MM-07	10th July 2023	Room 8	14:50	15:15	Multiscale modeling to guide energy-efficient separation of mixed xylenes using membranes
O1.MM-08	10th July 2023	Room 8	15:15	15:40	Miscibilities of poly(vinylidene fluoride) and antifouling polymers: Molecular dynamics study
O1.MM-09(KN)	10th July 2023	Room 8	16:10	16:35	Inverse Design of High-Performance Membranes using Deep Learning Generative Model
O1.MM-10	10th July 2023	Room 8	16:35	17:00	substances
O1.MM-11	10th July 2023	Room 8	17:00	17:25	Multi-scaled approach to intensify the modeling of membrane processes
O1.MM-12	10th July 2023	Room 8	17:25	17:50	Key interactions between the membrane and antisolvent crystallization system: experimental and MD simulations
O1.OR-01(KN)	10th July 2023	Room 9	11:10	11:35	Mixed-matrix membranes for precise molecular sieving in organic solvents
O1.OR-02	10th July 2023	Room 9	11:35	12:00	Nanofiltration
O1.OR-03	10th July 2023	Room 9	12:00	12:25	Robust polyamide-PTFE hollow fibre membranes for harsh organic solvent nanofiltration
O1.OR-04	10th July 2023	Room 9	12:25	12:50	Propyl-functionalized silica membrane for organic solvent nanofiltration
O1.OR-05(KN)	10th July 2023	Room 9	14:00	14:25	When the membrane is not enough - a simple membrane cascade process using organic solvent nanofiltration (osn) for efficient separation of organic mixtures
O1.OR-06	10th July 2023	Room 9	14:25	14:50	Transfer mechanisms of small organic solutes in toluene during Organic Solvent Nanofiltration by PDMS dense membrane
O1.OR-07	10th July 2023	Room 9	14:50	15:15	Bio-based materials for sustainable nanofiltration membranes
O1.OR-08	10th July 2023	Room 9	15:15	15:40	Anti-fouling membranes for organic solvent nanofiltration (OSN): graft modified polybenzimidazole
O1.OR-09	10th July 2023	Room 9	16:10	16:35	Aligned macrocycle pores in ultrathin films for accurate molecular sieving
O1.OR-10	10th July 2023	Room 9	16:35	17:00	Tuning polyimide thin film composite membranes for organic solvent reverse osmosis separations via Boc protected amine solid-state crosslinking
O1.OR-11	10th July 2023	Room 9	17:00	17:25	Development of fluorine-containing polymer coating membrane for organic solvent reverse osmosis
O1.OR-12	10th July 2023	Room 9	17:25	17:50	TMC modified Covalent organic framework on PVDF Membrane by Interfacial Polymerization for solvent/solvent separation
O1.MU-01(KN)	10th July 2023	Room 10	11:10	11:35	Membrane-based resource recovery for nutrients in a circular economy
O1.MU-02	10th July 2023	Room 10	11:35	12:00	Investigation of the influencing factors of low fouling hydrogels and their transferability to micro- and ultrafilter polyethersulfone membranes
O1.MU-03	10th July 2023	Room 10	12:00	12:25	Effect of zwitterionic carbon quantum dots incorporated cellulose acetate membrane for oil-water separation
O1.MU-04	10th July 2023	Room 10	12:25	12:50	Microporous zwitterionic polymer brushes grafted polyethersulfone membranes with microfiltration permeance and ultrafiltration bacteriophage removal
O1.MU-05	10th July 2023	Room 10	14:00	14:25	Low-Fouling Plate-and-Frame Ultrafiltration Membrane for Juice Clarification
O1.MU-06	10th July 2023	Room 10	14:25	14:50	Development of sustainable microfiltration membranes for biopharmaceutical applications



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O1.MU-07	10th July 2023	Room 10	14:50	15:15	Phycobiliprotein purification by multi-connected UF membrane modules
O1.MU-08	10th July 2023	Room 10	15:15	15:40	Membrane separation of grass extracts for the production of food and feed protein
O1.MU-09(KN)	10th July 2023	Room 10	16:10	16:35	Continuous integrated manufacturing of recombinant antibodies/biopharmaceutical using precipitation, membranes and membrane adsorbers: a strategy towards autonomous bioprocessing
O1.MU-10	10th July 2023	Room 10	16:35	17:00	On a methodological approach to deal with strengths and weaknesses of surfactants to formulate efficient detergents for PES/PVP membranes' cleaning
O1.MU-11	10th July 2023	Room 10	17:00	17:25	Modification of a PES microfiltration membrane to enhance sterile filtration by inhibiting protein adsorption
O1.MU-12	10th July 2023	Room 10	17:25	17:50	In-situ cleaning of iron flocs-H ₂ O ₂ to eliminate virus and mitigate membrane fouling caused by NOM and ions in ultrafiltration process
O1.RO-01(KN)	10th July 2023	Room 11	11:10	11:35	Using natural virus markers to safeguard the integrity of membrane plants
O1.RO-02	10th July 2023	Room 11	11:35	12:00	Concentration of ammoniacal nitrogen by a hybrid osmotically-assisted reverse osmosis and reverse osmosis process
O1.RO-03	10th July 2023	Room 11	12:00	12:25	Ion transport and specificity in polyamide membranes studied by conductivity and its activation energy
O1.RO-04	10th July 2023	Room 11	12:25	12:50	Quantitative analysis for oxidative deterioration of polyamide RO membranes
O1.RO-05	10th July 2023	Room 11	14:00	14:25	Osmotically Assisted Solvent Reverse Osmosis Membrane for Dewatering of Aqueous Ethanol Solution
O1.RO-06	10th July 2023	Room 11	14:25	14:50	Distinct impact of substrate hydrophilicity on performance and structure of TFC NF and RO polyamide membranes
O1.RO-07	10th July 2023	Room 11	14:50	15:15	Tailoring polyamide morphology by nanofoaming chemistry for enhanced RO membrane performance
O1.RO-08	10th July 2023	Room 11	15:15	15:40	
O1.RO-09	10th July 2023	Room 11	16:10	16:35	Mechanism of water transport in reverse osmosis membranes
O1.RO-10	10th July 2023	Room 11	16:35	17:00	Reevaluate practical performance and inefficiencies in close-circuit reverse osmosis (CCRO) design using time-dependent RO modelling
O1.RO-11	10th July 2023	Room 11	17:00	17:25	Pressure-induced diffusion of solvents in dense homogeneous membranes
O1.RO-12	10th July 2023	Room 11	17:25	17:50	Development of advanced restoration method with chemical agent for the degraded RO membranes by molecular dynamics simulation and experiment
P1-2D-01	10th July 2023	Poster Room	18:30	20:30	Scalable production of monolayer nanosheets for laminar membranes
P1-2D-02	10th July 2023	Poster Room	18:30	20:30	Effect of graphene oxide structure on organic solvent nanofiltration performance for laminar graphene oxide membrane
P1-2D-03	10th July 2023	Poster Room	18:30	20:30	Oriented 2D covalent organic framework membranes for nanofluidic ion transport
P1-2D-04	10th July 2023	Poster Room	18:30	20:30	Development of laminar silicate nanosheet membranes for separation of anionic organic dyes
P1-2D-05	10th July 2023	Poster Room	18:30	20:30	Asymmetric thin-film mixed-matrix membranes with ZIF-8 in PVI-POEM comb copolymer achieving high CO ₂ separation
P1-2D-06	10th July 2023	Poster Room	18:30	20:30	Growth of ZIF-67 on 2D graphene oxide for highly CO ₂ -permeable ultrathin mixed matrix membrane
P1-2D-07	10th July 2023	Poster Room	18:30	20:30	Ultrathin carbon-nanoporous metal oxide composite molecular sieve membrane for hydrogen separation
P1-2D-08	10th July 2023	Poster Room	18:30	20:30	Amine functionalized covalent organic framework ultrathin film membrane for organic solvent nanofiltration
P1-2D-09	10th July 2023	Poster Room	18:30	20:30	Interlayer space-induced horizontal arrangement of Zn-TCPP nanosheets for high-performance two-dimensional membrane
P1-2D-10	10th July 2023	Poster Room	18:30	20:30	Boron nitride hybrid membranes for water purification and hydrogen separation



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P1-2D-11	10th July 2023	Poster Room	18:30	20:30	Confined and mediated intercalation of nanoparticles in graphene oxide membrane to fine-tune desalination performance
P1-2D-12	10th July 2023	Poster Room	18:30	20:30	Bottom-Up Assembly of Highly Oriented MOF Membranes with MOF Nanosheet Gutter Layers for H ₂ /O ₂ separation
P1-2D-13	10th July 2023	Poster Room	18:30	20:30	A Nanostructured Lamellar Membranes for Mono-/multivalent Ion-Selective Separation
P1-2D-14	10th July 2023	Poster Room	18:30	20:30	Interlayer nanostructured reduced graphene oxide lamellar membrane for desalination
P1-2D-15	10th July 2023	Poster Room	18:30	20:30	Porous graphene oxide/ZIF-8 hybrid membranes with improved rejection performance by regulating the interlayer d-spacing
P1-2D-16	10th July 2023	Poster Room	18:30	20:30	Fabrication of laminar graphene oxide membrane on polyketone hollow fiber support for organic solvent nanofiltration
P1-2D-17	10th July 2023	Poster Room	18:30	20:30	Synthesizing CTF Membranes for Ultrafast Organic Solvent Transport and Photocatalytic Cleaning
P1-2D-18	10th July 2023	Poster Room	18:30	20:30	Bio-inspired Construction of Polycation-manipulated Covalent Organic Framework Membranes for Efficient Ion Separation
P1-2D-19	10th July 2023	Poster Room	18:30	20:30	The effect of Mxene nanoflakes size to nanofiltration process via Mxene membrane
P1-2D-20	10th July 2023	Poster Room	18:30	20:30	The role of graphitic domains in water vapor transport of graphene oxide membranes
P1-2D-21	10th July 2023	Poster Room	18:30	20:30	Effects of rGO introduction on photocatalytic activity and membrane performance for g-C ₃ N ₄ /HNb ₃ O ₈ nanosheet photocatalytic membranes
P1-2D-22	10th July 2023	Poster Room	18:30	20:30	Gas transport through large area graphene with intrinsic defects
P1-2D-23	10th July 2023	Poster Room	18:30	20:30	Ion transport phenomenon across nanoporous mono layer graphene transferred hydrogel membrane
P1-2D-24	10th July 2023	Poster Room	18:30	20:30	Biopolymer/MXene Composite 2D Membranes for Osmotic Power Generation
P1-2D-25	10th July 2023	Poster Room	18:30	20:30	Functionalized Graphene Oxide-Based Ion Exchange Membranes for Osmotic Energy Conversion
P1-2D-26	10th July 2023	Poster Room	18:30	20:30	Hydrophobic graphene-based membranes with tuneable separation factors for organic solvent separations
P1-2D-27	10th July 2023	Poster Room	18:30	20:30	Ultrathin membranes with tunable permeation characteristics for primary recovery of itaconic acid produced by fermentation
P1-2D-28	10th July 2023	Poster Room	18:30	20:30	Enantiomeric Separation of Racemic Mixtures Using Chiral-Selective and Organic-Solvent-Resistant Thin-Film Composite Membranes
P1-AM-01	10th July 2023	Poster Room	18:30	20:30	Fabrication of fouling-resistant and operationally stable nanocomposite membranes for refinery wastewater treatment
P1-AM-02	10th July 2023	Poster Room	18:30	20:30	Ion imprinted polymers for rare earth metal ions recovery from coal fly ash extracts
P1-AM-03	10th July 2023	Poster Room	18:30	20:30	Computer application REE 2.0 and its use to describe the behavior of rare earth metal ions in adsorptive membranes
P1-AM-04	10th July 2023	Poster Room	18:30	20:30	Magnetic nanoparticles decorated with synthetic zeolite derived from coal fly ash: Application to the removal of heavy metals and organic dyes
P1-AM-05	10th July 2023	Poster Room	18:30	20:30	In-situ fabrication of Prussian blue-assembled adsorptive membrane for radioactive cesium removal
P1-AM-06	10th July 2023	Poster Room	18:30	20:30	The effect of flow distributor on protein binding in membrane chromatography: CFD modelling
P1-AM-07	10th July 2023	Poster Room	18:30	20:30	Polytetrafluoroethylene-supported membrane adsorber using the iterative synthesis of sulfonated UiO-66 nanoparticles for effective dye removal



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P1-AM-08	10th July 2023	Poster Room	18:30	20:30	Enhanced Pervaporation Performance of PDMS/PSF Hollow Fiber Membranes with silicalite-1 zeolite nanoparticles
P1-AM-09	10th July 2023	Poster Room	18:30	20:30	Design and synthesis of new composite membranes based on Cellulose Nanocrystals for the adsorption of (per)polyfluoroalkyls (PFAS)
P1-BD-01	10th July 2023	Poster Room	18:30	20:30	Preparation of curcumin-loaded flexible liposomes/membranes by electrospinning for application in drug release
P1-BD-02	10th July 2023	Poster Room	18:30	20:30	filters
P1-BD-03	10th July 2023	Poster Room	18:30	20:30	Development of Erythrocyte-mimetic PDMS Thermoplastic Elastomer/PFOB Core-shell Microparticles by SPG Membrane Emulsification
P1-BD-04	10th July 2023	Poster Room	18:30	20:30	Development of drug-loaded torus-shaped alginate microparticles for its sustained release
P1-BD-05	10th July 2023	Poster Room	18:30	20:30	Evaluation of ultrafiltration, precipitation and adsorption processes for the purification of galactoglucomannan from steam pretreated softwood
P1-BD-06	10th July 2023	Poster Room	18:30	20:30	Development of the innovative separation membranes for biopharma processing
P1-BD-07	10th July 2023	Poster Room	18:30	20:30	A novel membrane with heterogeneously functionalized nanocrystal layers performing blood separation and sensing synchronously
P1-BD-08	10th July 2023	Poster Room	18:30	20:30	Designing Novel Adsorptive Dialysis Membranes for Removing Protein-Bound Uremic Toxins Via Π - Π and Cation- Π Interaction
P1-BD-09	10th July 2023	Poster Room	18:30	20:30	Prevention of Postoperative Peritoneal Adhesions by Hepatocyte Growth Factor DNA Aptamer
P1-BD-10	10th July 2023	Poster Room	18:30	20:30	Development of nanostructured membranes having two-dimensional liquid-crystalline nanochannels for virus removal
P1-BD-11	10th July 2023	Poster Room	18:30	20:30	Development of porous lipase particles for the formation of nanoemulsions in the nasal mucosa
P1-BD-12	10th July 2023	Poster Room	18:30	20:30	Deep Learning Method to Understand the Mechanisms of Fouling during Bioreactor Harvesting
P1-BD-13	10th July 2023	Poster Room	18:30	20:30	Design of dual stimuli-responsive polymer films with controllable physical and chemical properties and cell regulation on their surface
P1-BD-14	10th July 2023	Poster Room	18:30	20:30	Design of stimuli-responsive microcapsules by formation of molecular complexes at the emulsion interface and their drug release behavior.
P1-BD-15	10th July 2023	Poster Room	18:30	20:30	Responsive Membranes for Hydrophobic Interaction Chromatography
P1-BD-16	10th July 2023	Poster Room	18:30	20:30	Development of S/O/W Emulsions for Protein Delivery Formed with Solid Fat
P1-BD-17	10th July 2023	Poster Room	18:30	20:30	Dual responsive functional membrane-MOF as drug delivery for chemo-photodynamic therapy
P1-BD-18	10th July 2023	Poster Room	18:30	20:30	Development of CRISPR/Cas9 plasmid DNA lipid nanoparticles using lysine-based cationic lipids
P1-BD-19	10th July 2023	Poster Room	18:30	20:30	Immunosensor using porous membrane with enhanced antifouling properties for diagnostic applications
P1-BD-20	10th July 2023	Poster Room	18:30	20:30	Systematic design of membrane-based biosensor with high signal output
P1-BD-21	10th July 2023	Poster Room	18:30	20:30	Fibrous composite membrane based on ulvan for wound dressing application
P1-BD-22	10th July 2023	Poster Room	18:30	20:30	An oral delivery system self-assembly by zein/low-molecular-weight chitosan/gamma-polyglutamic acid for the encapsulation of quercetin
P1-BD-23	10th July 2023	Poster Room	18:30	20:30	Development of surface modification method on hemofilter membrane to prolong hemofilter lifetime in continuous kidney replacement therapy



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P1-BD-24	10th July 2023	Poster Room	18:30	20:30	Development of a novel DDS carrier having targetability to specific tissues by membrane fusion of exosome and liposome
P1-BD-25	10th July 2023	Poster Room	18:30	20:30	Antibody modification of exosome-based nanoparticles using improved Protein A to provide targeting ability
P1-BD-26	10th July 2023	Poster Room	18:30	20:30	Control of pH-dependent lipid bilayer permeation of cyclic peptides with noncanonical amino acids
P1-BD-27	10th July 2023	Poster Room	18:30	20:30	Disclosing Interior Structure of Nanostructured Lipid Carriers:Relation of Core-Shell Structure to Lipid Composition
P1-BD-28	10th July 2023	Poster Room	18:30	20:30	Characterization of pH-Responsive Lipid Nanoparticles and Effects of Lipid Composition on the Crystallization Behaviour and Colloidal Stability
P1-BD-29	10th July 2023	Poster Room	18:30	20:30	Systematic Characterization of Self-Assembly State for CP/CaTG/T80 Ternary Mixtures in Aqueous Solution: Toward high-performance NLC
P1-BD-30	10th July 2023	Poster Room	18:30	20:30	Development of mitophagy-inducing nanocarriers for rejuvenation of senescent mesenchymal stem cells
P1-BD-31	10th July 2023	Poster Room	18:30	20:30	Novel blood driven reverse electro dialysis biofuel cell
P1-BD-32	10th July 2023	Poster Room	18:30	20:30	Discoidal nanocarrier for enhanced transdermal delivery of TECA for the treatment of skin diseases
P1-BD-33	10th July 2023	Poster Room	18:30	20:30	Novel Hemocompatible Surface Modification Strategies for Blood-Contacting Membrane Applications
P1-BI-01	10th July 2023	Poster Room	18:30	20:30	Evaluation of the cation permeability of lipid membranes containing amphotericin B using a pH-sensitive dye and a pH gradient
P1-BI-02	10th July 2023	Poster Room	18:30	20:30	Enhanced antioxidant activity of astaxanthin and tocotrienol through intermolecular interactions in lipid membranes
P1-BI-03	10th July 2023	Poster Room	18:30	20:30	Stomatocyte formation and budding of DPPC/OA GUVs induced by translocation of oleic acid
P1-BI-04	10th July 2023	Poster Room	18:30	20:30	Ionic Effects of 2OHOA Induced by Hydrogen Bonding Interaction in Lipid Membranes
P1-BI-05	10th July 2023	Poster Room	18:30	20:30	Investigation of cubosome interactions with liposomal membranes based on time-resolved SAXS and membrane property analysis
P1-BI-06	10th July 2023	Poster Room	18:30	20:30	Evaluation of pesticide-lipid bilayer interactions for the assessment of toxicity
P1-BI-07	10th July 2023	Poster Room	18:30	20:30	Neutron scattering measurements of the distance and rate of phospholipid exchange between closely proximate lipid bilayers
P1-BI-08	10th July 2023	Poster Room	18:30	20:30	Pressure-induced interdigitation of lipid membranes: Difference from chemically induced interdigitation and the formation mechanism
P1-BI-09	10th July 2023	Poster Room	18:30	20:30	Preparation of giant liposomes supported with hydrogel particles via an oil-in-water interface transfer method with electrostatic interaction
P1-BI-10	10th July 2023	Poster Room	18:30	20:30	Formation of giant oligovesicular vesicles using electroformation and micromanipulation for microbioreactor
P1-BI-11	10th July 2023	Poster Room	18:30	20:30	Bilayer phase imaging by Prodan fluorescence spectroscopy
P1-BR-01	10th July 2023	Poster Room	18:30	20:30	Application of Membrane Separation Technology in C-phyco cyanin Purification
P1-BR-02	10th July 2023	Poster Room	18:30	20:30	Development of PVDF hollow nanofiltration membrane for virus removal
P1-BR-03	10th July 2023	Poster Room	18:30	20:30	Development of Conducting Polymer Hybrid Nanofibers as Novel Organic Bioelectronic Interfaces for Efficient Removal of Protein-Bound Uremic Toxins
P1-BR-04	10th July 2023	Poster Room	18:30	20:30	Viral Aerosol Capture and Deactivation by Enzyme and Hydrogel Functionalized Membranes
P1-BR-05	10th July 2023	Poster Room	18:30	20:30	Development of Stimuli-Responsive Polydiacetylene/PDMS Nanocomposite Film



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P1-BR-06	10th July 2023	Poster Room	18:30	20:30	Symmetric Electro-responsive Nanofiltration Membranes Combining Carbon Nanostructures and Regenerated Networked Cellulose for Desalination: Fabrication and Performance Evaluation
P1-BR-07	10th July 2023	Poster Room	18:30	20:30	Hetero-metal on Layered Double Hydroxide as a sensitive membrane for Large-scale application of Surface-Enhanced Raman Scattering
P1-BR-08	10th July 2023	Poster Room	18:30	20:30	Alveoli-like multifunctional 3D membrane for real-time monitoring of cellular responses from pneumocytes
P1-BR-09	10th July 2023	Poster Room	18:30	20:30	Novel bioinspired anti-biofouling membranes functionalized with light-responsive copolymer
P1-BR-10	10th July 2023	Poster Room	18:30	20:30	Dynamic Filtration Enabled by Autonomous pH-Sensitive Polymer Membranes
P1-BR-11	10th July 2023	Poster Room	18:30	20:30	Photo-responsive nanofiltration membranes for water purification
P1-BR-12	10th July 2023	Poster Room	18:30	20:30	Glucose responsive isoporous membranes for protein separation with improved separation coefficient and decreased denaturation
P1-BR-13	10th July 2023	Poster Room	18:30	20:30	acid
P1-BR-14	10th July 2023	Poster Room	18:30	20:30	Poly(N-isopropylacrylamide)-gelatin hydrogel membranes with thermo-tunable pores for water flux gating and protein separation
P1-BR-15	10th July 2023	Poster Room	18:30	20:30	Nanostructured biomimetic reverse osmosis membranes using artificial water channels
P1-BR-16	10th July 2023	Poster Room	18:30	20:30	sulfone
P1-BR-17	10th July 2023	Poster Room	18:30	20:30	Immobilization of urease-encapsulated liposomes onto microbeads using avidin-biotin affinity
P1-BR-18	10th July 2023	Poster Room	18:30	20:30	Self-spreading lipid bilayers in preformed polymeric lipid bilayer channels
P1-BR-19	10th July 2023	Poster Room	18:30	20:30	liposomes
P1-BR-20	10th July 2023	Poster Room	18:30	20:30	Stimuli responsive pores towards gated membranes based on iris-like nano-valves
P1-BR-21	10th July 2023	Poster Room	18:30	20:30	Self-powered molecular imprinted polymers-based triboelectric sensor for noninvasive monitoring lactate levels in human sweat
P1-BR-22	10th July 2023	Poster Room	18:30	20:30	The immobilization of lipase on a polyacrylonitrile ultrafiltration membrane via covalent bond formation
P1-BR-23	10th July 2023	Poster Room	18:30	20:30	Preparation and characterization of an edible gelatin membrane containing chitosan-oleic acid complex particles and its application for encapsulation of bioactive compounds
P1-BR-24	10th July 2023	Poster Room	18:30	20:30	Development of IgG-displayed liposomes for targeting amyloids of α -synuclein from Parkinson's disease
P1-BR-25	10th July 2023	Poster Room	18:30	20:30	Preparation characteristics of lipid vesicles encapsulating a nonionic contrast agent by the multiple emulsification-solvent evaporation process
P1-BR-26	10th July 2023	Poster Room	18:30	20:30	A channel-based paradigm for separation membranes
P1-CC-01	10th July 2023	Poster Room	18:30	20:30	Fabrication of carbon-based membranes and application for mitigation and catalytic conversion of CO ₂
P1-CC-02	10th July 2023	Poster Room	18:30	20:30	Controllable organosilica membranes for high-temperature H ₂ /CO ₂ separation synthesized by rapid oxygen plasma treatment of polysiloxane
P1-CC-03	10th July 2023	Poster Room	18:30	20:30	Evaluation of multilayer composite membrane carbon dioxide gas separation properties made by combining POSS and PEBAX
P1-CC-04	10th July 2023	Poster Room	18:30	20:30	A concept of membrane contactor with biomimetic enzyme for direct air capture
P1-CC-05	10th July 2023	Poster Room	18:30	20:30	Effect of CO ₂ concentration in gas-liquid hollow fiber membrane contactor
P1-CC-06	10th July 2023	Poster Room	18:30	20:30	Multi-stage membrane process for carbon dioxide capture from steam methane reformer in on-site hydrogen station
P1-CC-07	10th July 2023	Poster Room	18:30	20:30	Pebax/ZIF-67 mixed matrix membranes for CO ₂ /N ₂ separation.



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P1-CC-08	10th July 2023	Poster Room	18:30	20:30	Breathing behavior-induced H ₂ and CO ₂ highly selective MIL-88(Fe)/carbon molecular sieving membrane
P1-CC-09	10th July 2023	Poster Room	18:30	20:30	Dehumidification technology development using hydrophobic ceramic membrane condenser to recover water from the humidified gas stream
P1-CM-01	10th July 2023	Poster Room	18:30	20:30	Janus Membrane of CA/PVDF by Layer-by-Layer Electrospinning with immobilized Horseradish Peroxidase for Enzymatic Degradation of Toluene
P1-CM-02	10th July 2023	Poster Room	18:30	20:30	Fabrication of Ba _{0.3} Sr _{0.7} Fe _{0.9} Mo _{0.1} O ₃ perovskite multichannel hollow fiber for oxygen separation and membrane reactor
P1-CM-03	10th July 2023	Poster Room	18:30	20:30	Precise Manipulation of Iron Spin States for A Near 100% Selectivity of Singlet Oxygen Production
P1-CM-04	10th July 2023	Poster Room	18:30	20:30	Development of a Zeolite Membrane Reactor for Reverse Water Gas Shift
P1-CM-05	10th July 2023	Poster Room	18:30	20:30	Cobalt Oxide nanomaterial over MoS ₂ quantum dots as a heterojunction photocatalyst for water splitting.
P1-CM-06	10th July 2023	Poster Room	18:30	20:30	Novel V ₂ O ₅ -TiO ₂ catalytic membrane reactor coupled with ozonation for the removal of micropollutants in aqueous environments
P1-CM-07	10th July 2023	Poster Room	18:30	20:30	In-situ metal nanoparticles exsolution on perovskite oxides for catalytic membrane reactors
P1-CM-08	10th July 2023	Poster Room	18:30	20:30	Photoactive polymer membranes – using photosensitizers and sunlight for degradation of micropollutants
P1-CM-09	10th July 2023	Poster Room	18:30	20:30	Catalytic Membrane Reactor for Conversion of Biomass Feedstocks to Levulinic Acid
P1-CM-10	10th July 2023	Poster Room	18:30	20:30	An electrochemical dual-membrane reactor with multi-function carbon membrane electrode for efficient treatment of refractory organic wastewater
P1-DS-01	10th July 2023	Poster Room	18:30	20:30	Photothermal Surface Heating Membrane Distillation from 3D-printed MXene-based Nanocomposite
P1-DS-02	10th July 2023	Poster Room	18:30	20:30	Saline wastewater treatment by forward osmosis-nanofiltration hybrid process using continuous draw solute regeneration
P1-DS-03	10th July 2023	Poster Room	18:30	20:30	New Water Treatment Application by Membrane Distillation of Unique Polyimide Membrane
P1-DS-04	10th July 2023	Poster Room	18:30	20:30	Antimicrobial surfactant-incorporated antibiofouling thin film composite membranes
P1-DS-05	10th July 2023	Poster Room	18:30	20:30	One-step electrospray deposition of carbon materials to construct scalable photoactive membrane for solar membrane desalination
P1-DS-06	10th July 2023	Poster Room	18:30	20:30	desalination
P1-DS-07	10th July 2023	Poster Room	18:30	20:30	Development of water electrolysis process using urine
P1-DS-08	10th July 2023	Poster Room	18:30	20:30	Early detection of surfactant-induced wetting in direct contact membrane distillation using impedance for hydrophobic PVDF phase inversion membrane
P1-DS-09	10th July 2023	Poster Room	18:30	20:30	Effects of membrane resistance and transport number of anion exchange membranes on desalination performances of membrane capacitive deionization
P1-DS-10	10th July 2023	Poster Room	18:30	20:30	Membrane distillation using carbonized cloth
P1-DS-11	10th July 2023	Poster Room	18:30	20:30	PVDF/Graphene/catalyst multifunctional intelligent composite membrane for sustainable regeneration of clean water and energy
P1-DS-12	10th July 2023	Poster Room	18:30	20:30	A study on rubidium recovery from brine sources utilizing organic adsorbents
P1-DS-13	10th July 2023	Poster Room	18:30	20:30	Effect of membrane properties on desalination performance of novel RED-ED hybrid desalination system
P1-DS-14	10th July 2023	Poster Room	18:30	20:30	Ionic transport properties of charged mosaic membrane prepared by ion-track graft polymerization
P1-DS-15	10th July 2023	Poster Room	18:30	20:30	Preparation of monovalent ion selective hollow fiber cation-exchange membranes and their performance of Donnan dialysis



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P1-EC-01	10th July 2023	Poster Room	18:30	20:30	Thiophene-derived metal organic framework on nickel-cobalt layered double hydroxide for hybrid membrane supercapacitor
P1-EC-02	10th July 2023	Poster Room	18:30	20:30	CoFeP with N-doped carbon as a stable and efficient membrane for seawater splitting
P1-EC-03	10th July 2023	Poster Room	18:30	20:30	High entropy electrocatalyst for glycerol oxidation reaction and hydrogen production for membrane cell application
P1-EC-04	10th July 2023	Poster Room	18:30	20:30	Construction of MOF-based heterostructure for improved oxygen evolution reaction catalytic membrane with ultralow overpotential in alkaline seawater
P1-EC-05	10th July 2023	Poster Room	18:30	20:30	Diffusion selectivity in ion exchange membranes: influence of membrane hydration and specific ion effects
P1-EC-06	10th July 2023	Poster Room	18:30	20:30	Bipolar membrane electrodialysis for acidification of skim milk – effect of temperature on the composition of generated streams
P1-EC-07	10th July 2023	Poster Room	18:30	20:30	Impact of Correlated Ion-Ion Motions on Salt Transport in Ion Exchange Membranes
P1-EC-08	10th July 2023	Poster Room	18:30	20:30	The feasible investigation on the reclamation of high salinity pesticide wastewater by bipolar membrane electrodialysis
P1-EC-09	10th July 2023	Poster Room	18:30	20:30	Selective extraction of organic acids using electrodialysis
P1-EC-10	10th July 2023	Poster Room	18:30	20:30	Organic redox flow battery with hydrocarbon-based electrolyte membranes
P1-EC-11	10th July 2023	Poster Room	18:30	20:30	Electrocatalytic laser-induced graphene membrane for micropollutant removal
P1-EC-12	10th July 2023	Poster Room	18:30	20:30	Preparation of SEBS-based hybrid membrane using particles with enhanced ion exchange capacity
P1-EC-13	10th July 2023	Poster Room	18:30	20:30	Analysis of the Effects of the Membrane Ion Conductivity on the Fuel cell Performance
P1-EC-14	10th July 2023	Poster Room	18:30	20:30	Locally freestanding covalent organic framework membrane with carbon nanotube scaffold for efficient blue energy harvesting
P1-EC-15	10th July 2023	Poster Room	18:30	20:30	
P1-EC-16	10th July 2023	Poster Room	18:30	20:30	
P1-EC-17	10th July 2023	Poster Room	18:30	20:30	The effect of temperature on hydrogen generation from reverse electrodialysis
P1-EC-18	10th July 2023	Poster Room	18:30	20:30	Bipolar membrane electrodialysis for direct LiOH production from concentrated brines
P1-EC-19	10th July 2023	Poster Room	18:30	20:30	Resource recovery using membrane crystallization with anion-exchange hollow fibres
P1-EC-20	10th July 2023	Poster Room	18:30	20:30	Preparation of cation exchange membrane based on poly (2,6-dimethyl-1,4-phenylene oxide) with different sulfonation degrees for use in reverse electrodialysis
P1-EC-21	10th July 2023	Poster Room	18:30	20:30	Understanding of the relation between proton transport and microstructure of commercial Nafion [®] membranes
P1-EC-22	10th July 2023	Poster Room	18:30	20:30	CO ₂ extraction from water by bipolar membrane electrodialysis (BPMED)
P1-EC-23	10th July 2023	Poster Room	18:30	20:30	Advancing osmotic power generation through dual-symmetric nanochannels in covalent organic frameworks
P1-EC-24	10th July 2023	Poster Room	18:30	20:30	Reaction selectivity control on seawater electrolysis using thin flow channel electrolysis cell
P1-EC-25	10th July 2023	Poster Room	18:30	20:30	Electrodialysis for sulphate removal from saturated waste water
P1-EC-26	10th July 2023	Poster Room	18:30	20:30	Preparation and performance evaluation of monovalent selective cation-exchange membranes by plasma irradiation graft polymerization
P1-EC-27	10th July 2023	Poster Room	18:30	20:30	Relationship between anion permeability and membrane resistance in electrodialysis using monovalent selective anion exchange membrane



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P1-EC-28	10th July 2023	Poster Room	18:30	20:30	Development of anion exchange membranes for salinity gradient energy harvesting by reverse electro dialysis: Effect of amination and crosslinking degree
P1-EC-29	10th July 2023	Poster Room	18:30	20:30	Relationship between membrane properties and current efficiency in acid and alkali production using bipolar membrane electro dialysis
P1-EC-30	10th July 2023	Poster Room	18:30	20:30	Concentration and separation of ammonium ions from model wastewater using continuous electro dialysis
P1-EC-31	10th July 2023	Poster Room	18:30	20:30	Salinity gradient energy analysis of a pilot-scale reverse electro dialysis stack
P1-FL-01	10th July 2023	Poster Room	18:30	20:30	Real time monitoring of cake formation in semi dead-end membrane filtration with 3 ω sensor
P1-FL-02	10th July 2023	Poster Room	18:30	20:30	Impact of microplastics on biofouling of micro-capillary membranes
P1-FL-03	10th July 2023	Poster Room	18:30	20:30	Fouling behavior of foulants with different chemical structure in hexane solution
P1-FL-04	10th July 2023	Poster Room	18:30	20:30	Macroscopic and microscopic investigation of deposition processes and polystyrene particle and bacteria attachment to hydrogels
P1-FL-05	10th July 2023	Poster Room	18:30	20:30	perspectives
P1-FL-06	10th July 2023	Poster Room	18:30	20:30	Acoustic actuated 3D printed bubble-trapping structures for in-situ mitigation of membrane fouling
P1-FL-07	10th July 2023	Poster Room	18:30	20:30	Grafting zwitterionic polymer brush to ultrafiltration membranes via photo-ATRP using NH ₂ -GOQDs
P1-FL-08	10th July 2023	Poster Room	18:30	20:30	Development of a circulating quorum quenching-vessel to improve the efficiency of biofouling control in a membrane bioreactor
P1-FL-09	10th July 2023	Poster Room	18:30	20:30	Mechanism of membrane fouling by particulate matter in vacuum membrane distillation
P1-FL-10	10th July 2023	Poster Room	18:30	20:30	Lipid-Hydrogel-Nanostructure Hybrids for Robust Anti-Fouling
P1-FL-11	10th July 2023	Poster Room	18:30	20:30	Development of low-fouling PVDF-poly(carboxymethylbetaine) blend microfiltration membranes via NIPS process
P1-FL-12	10th July 2023	Poster Room	18:30	20:30	Evaluation of NaCl cleaning vs alkaline cleaning for PVDF based MF membrane fouled by skim milk
P1-FL-13	10th July 2023	Poster Room	18:30	20:30	Binary Nanofibrous Membranes with Independent Oil/Water Transport Channels for Durable Emulsion Separation
P1-FL-14	10th July 2023	Poster Room	18:30	20:30	Formulation of enzymatic detergents for the cleaning of ultrafiltration membranes fouled by skim milk
P1-FL-15	10th July 2023	Poster Room	18:30	20:30	Development of novel fouling indexes for inline monitoring of Membrane Bioreactor
P1-FL-16	10th July 2023	Poster Room	18:30	20:30	Surface Modification of Commercial Polysulfone Membranes With Dopamine Coating to Improve Their Antifouling Behavior During Concentration of Whey Proteins
P1-FT-01	10th July 2023	Poster Room	18:30	20:30	Fundamental investigation on the effect of humidity on the CO ₂ permeability of ionic liquid-based facilitated transport membranes
P1-FT-02	10th July 2023	Poster Room	18:30	20:30	anion
P1-FT-03	10th July 2023	Poster Room	18:30	20:30	purification
P1-FT-04	10th July 2023	Poster Room	18:30	20:30	Biomimetic polyamide membranes containing hydrophobic cavities for CO ₂ separation
P1-FT-05	10th July 2023	Poster Room	18:30	20:30	3d printed robust MOF-MMMs for liquid organic hydrogen carriers separation
P1-FT-06	10th July 2023	Poster Room	18:30	20:30	Hydrogen sulfide and acetylene stability, gas transport properties, and molecular interactions of high-concentration, hydrogen-stable Ag ⁺ -based facilitated transport membranes
P1-GS-01	10th July 2023	Poster Room	18:30	20:30	Polymers of intrinsic microporosity containing aryl-phthalimide moieties: synthesis, modeling, and membrane gas transport properties
P1-GS-02	10th July 2023	Poster Room	18:30	20:30	Fabrication of MIL-178(Fe) Membranes for Gas Separation



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P1-GS-03	10th July 2023	Poster Room	18:30	20:30	polymer
P1-GS-04	10th July 2023	Poster Room	18:30	20:30	Highly CO ₂ selective ion gel membrane composed of CO ₂ -philic ionic liquid and semi-crystalline polymer network
P1-GS-05	10th July 2023	Poster Room	18:30	20:30	Development of thin ion gel membrane using gel precursor solution containing a surfactant
P1-GS-06	10th July 2023	Poster Room	18:30	20:30	Random and alternating PIM-1 copolymers introducing allyl side groups
P1-GS-07	10th July 2023	Poster Room	18:30	20:30	Development of thin film composite membrane composed of ion gel-based CO ₂ separation layer and porous support membrane
P1-GS-08	10th July 2023	Poster Room	18:30	20:30	The role of free volume modification (FVM) on physical aging in amine-functional polymers of intrinsic microporosity (PIMs)
P1-GS-09	10th July 2023	Poster Room	18:30	20:30	dynamics
P1-GS-10	10th July 2023	Poster Room	18:30	20:30	self-healing polymeric membrane for CO ₂ /N ₂ separation
P1-GS-11	10th July 2023	Poster Room	18:30	20:30	Use of unsteady process to improve energy efficiency of membrane gas separation : a simulation sensitivity analysis
P1-GS-12	10th July 2023	Poster Room	18:30	20:30	Development of thin film composite membrane composed of ion gel layer and loosely cross-linked polydimethylsiloxane gutter layer
P1-GS-13	10th July 2023	Poster Room	18:30	20:30	solvent
P1-GS-14	10th July 2023	Poster Room	18:30	20:30	Preparation and morphology analysis of PBI separation membrane for gas separation
P1-GS-15	10th July 2023	Poster Room	18:30	20:30	Preparation of hollow fiber membrane based polyetherimide polymer for evaluation of gas separation characteristics
P1-GS-16	10th July 2023	Poster Room	18:30	20:30	MD simulation study on oxygen diffusion in the multilayer membrane models
P1-GS-17	10th July 2023	Poster Room	18:30	20:30	Separation of hydrofluorocarbons using dimethoxydiphenylsilane-derived amorphous silica membranes prepared via CVD
P1-GS-18	10th July 2023	Poster Room	18:30	20:30	Oil removal by a Coreless Filter System for Treatmnt of Oil Sands Process Affectd Water undr various conditions
P1-GS-19	10th July 2023	Poster Room	18:30	20:30	Study of ammonia transport in Perfluorosulphonated Aquivion® membranes
P1-GS-20	10th July 2023	Poster Room	18:30	20:30	Transient experiments of propylene permeation through Ag-X membrane
P1-GS-21	10th July 2023	Poster Room	18:30	20:30	Modeling of gas separation with asymmetric hollow fiber membrane
P1-GS-22	10th July 2023	Poster Room	18:30	20:30	Polymer-based mixed matrix membranes with ZIF-8 as filler for removal of carbon dioxide from biogas
P1-GS-23	10th July 2023	Poster Room	18:30	20:30	Highly H ₂ Solubility Selective Polyimide-based Semi-IPN membranes for Hydrogen Purification
P1-GS-24	10th July 2023	Poster Room	18:30	20:30	Development of an ion gel membrane composed of a CO ₂ -philic ionic liquid and an interpenetrating semi-crystalline and cross-linkable polymer network
P1-GS-25	10th July 2023	Poster Room	18:30	20:30	Core-Shell Porous Framework Contactors for Efficient CO ₂ Capture from Low Concentration Flue Gas.
P1-GS-26	10th July 2023	Poster Room	18:30	20:30	A buckypaper-scaffolded nanofilm for H ₂ purification with enhanced mechanical stability
P1-GS-27	10th July 2023	Poster Room	18:30	20:30	Development of H ₂ -selective and permeable fluorinated polyimide membranes
P1-GS-28	10th July 2023	Poster Room	18:30	20:30	Fine-tuning of carbon molecular sieve membranes for propylene propylene separation derived from a tetraphenylethylene (TPE) based ladder polymer of intrinsic microporosity
P1-GS-29	10th July 2023	Poster Room	18:30	20:30	separation
P1-IM-01	10th July 2023	Poster Room	18:30	20:30	2D-nanomaterial coated ceramic membranes for semiconductor wastewater treatment



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P1-IM-02	10th July 2023	Poster Room	18:30	20:30	Robust Ultrathin Polycrystalline Metal-Organic Framework Membranes for Organic Solvent Nanofiltration
P1-IM-03	10th July 2023	Poster Room	18:30	20:30	Fabrication of highly permselective silica membranes using atmospheric-pressure plasma jet CVD
P1-IM-04	10th July 2023	Poster Room	18:30	20:30	Gas permeation property of silica membranes fabricated by atmospheric-pressure plasma-enhanced CVD: Effect of precursor species and their concentration
P1-IM-05	10th July 2023	Poster Room	18:30	20:30	Silylated ionic liquid-derived organosilica membranes for separation of CH ₃ OH and H ₂ O from H ₂ and CO ₂
P1-IM-06	10th July 2023	Poster Room	18:30	20:30	Reverse Osmosis Separation of Organic Solution through MFI Membranes
P1-IM-07	10th July 2023	Poster Room	18:30	20:30	Emerging Membranes for Olefin/Paraffin Separation
P1-IM-08	10th July 2023	Poster Room	18:30	20:30	Dehydration performance from various organic solvents using carbon hollow fiber membranes
P1-IM-09	10th July 2023	Poster Room	18:30	20:30	Improvement of CO ₂ permselectivity by adding iron acetate salt to the precursor of carbon molecular sieve membranes
P1-IM-10	10th July 2023	Poster Room	18:30	20:30	MAF-6 Membranes for Separation of Ethanol/Water via Pervaporation
P1-IM-11	10th July 2023	Poster Room	18:30	20:30	Preparation and dehydration performance of carbon composite membranes
P1-IM-12	10th July 2023	Poster Room	18:30	20:30	Sol-Gel Assisted Processing of Metal-Organic Framework ZIF-8 Membranes for Gas Separations
P1-IM-13	10th July 2023	Poster Room	18:30	20:30	Synthesis of carbon molecular sieve membrane from polymer precursor layers with zeolite nanosheet
P1-IM-14	10th July 2023	Poster Room	18:30	20:30	Microstructural engineering of zeolite membranes through composite seed layers
P1-IM-15	10th July 2023	Poster Room	18:30	20:30	Preparation of TiO ₂ -Al ₂ O ₃ organic chelating ligand (OCL) composite membranes and their gas permeation characteristics
P1-IM-16	10th July 2023	Poster Room	18:30	20:30	Preparation of Al-rich beta zeolite membrane for pervaporation dehydration of water-n-butanol mixtures
P1-IM-17	10th July 2023	Poster Room	18:30	20:30	Permeation properties and hydrothermal stability of AHPCS-derived Silicon Carbide (SiC) membranes
P1-IM-18	10th July 2023	Poster Room	18:30	20:30	Splitting
P1-IM-19	10th July 2023	Poster Room	18:30	20:30	reactor
P1-IM-20	10th July 2023	Poster Room	18:30	20:30	Fabrication of CO ₂ -tolerant dual-layer 7-channel hollow fiber membrane by co-spinning and one-step thermal process
P1-IM-21	10th July 2023	Poster Room	18:30	20:30	Zeolite Membrane supported by Porous Ceramic Electrode for flow battery
P1-IM-22	10th July 2023	Poster Room	18:30	20:30	Metal oxide deposited dynamic membrane with ceramic membrane base for NOM removal
P1-IM-23	10th July 2023	Poster Room	18:30	20:30	Rapid Synthesis of Silicalite-1 Membrane in Small Tubular Reactor
P1-IM-24	10th July 2023	Poster Room	18:30	20:30	Investigation of electric field enhancement of entangled plasmonic nanowires toward a sensor membrane powered by surface-enhanced Raman spectroscopy
P1-IM-25	10th July 2023	Poster Room	18:30	20:30	Functionalized nanoporous ceramic membranes for electrodialysis treatment of harsh wastewater
P1-IM-26	10th July 2023	Poster Room	18:30	20:30	Development of long-scale Si-rich LTA zeolite membrane for methanol synthesis membrane reactor
P1-IM-27	10th July 2023	Poster Room	18:30	20:30	Development of a membrane reactor consisting of TiO ₂ /MFI nanosheets composite materials for water purification
P1-IM-28	10th July 2023	Poster Room	18:30	20:30	Direct coating of PVDF-derived carbon molecular sieve on macroporous ceramic hollow fiber membranes for CO ₂ capture
P1-IM-29	10th July 2023	Poster Room	18:30	20:30	Dual all-carbon membrane for effective CO ₂ separation from a gas containing impurities
P1-IM-30	10th July 2023	Poster Room	18:30	20:30	MFI-type nanosheets for the separation of water from post-treatment of lignocellulosic biomass
P1-IM-31	10th July 2023	Poster Room	18:30	20:30	Preparation of silica hybrid membrane using silica-metal oxide sol



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P1-IM-32	10th July 2023	Poster Room	18:30	20:30	Triple-layer tubular Al ₂ O ₃ membrane fabricated by agar gelcasting and dip coating: Comparison between inside and outside coating
P1-IM-33	10th July 2023	Poster Room	18:30	20:30	Precursors for SiC, SiC _x N _y and Si ₃ N ₄ membrane formation
P1-IM-34	10th July 2023	Poster Room	18:30	20:30	Pervaporation dehydration of water/alcohol mixture using TiO ₂ -SiO ₂ -organic chelating ligand (OCL) composite membranes
P1-MB-01	10th July 2023	Poster Room	18:30	20:30	Revamping our wastewater treatment process with anaerobic membrane bioreactor and advanced oxidation disinfection
P1-MB-02	10th July 2023	Poster Room	18:30	20:30	Formation of PtBi nanoparticles on vesicle membranes and its application to the oxidative conversion of 5-hydroxymethylfurfural
P1-MB-03	10th July 2023	Poster Room	18:30	20:30	membranes
P1-MB-04	10th July 2023	Poster Room	18:30	20:30	Mitigation of membrane fouling with biopolymer assimilating bacteria in MBRs
P1-MB-05	10th July 2023	Poster Room	18:30	20:30	plants
O2.BR-01(KN)	11th July 2023	Room 1	09:00	09:25	Metal-organic framework-based nanochannel membranes for enhanced transport and separation
O2.BR-02	11th July 2023	Room 1	09:25	09:50	dyes
O2.BR-03	11th July 2023	Room 1	09:50	10:15	Development of Responsive Catalytic Membranes for the Filtration and Degradation of Toxic Air Pollutants
O2.BR-04	11th July 2023	Room 1	10:15	10:40	Surface-Heated Membranes with Radiofrequency for Membrane Distillation Applications
O2.MP-05(KN)	11th July 2023	Room 1	11:10	11:35	Analysis of Nitrate and Salt Passage Based on Extensive Field Data of RO Purification and Desalination of Impaired Brackish Groundwater
O2.MP-06	11th July 2023	Room 1	11:35	12:00	Onsite Water Reuse in Data Centers with Membrane-based Technologies
O2.MP-07	11th July 2023	Room 1	12:00	12:25	A hybrid hollow fiber nanofiltration process for organic micro-pollutant removal from wastewater
O2.MP-08	11th July 2023	Room 1	12:25	12:50	conditions?
O2.MP-09	11th July 2023	Room 1	14:00	14:25	Continuous and intensified membrane crystallization process: quality control of an active pharmaceutical ingredient
O2.MP-10	11th July 2023	Room 1	14:25	14:50	Long-term performance of a submerged photocatalytic membrane reactor utilizing membrane distillation
O2.MP-11	11th July 2023	Room 1	14:50	15:15	Recovery and purification of CO ₂ -based lactic and glyoxylic acids using membrane technology
O2.MP-12	11th July 2023	Room 1	15:15	15:40	New opportunities of membrane processes for protein recovery
O2.MP-13	11th July 2023	Room 1	16:10	16:35	Development of a Solvent Resistant Poly (Ether Imide Sulfone) Ultrafiltration Membrane for a Sustainable Silica Nanopowder Production
O2.MP-14	11th July 2023	Room 1	16:35	17:00	Steam recovery via high performance organosilica membranes : long-term stability and proof of concept in an incinerator plant
O2.MP-15	11th July 2023	Room 1	17:00	17:25	Energy-efficient Biogas Upgrading System by Membrane Processes
O2.MP-16	11th July 2023	Room 1	17:25	17:50	A hybrid process for efficient extraction of H ₂ from a H ₂ blended natural gas pipeline
O2.FL-01(KN)	11th July 2023	Room 2	09:00	09:25	Simulation of foulant adsorption and preparation of anti-fouling RO membrane
O2.FL-02	11th July 2023	Room 2	09:25	09:50	Synergistic effects of nanobubbles and chemicals on backwashing for submerged MBRs treating municipal wastewater
O2.FL-03	11th July 2023	Room 2	09:50	10:15	The Temperature Effect on Fouling in Anaerobic Membrane Bioreactor: Roles of Extracellular Polymeric Substances and Soluble Microbial Products
O2.FL-04	11th July 2023	Room 2	10:15	10:40	Fouling potentials of biopolymers isolated from surface water and supernatants of a membrane bioreactor.



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O2.FL-05(KN)	11th July 2023	Room 2	11:10	11:35	Understanding Fouling of Virus Filters at High Product Titers
O2.FL-06	11th July 2023	Room 2	11:35	12:00	Development of advanced membrane control systems for membrane processes to account fouling phenomena during operation
O2.FL-07	11th July 2023	Room 2	12:00	12:25	Multicycle Ultrafiltration Fouling Forecasting Using Exponential
O2.FL-08	11th July 2023	Room 2	12:25	12:50	
O2.FL-09	11th July 2023	Room 2	14:00	14:25	Low-biofouling anaerobic electro-conductive membrane bioreactor (Ec-AnMBR): The role of pH changes in bacterial inactivation and biofouling mitigation
O2.FL-10	11th July 2023	Room 2	14:25	14:50	Milk protein fractionation by microfiltration: Effect of pre-treatment of casein micelles with transglutaminase on deposit layer properties and process performance
O2.FL-11	11th July 2023	Room 2	14:50	15:15	Protein Adsorption during Membrane Filtrations in Biopharmaceutical Downstream Process
O2.FL-12	11th July 2023	Room 2	15:15	15:40	Improving Efficiency and Sustainability of Membrane Filtration and Cleaning Processes using Pulsed Flow
O2.FL-13	11th July 2023	Room 2	16:10	16:35	Elucidating the scaling behavior in membrane distillation: effects of spacer geometry and antiscalants
O2.FL-14	11th July 2023	Room 2	16:35	17:00	Oil-Water Receiving Membrane with Sub-10 nm Surfactant Layer for Long-Lasting Oil-Water Separation
O2.FL-15	11th July 2023	Room 2	17:00	17:25	Effect of membrane properties on fouling mechanism in microfiltration of polysaccharide
O2.FL-16	11th July 2023	Room 2	17:25	17:50	
O2.GS-01(KN)	11th July 2023	Room 3	09:00	09:25	Gas Permeation through Dual-Phase Inorganic Membranes
O2.GS-02	11th July 2023	Room 3	09:25	09:50	Polymer-supported silica-based membranes for gas separation via atmospheric-pressure plasma-enhanced chemical vapor deposition
O2.GS-03	11th July 2023	Room 3	09:50	10:15	Ultra-thin tubular small-pore zeolite membranes for CO ₂ /CH ₄ separation
O2.GS-04	11th July 2023	Room 3	10:15	10:40	photosynthesis
O2.GS-05(KN)	11th July 2023	Room 3	11:10	11:35	Our recent efforts on hollow fiber supported DD3R zeolite membranes towards industrialization
O2.GS-06	11th July 2023	Room 3	11:35	12:00	Highly selective size-sieving gas separation membranes by plasma-enhanced chemical vapor deposition
O2.GS-07	11th July 2023	Room 3	12:00	12:25	N ₂ selectivity of graphene-wrapped zeolite membranes for rapid air separation
O2.GS-08	11th July 2023	Room 3	12:25	12:50	The role of the energetic and entropic selectivities in defining the gas transport properties of polymer-based membrane
O2.GS-09(KN)	11th July 2023	Room 3	14:00	14:25	Microstructure tailoring of ligand-modified ceramic membranes for gas separation
O2.GS-10	11th July 2023	Room 3	14:25	14:50	Fabrication of carbon molecular sieve membranes supported on a novel porous carbon fiber
O2.GS-11	11th July 2023	Room 3	14:50	15:15	Electron-mediated Nanoporosity Control in Carbon Membranes for Targeted Molecular Separation
O2.GS-12	11th July 2023	Room 3	15:15	15:40	Evaluation of H ₂ permeation properties and separation performance of commercial Pd-based membrane
O2.GS-13(KN)	11th July 2023	Room 3	16:10	16:35	Development of thin film composite membrane with ion gel layer composed of semi-crystalline and cross-linkable polymers
O2.GS-14	11th July 2023	Room 3	16:35	17:00	Material and Structural Design of Membranes for Carbon Capture
O2.GS-15	11th July 2023	Room 3	17:00	17:25	The permeation number - A dimensionless group for membrane operation design
O2.GS-16	11th July 2023	Room 3	17:25	17:50	Plasma-assisted tailoring of ultramicropores in biomaterial-derived carbon molecular sieve membranes for hydrogen separation
O2.2D-01(KN)	11th July 2023	Room 4	09:00	09:25	Mechanism of Self-Assembling of Electrical Responsive Graphene-based membranes for Simultaneous Steam and Power Generation
O2.2D-02	11th July 2023	Room 4	09:25	09:50	Scale-up of CO ₂ -selective nanoporous single-layer graphene membranes



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O2.2D-03	11th July 2023	Room 4	09:50	10:15	Confined graphene oxide nanochannel membranes for desalination
O2.2D-04	11th July 2023	Room 4	10:15	10:40	
O2.2D-05	11th July 2023	Room 4	11:10	11:35	Preparation of Graphene-Based Membrane Materials and Their Application for Water Purification
O2.2D-06	11th July 2023	Room 4	11:35	12:00	Bottom-up synthesis of porous nanocrystalline graphene (PNG) for high-performance gas separation membranes
O2.2D-07	11th July 2023	Room 4	12:00	12:25	Improving the size exclusion performance of porous graphene oxide hollow fibre membranes by tailoring the substrate curvature
O2.2D-08	11th July 2023	Room 4	12:25	12:50	Fabrication of large-scale graphene oxide-based nanofiltration membrane by poly(ethyleneimine) coating and graphene oxide gelation
O2.CC-09(KN)	11th July 2023	Room 4	14:00	14:25	Transformational membranes for carbon capture and utilization
O2.CC-10	11th July 2023	Room 4	14:25	14:50	A high-performance hybrid structured zeolite membrane for effective CO ₂ separation
O2.CC-11	11th July 2023	Room 4	14:50	15:15	Ultrasensitive aramid-derived carbon molecular sieve membranes for carbon dioxide capture
O2.CC-12	11th July 2023	Room 4	15:15	15:40	
O2.CC-13	11th July 2023	Room 4	16:10	16:35	Leveraging competitive sorption in microporous polymer membranes to enhance CO ₂ - and H ₂ S-specific gas separation performance
O2.CC-14	11th July 2023	Room 4	16:35	17:00	Tailoring Structure-Property Relationship of Crosslinked Copolymer-based Gas Separation Membranes through Judicious Chemical Modification
O2.CC-15	11th July 2023	Room 4	17:00	17:25	Ultrathin poly(ethylene oxide)-based membranes for high performance CO ₂ separation
O2.CC-16	11th July 2023	Room 4	17:25	17:50	Poly(poly(ethylene glycol) methyl ether acrylate) micelles for highly CO ₂ permeable membranes
O2.MF-01(KN)	11th July 2023	Room 5	09:00	09:25	Development of novel solid electrolytes using ionic plastic crystals and ion conductive polymers
O2.MF-02	11th July 2023	Room 5	09:25	09:50	Structure and Dynamics of Oligomeric Zwitterions using Molecular Dynamics Simulation
O2.MF-03	11th July 2023	Room 5	09:50	10:15	Study of cellulose/BMIMCl composite film as membrane in microbial fuel cell
O2.MF-04	11th July 2023	Room 5	10:15	10:40	Development of Highly Selective Monovalent Ion Transport Enabled by Self-assembly for High-performance Cation Exchange Membrane
O2.MF-05	11th July 2023	Room 5	11:10	11:35	Highly durable anion-exchange membranes and membrane-electrode assemblies using spirobifluorene-based aromatic polymers for direct formate fuel cells
O2.MF-06	11th July 2023	Room 5	11:35	12:00	Two-dimensional material membranes for Li-S batteries
O2.MF-07	11th July 2023	Room 5	12:00	12:25	Effects of hydrophobic side chains in poly(fluorenyl-co-aryl piperidinium) ionomers for durable anion exchange membrane fuel cells
O2.MF-08	11th July 2023	Room 5	12:25	12:50	H ₂ Production by water electrolysis proton exchange membrane technology for propulsion of Space shuttle
O2.WM-01	11th July 2023	Room 5	14:00	14:05	WA-MS Overview
O2.WM-02	11th July 2023	Room 5	14:05	14:50	Education Working Group, Courses launch from WA-MS Teachers
O2.WM-03	11th July 2023	Room 5	14:50	15:40	Panel session, Circular Economy, green processes and sustainability: which membrane advances and what is their future role?
O2.WM-04	11th July 2023	Room 5	16:10	16:35	Functionalized Membrane Advances for Water Remediation
O2.WM-05	11th July 2023	Room 5	16:35	17:00	Realizing sustainable industries with membrane applications
O2.WM-06	11th July 2023	Room 5	17:00	17:25	WA-MS Pioneers – Founding WA-MS and steps into the future-
O2.WM-07	11th July 2023	Room 5	17:25	17:50	WA-MS future and closing remarks



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O2.SP-01(KN)	11th July 2023	Room 6	09:00	09:25	Plasma surface functionalized tight ultrafiltration membranes for PFAS concentration
O2.SP-02	11th July 2023	Room 6	09:25	09:50	Micellar-enhanced ultrafiltration using ZIF-L–modified polyacrylonitrile membrane for nitrate removal from contaminated groundwater of the Israel Coastal Aquifer
O2.SP-03	11th July 2023	Room 6	09:50	10:15	UV-grafting of zwitterionic hydrogel stabilizing ZIF-67 nanoparticles on polyacrylonitrile membrane for enhanced antifouling in wastewater treatment
O2.SP-04	11th July 2023	Room 6	10:15	10:40	Vacuum UV / plasma irradiation for antifouling, chlorine resistant RO membranes
O2.SP-05(KN)	11th July 2023	Room 6	11:10	11:35	Tailoring functionalization, antifouling and catalytic properties by electron beam engineering of polymer membranes
O2.SP-06	11th July 2023	Room 6	11:35	12:00	Application of synthetic hydrogels on polymer membranes via electron beam modification and its anti-biofouling properties – a fundamental and applied study
O2.SP-07	11th July 2023	Room 6	12:00	12:25	Fabrication of a highly aligned membrane using selective laser sintering 3D printer
O2.SP-08	11th July 2023	Room 6	12:25	12:50	Precise surface modification of porous membrane with zwitterionic polymers for antifouling applications
O2.SP-09	11th July 2023	Room 6	14:00	14:25	Application of superomniphobic electrospun membrane for treatment of produced water through membrane distillation
O2.SP-10	11th July 2023	Room 6	14:25	14:50	Fabrication of functional membrane via atmospheric pressure plasma graft polymerization
O2.SP-11	11th July 2023	Room 6	14:50	15:15	Antifouling properties of linear and branched polyzwitterion brush-functionalized polyethersulfone ultrafiltration membranes
O2.SP-12	11th July 2023	Room 6	15:15	15:40	Fabrication of a bioinspired springtail nano-concave Polystyrene green omniphobic membrane for membrane distillation
O2.SP-13(KN)	11th July 2023	Room 6	16:10	16:35	Formation and functionalization of integral asymmetric isoporous block copolymer membranes and their performance in ultra- and nanofiltration
O2.SP-14	11th July 2023	Room 6	16:35	17:00	Enhanced TiO ₂ adhesion on PVDF membrane and membrane self-protective property by polydopamine assistance for efficient dye wastewater treatment
O2.SP-15	11th July 2023	Room 6	17:00	17:25	Enhancement of CO ₂ selectivity of membranes by molecular anchoring
O2.SP-16	11th July 2023	Room 6	17:25	17:50	Surface modification of Cellulose Nanofiber membrane for water remediation
O2.IM-01(KN)	11th July 2023	Room 7	09:00	09:25	Molecular sieve membranes made of multi-dimensional building blocks
O2.IM-02	11th July 2023	Room 7	09:25	09:50	Effect of the Peptization Process and Thermal Treatment on the Sol-Gel Preparation of Mesoporous-Alumina Membranes
O2.IM-03	11th July 2023	Room 7	09:50	10:15	Monolithic MFI zeolite membranes for butane isomer separation
O2.IM-04	11th July 2023	Room 7	10:15	10:40	Preparation of FAU zeolite membranes by using statistics analysis of porous substrates
O2.IM-05(KN)	11th July 2023	Room 7	11:10	11:35	Scale-up of ceramic membranes for gas separation
O2.IM-06	11th July 2023	Room 7	11:35	12:00	Synthesis and performance of STT zeolite membranes for He/N ₂ and He/CH ₄ separation
O2.IM-07	11th July 2023	Room 7	12:00	12:25	High-performance CHA-type zeolite membranes for efficient CO ₂ capture
O2.IM-08	11th July 2023	Room 7	12:25	12:50	H ₂ -sieving zeolitic membrane fabricated on polymeric support by scalable filter deposition
O2.IM-09(KN)	11th July 2023	Room 7	14:00	14:25	Ceramic membranes with adjustable features for improved liquid separation and enzyme bioconjugation
O2.IM-10	11th July 2023	Room 7	14:25	14:50	Development of flexible ceramic nanofibers for photocatalytic degradation of organic foulants
O2.IM-11	11th July 2023	Room 7	14:50	15:15	Hydrophobic ceramic membranes for solvent resistant membrane distillation (SR-MD)
O2.IM-12	11th July 2023	Room 7	15:15	15:40	Development of high-performance multichannel perovskite hollow fibers



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O2.IM-13(KN)	11th July 2023	Room 7	16:10	16:35	Organic solvent nanofiltration/reverse osmosis characteristics of TiO ₂ -ZrO ₂ -organic chelating ligand (OCL) composite membranes
O2.IM-14	11th July 2023	Room 7	16:35	17:00	One-step co-sintering of hierarchical mullite whisker/fiber membranes with gradient pore structures for effective filtration of dust-laden gas
O2.IM-15	11th July 2023	Room 7	17:00	17:25	3D printed ceramic tubular membranes in novel shapes for enhanced fluid mixing
O2.IM-16	11th July 2023	Room 7	17:25	17:50	Development and characterization of ceramic membranes for nanofiltration
O2.MM-01(KN)	11th July 2023	Room 8	09:00	09:25	A critical analysis of enzymatic membrane reactors by coupling a model with experiments
O2.MM-02	11th July 2023	Room 8	09:25	09:50	Alkali metal ion permeation through confined MXene nano-channels and the tuning strategy for targeted ion separation
O2.MM-03	11th July 2023	Room 8	09:50	10:15	Mixed Ion Partitioning into Crosslinked PEGDA Membranes
O2.MM-04	11th July 2023	Room 8	10:15	10:40	Revealing the Wetting Phenomenon Stage in Membrane Distillation by Advanced Real-time Wetting Front Detection
O2.MM-05(KN)	11th July 2023	Room 8	11:10	11:35	Transport electrolytes and non-electrolytes in NF and RO membranes: a unified view
O2.MM-06	11th July 2023	Room 8	11:35	12:00	System-modelling of separation properties of membranes for desalination
O2.MM-07	11th July 2023	Room 8	12:00	12:25	Maxwell model for everything? A versatile new model to predict the permeability of mixed-matrix membranes with impermeable fillers of diverse geometry
O2.MM-08	11th July 2023	Room 8	12:25	12:50	A geometric model for build-up of retention for dissolved proteins by accumulation of casein micelles
O2.MM-09(KN)	11th July 2023	Room 8	14:00	14:25	Effect of Membrane Surfaces on Nucleation and Growth of Inorganic Crystals
O2.MM-10	11th July 2023	Room 8	14:25	14:50	Novel assessment of topology and anisotropy of microporous membranes by computational fluid dynamics on digitally-reconstructed real 3D structures
O2.MM-11	11th July 2023	Room 8	14:50	15:15	Process optimization of a membrane contactor for the separation of chiral amines using computational fluid dynamics
O2.MM-12	11th July 2023	Room 8	15:15	15:40	Modelling flux reduction of gases in semicrystalline polymers: effect of volume fraction, aspect ratio, dispersion, size distribution and orientation of crystalline domains.
O2.MM-13	11th July 2023	Room 8	16:10	16:35	Simulation of mass transfer during membrane formation by phase separation
O2.MM-14	11th July 2023	Room 8	16:35	17:00	Molecular insights into the pattern formation of interfacial polymerized desalination polyamide membranes
O2.MM-15	11th July 2023	Room 8	17:00	17:25	Equilibrium separation phenomena in a simple lattice model of polymer membranes
O2.MM-16	11th July 2023	Room 8	17:25	17:50	Towards 90% CO ₂ Capture Ratio and 95% CO ₂ Purity: A Simulation Study of Pre-combustion Carbon Capture with Facilitated Transport Membranes
O2.OR-01	11th July 2023	Room 9	09:00	09:25	Poly(aryl ether ketone) hollow fibers spinning with acid-resistant spinneret for organic solvent nanofiltration
O2.OR-02	11th July 2023	Room 9	09:25	09:50	Polyamide composite membrane with 3D honeycomb-like structure fabricated via co-solvent regulated interfacial polymerization for high-efficiency organic solvent nanofiltration
O2.OR-03	11th July 2023	Room 9	09:50	10:15	Liquid phase peptide synthesis via one-pot nanostar-sieving (PEPSTAR)
O2.OR-04	11th July 2023	Room 9	10:15	10:40	Metal ion crosslinked microporous polymer membranes for organic solvent nanofiltration
O2.MB-05(KN)	11th July 2023	Room 9	11:10	11:35	Coupling horseradish peroxidase based bioreactor with membrane distillation: elucidating antibiotics degradation and membrane fouling mitigation
O2.MB-06	11th July 2023	Room 9	11:35	12:00	Development of MBR Operation Management Technology with Advanced Sludge Analysis Using Microscope and Original Simulation of MBR Performance.



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O2.MB-07	11th July 2023	Room 9	12:00	12:25	Development of MBR fouling reduction technology with estimating membrane fouling and chemical cleaning based on original simulation technology
O2.MB-08	11th July 2023	Room 9	12:25	12:50	An innovative combination of membrane reciprocation and quorum quenching for enhanced fouling mitigation in membrane bioreactors
O2.MB-09	11th July 2023	Room 9	14:00	14:25	In-situ biogas upgrading with H ₂ addition in a thermophilic anaerobic membrane bioreactor (AnMBR) digesting waste activated sludge
O2.MB-10	11th July 2023	Room 9	14:25	14:50	Control of membrane fouling in MBRs by using membranes modified with BisBAL chelates.
O2.MB-11	11th July 2023	Room 9	14:50	15:15	MBR)
O2.MB-12	11th July 2023	Room 9	15:15	15:40	
O2.MX-13(KN)	11th July 2023	Room 9	16:10	16:35	Advance temperature control in microporous hydrophobic membranes
O2.MX-14	11th July 2023	Room 9	16:35	17:00	Facile membrane preparation from colloidally stable Metal-Organic Framework polymer nanoparticles
O2.MX-15	11th July 2023	Room 9	17:00	17:25	Improving interfacial compatibility in microporous polymer-based MMMs with compatible functional groups
O2.MX-16	11th July 2023	Room 9	17:25	17:50	Preparation and characterization of sphere-shaped graphene nanomaterials and their uses in membrane applications
O2.MU-01	11th July 2023	Room 10	09:00	09:25	Rapid Modification of Janus PVDF Membrane Using Tannic Acid for Emulsion Separation
O2.MU-02	11th July 2023	Room 10	09:25	09:50	Thermally and Chemically Stable Isoporous Block Copolymer Membranes
O2.MU-03	11th July 2023	Room 10	09:50	10:15	PET membranes prepared from recycled polymer waste using phase inversion process from high temperature solutions
O2.MU-04	11th July 2023	Room 10	10:15	10:40	In-situ SAXS studies of phase separation in the air gap of a spinning process
O2.MU-05(KN)	11th July 2023	Room 10	11:10	11:35	Recent advances in development of polyacrylonitrile-based membranes
O2.MU-06	11th July 2023	Room 10	11:35	12:00	Development of polyketone (PK) membrane via liquid-liquid thermally induced phase separation
O2.MU-07	11th July 2023	Room 10	12:00	12:25	A polymeric membrane using water as solvent
O2.MU-08	11th July 2023	Room 10	12:25	12:50	
O2.MU-09	11th July 2023	Room 10	14:00	14:25	Effect of surface grafting poly (GMA-co-SBMA) on the CTA/cadmium telluride quantum dots membrane for ultrafiltration
O2.MU-10	11th July 2023	Room 10	14:25	14:50	Nanoengineered Carilon-Based Fibrous Membrane For Nanomaterial Rejections With Effective Thermal Calendaring
O2.MU-11	11th July 2023	Room 10	14:50	15:15	forces
O2.MU-12	11th July 2023	Room 10	15:15	15:40	
O2.WT-13(KN)	11th July 2023	Room 10	16:10	16:35	Arsenic trapping membranes using a new polymerizable ionic liquid
O2.WT-14	11th July 2023	Room 10	16:35	17:00	Sustainable drinking water processes enabled by novel hollow fiber nanofiltration membranes
O2.WT-15	11th July 2023	Room 10	17:00	17:25	Achieving the stable operation of a severely biofouled seawater reverse osmosis membrane facility by applying the latest in chemical technology
O2.WT-16	11th July 2023	Room 10	17:25	17:50	Membrane fractionation to understand biological stability of pre-treated groundwater at a full scale drinking water production plant
O2.MD-01(KN)	11th July 2023	Room 11	09:00	09:25	CFD modelling of flue gas separation with hollow fiber modules and experimental verification via 3D printing
O2.MD-02	11th July 2023	Room 11	09:25	09:50	Exploring the feasibility of membrane technology for direct air capture
O2.MD-03	11th July 2023	Room 11	09:50	10:15	3D Printing Technology for Separation and Purification



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O2.MD-04	11th July 2023	Room 11	10:15	10:40	Double-layered omniphobic electrospun membrane enhanced with anti-wetting and anti-scaling properties for membrane distillation
O2.MD-05(KN)	11th July 2023	Room 11	11:10	11:35	Strategies for tailoring the porous structure and filtration performance of polymeric membranes
O2.MD-06	11th July 2023	Room 11	11:35	12:00	Carbon molecular sieve membranes with integrally skinned asymmetric structure for organic solvent nanofiltration (OSN) and organic solvent reverse osmosis (OSRO)
O2.MD-07	11th July 2023	Room 11	12:00	12:25	Effects of substrate properties on forward osmosis membrane performance
O2.MD-08	11th July 2023	Room 11	12:25	12:50	A facile strategy to achieve macrovoid-free and skin-free polysulfone membranes via the NIPS process
O2.MD-09	11th July 2023	Room 11	14:00	14:25	Synthesis and fabrication of mechanically robust and mesoporous ABAC tetrablock polymer membranes for ultrafiltration
O2.MD-10	11th July 2023	Room 11	14:25	14:50	Sustainability & Scale-Up: An Evolution in Polymeric Membrane Manufacturing Using Green Solvents and Slot Die Coating for Water Treatment
O2.MD-11	11th July 2023	Room 11	14:50	15:15	Solution casting of Lithium ion selective membrane by polymer assisted particle segregation
O2.MD-12	11th July 2023	Room 11	15:15	15:40	Triple-layer nanofiber membrane with enhanced energy efficiency for desalination of high salinity solution using membrane distillation
O2.PB-13(KN)	11th July 2023	Room 11	16:10	16:35	Does energy production from pressure retarded osmosis a future, and if not, why not?
O2.PB-14	11th July 2023	Room 11	16:35	17:00	Experimental and simulation study of a commercial CTA hollow fiber membrane module in osmotically assisted reverse osmosis (OARO) toward various applications.
O2.PB-15	11th July 2023	Room 11	17:00	17:25	Long term membrane performance comparison of full scale Toyobo CTA HFMs in PRO at high applied hydraulic pressure
O2.PB-16	11th July 2023	Room 11	17:25	17:50	
P2-MC-01	11th July 2023	Poster Room	18:30	20:30	Membrane contactor for the recovery of ammonia from ammonia-rich semiconductor wastewater using concentrated acid as a strip solution
P2-MC-02	11th July 2023	Poster Room	18:30	20:30	Low energy-intensive biofuel production through membrane-based extraction
P2-MC-03	11th July 2023	Poster Room	18:30	20:30	Hollow fiber membrane for concentration of ginseng extract solution by direct contact membrane distillation using PVDF based membrane
P2-MC-04	11th July 2023	Poster Room	18:30	20:30	Numerical investigation of several geometric parameters' effects on CO ₂ absorption into MEA in membrane contactors
P2-MC-05	11th July 2023	Poster Room	18:30	20:30	Tuning porous hydrophobic membrane performance via hydrogel coatings
P2-MC-06	11th July 2023	Poster Room	18:30	20:30	Parameters of membrane contactor for the harvesting of ammonia from ammonia-rich wastewaters
P2-MC-07	11th July 2023	Poster Room	18:30	20:30	Construction of supported ionic liquid membrane contactor with dual crown ether functionalized polyimide mixed matrix membrane for highly selective Li ⁺ /Mg ²⁺ separation
P2-MD-01	11th July 2023	Poster Room	18:30	20:30	Study on the synergistic heat transfer of double boundary layers in the jacketed vacuum membrane distillation process
P2-MD-02	11th July 2023	Poster Room	18:30	20:30	Regulating PVDF Membrane Structure via Controlling Solvent-nonsolvent Exchange Rate by Two-step Coagulation in Non-solvent Induced Phase Separation
P2-MD-03	11th July 2023	Poster Room	18:30	20:30	Nanostructured ultrafiltration membranes prepared by a combination of unidirectional freezing and phase inversion approach - a breakthrough in ultrafiltration membrane performance



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P2-MD-04	11th July 2023	Poster Room	18:30	20:30	Development of heat-resistant hollow fiber membrane module and its application to food & beverage, bio-production process
P2-MD-05	11th July 2023	Poster Room	18:30	20:30	Understanding the impact of pores-trapped air on liquid entry pressure during direct contact membrane distillation
P2-MD-06	11th July 2023	Poster Room	18:30	20:30	DOFDA-ODA membrane prepared by employing a non-solvent induced phase separation for H ₂ /CH ₄ gas separation
P2-MD-07	11th July 2023	Poster Room	18:30	20:30	Development of a high-performance 30nm ptfе membrane
P2-MD-08	11th July 2023	Poster Room	18:30	20:30	Molecular dynamic simulation of zein protein membranes in Oxygen/Nitrogen separation
P2-MD-09	11th July 2023	Poster Room	18:30	20:30	Novel graphene oxide (GO) interlayered nanofibrous thin-film nanocomposite membrane towards high forward osmosis performances
P2-MD-10	11th July 2023	Poster Room	18:30	20:30	Development of cellulose triacetate hollow fiber type high permeability performance RO membrane for seawater desalination system
P2-MD-11	11th July 2023	Poster Room	18:30	20:30	Separation process intensification of isopropanol (IPA) and 1, 2 and 1,5 Pentane diol (PDO) mixture with pervaporation by hydrophobically tuned inside coated polydimethyl siloxane (PDMS) membranes in polyvinylidene fluoride (PVDF) hollowfiber
P2-MD-12	11th July 2023	Poster Room	18:30	20:30	Evaluation of PVDF separation membrane characteristics for application of thermally induced phase separation method
P2-MD-13	11th July 2023	Poster Room	18:30	20:30	Study on the PES membrane formation mechanism--macrovoid and bi-continuous structure
P2-MD-14	11th July 2023	Poster Room	18:30	20:30	Polymer membrane for separation performance and gas trasport modeling
P2-MD-15	11th July 2023	Poster Room	18:30	20:30	Preparation of isoporous flat sheet membranes via vapor-nonsolvent induced phase separation: bridging the gap between lab-scale study and pilot-scale fabrication
P2-MD-16	11th July 2023	Poster Room	18:30	20:30	Preparation of braid-reinforced hollow fiber membrane using composite braid polymers
P2-MD-17	11th July 2023	Poster Room	18:30	20:30	Preparation of polyamide-ceramic thin film composite RO/FO membranes with porous ceramic substrates
P2-MF-01	11th July 2023	Poster Room	18:30	20:30	Bipolar membrane with "Mortise-Tenon joint" Interface for Continuous Ammonia electrosynthesis at 1000 mA cm ⁻²
P2-MF-02	11th July 2023	Poster Room	18:30	20:30	Self-standing covalent organic frameworks membranes for flow battery
P2-MF-03	11th July 2023	Poster Room	18:30	20:30	Synthesis and performance testing of low-cost sPEEK/DCX proton exchange membranes for artificial photosynthesis.
P2-MF-04	11th July 2023	Poster Room	18:30	20:30	Core-shell Co ₃ O ₄ @NiCoMn phosphate on PANI-coated carbon cloth for solid-state hybrid asymmetric supercapacitor based PVA/KOH membrane
P2-MF-05	11th July 2023	Poster Room	18:30	20:30	High energy density, flexible, solid-state supercapacitors with amphiphilic comb P(VDF-co-CTFE)-g-POEM and 1D hierarchical carbon nanotube electrode
P2-MF-06	11th July 2023	Poster Room	18:30	20:30	Evaluation of the environment of water molecules in lyotropic liquid crystalline polymer electrolytes
P2-MF-07	11th July 2023	Poster Room	18:30	20:30	Effect of formate crossover on open circuit voltage in direct formate fuel cells by developing durable polyfluorene polyelectrolytes and pore-filing membrane methods
P2-MF-08	11th July 2023	Poster Room	18:30	20:30	UV-reactive formulations for the fabrication of hierarchical cation exchange membranes for artificial photosynthesis
P2-MF-09	11th July 2023	Poster Room	18:30	20:30	Molecular design for anion exchange membrane fuel cell high-temperature low humidity operation



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P2-MF-10	11th July 2023	Poster Room	18:30	20:30	Thin film composite membranes for alkaline water eletrolysis
P2-MF-11	11th July 2023	Poster Room	18:30	20:30	Development of nanofiber composite electrolyte membranes with high proton conductivity and durability for fuel cell applications
P2-MF-12	11th July 2023	Poster Room	18:30	20:30	Effects of thermal treatment of polymer nanofiber composite membranes on the proton-exchange properties
P2-MF-13	11th July 2023	Poster Room	18:30	20:30	Oriented intergrowth of the catalyst layer in membrane electrode assembly for alkaline water electrolysis
P2-MF-14	11th July 2023	Poster Room	18:30	20:30	Gyroid nanostructured polymer electrolyte membranes with a 3D continuous proton conduction pathway: conduction mechanism and new functions
P2-MF-15	11th July 2023	Poster Room	18:30	20:30	Asymmetric and Bi-continuously Structured Polyethersulfone (PES) Membranes for Lithium Metal Battery Application : Effects of Glycerol Contents
P2-MF-16	11th July 2023	Poster Room	18:30	20:30	Development of diaphragm using BaTiO ₃ with excellent alkali resistance for alkaline water electrolysis application
P2-MF-17	11th July 2023	Poster Room	18:30	20:30	Fuel cell application and characterization of polyphenylene oxide composite membrane introduced with quaternary ammonium
P2-MF-18	11th July 2023	Poster Room	18:30	20:30	Mesoporous inorganic membrane doped with phosphoric acid for high temperature protonic fuel cells
P2-MF-19	11th July 2023	Poster Room	18:30	20:30	The structure effect of hydrocarbon polymers on the cathodic binder in electrochemical systems using proton exchange membranes
P2-MF-20	11th July 2023	Poster Room	18:30	20:30	Preparation and characterization of anion exchange membrane with added ion exchange particles
P2-MF-21	11th July 2023	Poster Room	18:30	20:30	polymer
P2-MF-22	11th July 2023	Poster Room	18:30	20:30	electrolysis
P2-MF-23	11th July 2023	Poster Room	18:30	20:30	Engineering PEEK polymer synthesis and anion exchange membrane preparing and characterization for water electrolysis
P2-MF-24	11th July 2023	Poster Room	18:30	20:30	Development and evaluation of polybenzimidazole (PBI) nanofiber support under various conditions using electrospinning
P2-MF-25	11th July 2023	Poster Room	18:30	20:30	CFD Modeling and Simulation of Proton Exchange Membrane Fuel Cells
P2-MF-26	11th July 2023	Poster Room	18:30	20:30	performance
P2-MF-27	11th July 2023	Poster Room	18:30	20:30	Surface modified porous membrane with carboxymethyl cellulose for long stable zinc-based flow battery
P2-MF-28	11th July 2023	Poster Room	18:30	20:30	Metal-organic framework ion-sieving membrane towards vanadium flow battery energy storage
P2-MF-29	11th July 2023	Poster Room	18:30	20:30	A study on pore filled ion exchange membrane according to the characteristics of the substrate for anion exchange membrane fuel cell
P2-MF-30	11th July 2023	Poster Room	18:30	20:30	Preparation and characterization of composite membrane for performance improvement of chitosan-based anion exchange membrane
P2-MF-31	11th July 2023	Poster Room	18:30	20:30	Development of high IEC ether-free aromatic proton conducting membrane for high temperature polymer electrolyte fuel cell
P2-MF-32	11th July 2023	Poster Room	18:30	20:30	Impact of feed solutions on the power generation performance of a pilot-scale RED stack
P2-MH-01	11th July 2023	Poster Room	18:30	20:30	Vacuum-assisted MPD loading toward promoted nanoscale structure and enhanced water permeance of polyamide RO membrane
P2-MH-02	11th July 2023	Poster Room	18:30	20:30	Effects of sulfonation temperature and time on the thin crosslinked sulfonated polyphenylsulfone (CSPPSU) membranes



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P2-MH-03	11th July 2023	Poster Room	18:30	20:30	Synthesis of CO ₂ -philic PVIm-POEM comb copolymers via microphase separation for high CO ₂ separation performance
P2-MH-04	11th July 2023	Poster Room	18:30	20:30	Unveiling the Growth of Polyamide Nanofilms at Water/Organic Free Interfaces: Toward Enhanced Water/Salt Selectivity
P2-MH-05	11th July 2023	Poster Room	18:30	20:30	Effect of physical aging on the temperature dependence of gas permeation properties of polymer of intrinsic microporosity (PIM-1)
P2-MH-06	11th July 2023	Poster Room	18:30	20:30	Synthesis of single and bilayer MFI/BEA type zeolite membrane reactor
P2-MH-07	11th July 2023	Poster Room	18:30	20:30	Numerical calculations of membrane structure, virus removal performance, and filtration behavior of virus filters based on a heterogeneous membrane structural model comprising multiple layers with different pore size distributions
P2-MH-08	11th July 2023	Poster Room	18:30	20:30	Effect of temperature on the desalination process by electrodialysis
P2-MH-09	11th July 2023	Poster Room	18:30	20:30	Preparation of porous polyketone membranes modified with hydrophobic silica particles for water-in-oil emulsion separation
P2-MH-10	11th July 2023	Poster Room	18:30	20:30	Highly durable bipolar membranes for efficient energy conversion applications
P2-MH-11	11th July 2023	Poster Room	18:30	20:30	Heterogeneous ion-exchange membranes for efficient electro-membrane processes
P2-MH-12	11th July 2023	Poster Room	18:30	20:30	Polystyrene - polyvinylidene fluoride reinforced nanoparticles composite superhydrophobic Low-Cost membrane for seawater brine management
P2-MH-13	11th July 2023	Poster Room	18:30	20:30	Thermal Properties of PIM-1 Membranes
P2-MH-14	11th July 2023	Poster Room	18:30	20:30	Electrokinetic properties of microporous alumina membrane over a wide range of electrical conductivity and pH
P2-MH-15	11th July 2023	Poster Room	18:30	20:30	Quantitative evaluation of gradual hydrophobicity in micelles and vesicles composed of Span and Tween surfactants
P2-MH-16	11th July 2023	Poster Room	18:30	20:30	Preparation and characterization of lens-like vesicles made of Span40 and Tween40: a use of hydrothermal emulsification and solvent diffusion
P2-MM-01	11th July 2023	Poster Room	18:30	20:30	Patterns
P2-MM-02	11th July 2023	Poster Room	18:30	20:30	How simulation of mass and heat transfer help predicting chitosan membrane formation
P2-MM-03	11th July 2023	Poster Room	18:30	20:30	Modeling and structural characterization of amorphous TiO ₂ -SiO ₂ membrane materials by molecular dynamics and X-ray analysis
P2-MM-04	11th July 2023	Poster Room	18:30	20:30	Novel Anti-fouling Polymer Structures Suggested by Machine Learning
P2-MM-05	11th July 2023	Poster Room	18:30	20:30	Mesoscale structural analysis of water in RO membranes by dissipative particle dynamics
P2-MM-06	11th July 2023	Poster Room	18:30	20:30	Mixed ion partitioning into crosslinked poly(ethylene glycol) diacrylate membranes
P2-MM-07	11th July 2023	Poster Room	18:30	20:30	CFD simulation on the design and performance of zeolite membranes for SF ₆ recovery
P2-MM-08	11th July 2023	Poster Room	18:30	20:30	PMMOTO: A parallel toolkit for analyzing molecular-scale membrane morphology and topology
P2-MM-09	11th July 2023	Poster Room	18:30	20:30	An Osmotic Battery Integrating Reverse Osmosis and Pressure-retarded Osmosis for Grid-Scale Energy Storage
P2-MM-10	11th July 2023	Poster Room	18:30	20:30	A simplified computational chemistry approach to accelerate the molecular design of temperature-responsive materials



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P2-MM-11	11th July 2023	Poster Room	18:30	20:30	A Study on Ionomer Dispersion in the Catalyst Slurry Solution for Proton Exchange Membrane Fuel Cell by Molecular Dynamics Simulation.
P2-MM-12	11th July 2023	Poster Room	18:30	20:30	Simulations on the formation of NIPS polymer membrane under tension
P2-MM-13	11th July 2023	Poster Room	18:30	20:30	Molecular simulation of organic solvent reverse osmosis separation in microporous ceramic membranes
P2-MM-14	11th July 2023	Poster Room	18:30	20:30	Effects of sidechain lengths of perfluorinated ionomers as binders using molecular dynamics simulation
P2-MM-15	11th July 2023	Poster Room	18:30	20:30	MD Simulation Study on the Mechanical Property of Ion Exchange Membranes for Fuel Cells
P2-MM-16	11th July 2023	Poster Room	18:30	20:30	Modeling water transport through thin film composite membranes
P2-MM-17	11th July 2023	Poster Room	18:30	20:30	How 2D nanoflakes improve transport in mixed matrix membranes: insights from a simple lattice model and Dynamic Mean Field Theory
P2-MM-18	11th July 2023	Poster Room	18:30	20:30	phenomena
P2-MM-19	11th July 2023	Poster Room	18:30	20:30	Developing a criterion for the selection of 1D or 2D in modelling a dehydrogenation reaction in a catalytic membrane reactor
P2-MM-20	11th July 2023	Poster Room	18:30	20:30	Solute–phase affinity enhanced separation in green-supported liquid membranes
P2-MM-21	11th July 2023	Poster Room	18:30	20:30	Origins of the different antifouling properties of poly(2-methoxyethyl acrylate) and poly(2-hydroxyethyl methacrylate): Molecular dynamics study
P2-MM-22	11th July 2023	Poster Room	18:30	20:30	Functional ionic liquid crystal membranes based on gallic acid derivatives: a computational study
P2-MM-23	11th July 2023	Poster Room	18:30	20:30	Controlling the Stability of Oxidized Graphene-Based Membranes in Aqueous Environment
P2-MM-24	11th July 2023	Poster Room	18:30	20:30	Chemomertic methods in the search for modifiers of ceramic membranes
P2-MP-01	11th July 2023	Poster Room	18:30	20:30	Tb(III)-based macrocyclic framework and its mixed-matrix membrane as methyl amine turn-on sensor
P2-MP-02	11th July 2023	Poster Room	18:30	20:30	Membrane assisted on-site bioethanol production from food waste
P2-MP-03	11th July 2023	Poster Room	18:30	20:30	Catanionic Surfactant Self-Assembly System Assessed from Membrane Properties
P2-MP-04	11th July 2023	Poster Room	18:30	20:30	Membrane Distillation and Crystallization for Treating Hydraulic Fracturing Produced Water
P2-MP-05	11th July 2023	Poster Room	18:30	20:30	New hybrid concentrated photovoltaic/membrane distillation unit for simultaneous freshwater and electricity production
P2-MP-06	11th July 2023	Poster Room	18:30	20:30	electrodialysis
P2-MP-07	11th July 2023	Poster Room	18:30	20:30	Membrane humidity separator in microgravity
P2-MP-08	11th July 2023	Poster Room	18:30	20:30	Intensification of bio production of hydrogen from waste biomass using nanofiltration
P2-MP-09	11th July 2023	Poster Room	18:30	20:30	Evaluating effects of chemical precipitation parameters on the fouling of submerged ultrafiltration membrane for textile wastewater reclamation
P2-MP-10	11th July 2023	Poster Room	18:30	20:30	Hydroformylation in an extractor type membrane reactor: dimensionless analysis
P2-MP-11	11th July 2023	Poster Room	18:30	20:30	CUMERI – Customized membranes for green and resilient industries
P2-MP-12	11th July 2023	Poster Room	18:30	20:30	Field demonstration of intensified membrane distillation for treating hypersaline hydraulic fracturing produced water
P2-MP-13	11th July 2023	Poster Room	18:30	20:30	Key parameters affecting CaCO ₃ properties in a membrane–assisted crystallization process
P2-MU-01	11th July 2023	Poster Room	18:30	20:30	Dopamine initiated graft copolymerization of hydrophilic poly(methacrylate) on ultrafiltration poly(acrylonitrile) membranes for highly efficient dye/salt separation
P2-MU-02	11th July 2023	Poster Room	18:30	20:30	Fabrication of high-flux asymmetric polyethersulfone (PES) ultrafiltration membranes by H ₂ O additive in the dope



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P2-MU-03	11th July 2023	Poster Room	18:30	20:30	Mixed solvent phase separation membranes for the enhanced performance of produced water treatment
P2-MU-04	11th July 2023	Poster Room	18:30	20:30	Understanding organic solvent filtration via electrical impedance spectroscopy (EIS)
P2-MU-05	11th July 2023	Poster Room	18:30	20:30	Compression of CHO cells during microfiltration
P2-MU-06	11th July 2023	Poster Room	18:30	20:30	Purification of salt-derived brine from tannery industry by a hybrid method
P2-MU-07	11th July 2023	Poster Room	18:30	20:30	Precision-tuning of membrane pore structure of hollow fiber membrane prepared by non-solvent induced phase separation
P2-MU-08	11th July 2023	Poster Room	18:30	20:30	Effect of hydrothermal treatment on regenerated cellulose ultrafiltration membrane
P2-MX-01	11th July 2023	Poster Room	18:30	20:30	Size effect of MOF particles embedded in polymeric membranes on the CO ₂ separation performance
P2-MX-02	11th July 2023	Poster Room	18:30	20:30	In-situ growth of ZIF-8 into PVC-g-POEM matrix with high CO ₂ separation performance via interfacial engineering
P2-MX-03	11th July 2023	Poster Room	18:30	20:30	Homochiral polymer-graphene oxide membrane for enantioselective separation
P2-MX-04	11th July 2023	Poster Room	18:30	20:30	Functionalized CNTs/Poly(lactic acid) Mixed Matrix Membrane for Oil Water Separation
P2-MX-05	11th July 2023	Poster Room	18:30	20:30	Incorporated LDH-based facilitated transport channel in ternary mixed matrix membranes for CO ₂ capture
P2-MX-06	11th July 2023	Poster Room	18:30	20:30	High-performance thin-film composite mixed-matrix membrane based on micron-sized UTSA-16 filler for CO ₂ separation
P2-MX-07	11th July 2023	Poster Room	18:30	20:30	Pressure dependence of gas permeation properties of PIM-1 composite membranes loaded with surface-modified silica nanoparticles
P2-MX-08	11th July 2023	Poster Room	18:30	20:30	Effect of solvents on asymmetric polyimide membranes containing surface-modified silica nanoparticles by dry-wet phase inversion process
P2-MX-09	11th July 2023	Poster Room	18:30	20:30	Investigation on the effects of 2D metal-organic framework nanosheets embedded in a self-polymerized membrane for efficient CO ₂ /N ₂ separation
P2-MX-10	11th July 2023	Poster Room	18:30	20:30	Sustainable Food-Water-Energy Nexus: Synchronising 2-D materials and Polymers in Membrane Fabrication for Precise Liquid Separation
P2-MX-11	11th July 2023	Poster Room	18:30	20:30	Molecular simulations of three component mixed matrix membranes for CO ₂ separation applications: design and microstructure description
P2-MX-12	11th July 2023	Poster Room	18:30	20:30	Gas permselectivity of thermally rearranged (TR) polybenzoxazole – silica hybrid membranes
P2-MX-13	11th July 2023	Poster Room	18:30	20:30	Hydrophilicity controlled kaolinite by the exfoliation method to enhance affinity with hydrophilic or organophilic mixed matrix membrane
P2-MX-14	11th July 2023	Poster Room	18:30	20:30	Preparation of zeolite-4A@MOF crystal as a filler for Mixed matrix membranes (MMMs)
P2-MX-15	11th July 2023	Poster Room	18:30	20:30	Thin film nanocomposite reverse osmosis membranes blended with porous aromatic network polymers via interfacial polymerization
P2-MX-16	11th July 2023	Poster Room	18:30	20:30	Effect of filler structural integrity on separation performance of mixed-matrix membranes: an important yet overlooked issue
P2-MX-17	11th July 2023	Poster Room	18:30	20:30	Influence of interfacial compatibility on mixed matrix membranes performance
P2-MX-18	11th July 2023	Poster Room	18:30	20:30	MOF@zeolite core-shell structured filler for fabrication of defect-free mixed-matrix membranes for enhanced CO ₂ separation
P2-MX-19	11th July 2023	Poster Room	18:30	20:30	Shear-exfoliated Few-layer Graphene and Polyimide Membrane for Enhancing Gas Barrier and Mechanical Properties



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P2-MX-20	11th July 2023	Poster Room	18:30	20:30	Pillar[5]arene-integrated TFC membranes with characteristically interconnected microvoid structures to separate light gases
P2-MX-21	11th July 2023	Poster Room	18:30	20:30	CO ₂ -philic Oxadiazole Crosslinked Mixed Matrix Membranes with Enhanced Filler/Matrix Interfacial Compatibility for Efficient Gas Separation
P2-MX-22	11th July 2023	Poster Room	18:30	20:30	Assessing the aqueous stability of metal-organic frameworks for application in liquid water environments
P2-MX-23	11th July 2023	Poster Room	18:30	20:30	Printable MOF-polymer composites for molecular separation
P2-MX-24	11th July 2023	Poster Room	18:30	20:30	High Compatible Mixed Matrix Membrane Using Amine Functionalized ZIF-8 into Microporous Polymer (PIM) for Efficient Gas Separation
P2-MX-25	11th July 2023	Poster Room	18:30	20:30	Novel hybrid covalent organic framework based membrane for the effective removal of Rhodamine B
P2-MX-26	11th July 2023	Poster Room	18:30	20:30	Constructing POMbranes by conjugated microporous polymer for sieving divalent ions
P2-MX-27	11th July 2023	Poster Room	18:30	20:30	Harnessing the power of MWCNTs/UiO-66-NH ₂ hybrid nanostructures to enhance the performance and anti-fouling characteristics of thin film composite forward osmosis membranes
P2-NF-01	11th July 2023	Poster Room	18:30	20:30	Guanidyl-incorporated nanofiltration membranes toward superior Li ⁺ /Mg ²⁺ selectivity under weakly alkaline environment
P2-NF-02	11th July 2023	Poster Room	18:30	20:30	Carbon nanotube interlayered nanofiltration membrane with enhanced water permeance and antifouling performance
P2-NF-03	11th July 2023	Poster Room	18:30	20:30	The regulation of the chargeability and spatial microstructure of nanofiltration membrane separation layer
P2-NF-04	11th July 2023	Poster Room	18:30	20:30	Porous substrate affects fouling propensity of thin-film composite nanofiltration membranes
P2-NF-05	11th July 2023	Poster Room	18:30	20:30	Waste water treatment by using novel tublar RO/NF membrane module
P2-NF-06	11th July 2023	Poster Room	18:30	20:30	A new highly lithium-selective nanofiltration membrane with greatly improved acid resistance and its application to resource recovery
P2-NF-07	11th July 2023	Poster Room	18:30	20:30	Development of nanofiltration membrane with crumpled polyamide nanofilm toward enhanced desalination performance
P2-NF-08	11th July 2023	Poster Room	18:30	20:30	Structure retention and polymerization of nanofiltration membrane active layer templated from hexagonal lyotropic liquid crystal
P2-NF-09	11th July 2023	Poster Room	18:30	20:30	Asymmetric polyelectrolyte multilayer membranes: lab-scale research and potential for scaling-up
P2-NF-10	11th July 2023	Poster Room	18:30	20:30	nanofiltration
P2-NF-11	11th July 2023	Poster Room	18:30	20:30	Comparison of perfluoroalkyl substances removal using polymeric and ceramic nanofiltration membranes with magnetic activated carbon
P2-NF-12	11th July 2023	Poster Room	18:30	20:30	Interlayered thin film nanocomposite membranes for micropollutants removal
P2-NF-13	11th July 2023	Poster Room	18:30	20:30	High-performance ultrafiltration and nanofiltration membranes based on poly(m-phenylene isophthalamide) material
P2-NF-14	11th July 2023	Poster Room	18:30	20:30	Complexation of cellulose nanocrystal and amine monomer for interfacial polymerization of nanofiltration membrane
P2-NF-15	11th July 2023	Poster Room	18:30	20:30	Ion-specific effects on the charge and performance of polyamide nanofiltration membranes
P2-NF-16	11th July 2023	Poster Room	18:30	20:30	Interfacial polymerized organic-inorganic hybrid nanofiltration composite membranes for dye/salt separation
P2-NM-01	11th July 2023	Poster Room	18:30	20:30	Fly ash based functional materials: synthesis, application in BTEX removal and the future of ceramic membranes



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P2-NM-02	11th July 2023	Poster Room	18:30	20:30	Kevlar hydrogel assisted interfacial polymerization for high performance nanofiltration membranes
P2-NM-03	11th July 2023	Poster Room	18:30	20:30	Laser induced graphene filters and membranes fabrication and application in desalination and wastewater treatment
P2-NM-04	11th July 2023	Poster Room	18:30	20:30	Steering solvent-free membrane fabrication to industrial demands
P2-NM-05	11th July 2023	Poster Room	18:30	20:30	Membranes with ionic-liquid-activated surfaces designed for virus capture and deactivation
P2-NM-06	11th July 2023	Poster Room	18:30	20:30	PVDF-Gd ₂ O ₃ bioinspired materials with 3D surface nano-architecture
P2-NM-07	11th July 2023	Poster Room	18:30	20:30	THV-chitosan composite membranes – new materials with enhance feates
P2-NM-08	11th July 2023	Poster Room	18:30	20:30	Membranes with surficial spherical nanoarchitecture - material relevance in premix membrane emulsification emulsion formulation
P2-NM-09	11th July 2023	Poster Room	18:30	20:30	Development and Modelling of Sustainable Membranes for Gas Separation and Packaging
P2-NM-10	11th July 2023	Poster Room	18:30	20:30	New sustainable routes for gas separation membranes: an experimental and modeling assessment of polyhydroxyalkanoates
P2-NM-11	11th July 2023	Poster Room	18:30	20:30	Esters of nature-identical engineered polysaccharides as new materials with tunable transport properties
P2-NM-12	11th July 2023	Poster Room	18:30	20:30	Tunable Nanostructured Stainless-steel Coating for Ultra-selective and Ultra-permeable Separation Membranes for Oil/water Emulsions
P2-OR-01	11th July 2023	Poster Room	18:30	20:30	Carbon molecular sieve membranes with integrally skinned asymmetric structure for organic solvent nanofiltration (OSN) and organic solvent reverse osmosis (OSRO)
P2-OR-02	11th July 2023	Poster Room	18:30	20:30	Elucidating the role of MOF pore size on OSN performance of microporous polymer-based MMMs
P2-OR-03	11th July 2023	Poster Room	18:30	20:30	Hydrophobic polyamide nanofilms provide rapid transport for crude oil separation
P2-OR-04	11th July 2023	Poster Room	18:30	20:30	Hydrophobic polyamide nanofilms provide rapid transport for crude oil separation
P2-OR-05	11th July 2023	Poster Room	18:30	20:30	Kinetic differentiation of liquid hydrocarbons in shape-selective carbon membrane via organic solvent forward osmosis
P2-OR-06	11th July 2023	Poster Room	18:30	20:30	Beyond rejection: bridging the gap between materials and nanofiltration processes with predictive modeling
P2-OR-07	11th July 2023	Poster Room	18:30	20:30	Preparation of thin-film nanocomposite organic solvent nanofiltration membrane via hexadecanoyl chloride modified UiO-66 incorporated in polyamide layer for high-permeability
P2-OR-08	11th July 2023	Poster Room	18:30	20:30	Data-driven predictions of complex mixture permeation in polymer membranes
P2-OR-09	11th July 2023	Poster Room	18:30	20:30	Sustainable Fabrication of Biodegradable Cellulose Membranes for Organic Solvent Nanofiltration
P2-OR-10	11th July 2023	Poster Room	18:30	20:30	Preparation of organic solvent nanofiltration membrane using high-durability polymer
P2-OR-11	11th July 2023	Poster Room	18:30	20:30	Molecular dynamics simulation study of polyamide membrane structures for organic solvent reverse osmosis (OSRO)
P2-OR-12	11th July 2023	Poster Room	18:30	20:30	Hyper-crosslinked polymer molecular sieve membranes for advanced OSN/OSRO
P2-OR-13	11th July 2023	Poster Room	18:30	20:30	Nanoengineered green polymer blends for nanofiltration
P2-OR-14	11th July 2023	Poster Room	18:30	20:30	Cellulose-based Green Supports for Organic Solvent Nanofiltration (OSN) Membranes
P2-OR-15	11th July 2023	Poster Room	18:30	20:30	Electrospun Polyamide Polyketone Membrane For OSRO Separation
P2-OR-16	11th July 2023	Poster Room	18:30	20:30	The challenge of scaling membrane fabrication from bench to roll-to-roll: PEEK membranes
P2-OR-17	11th July 2023	Poster Room	18:30	20:30	Crosslinking of polybenzimidazole membrane for improved organic solvent nanofiltration performance
P2-OR-18	11th July 2023	Poster Room	18:30	20:30	Effect of acetonitrile in the preparation of polybenzimidazole membrane for organic solvent nanofiltration



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P2-OR-19	11th July 2023	Poster Room	18:30	20:30	The performance of amino-functionalized metal-organic frameworks incorporated into thin film nanocomposite membrane for organic solvent nanofiltration
P2-OR-20	11th July 2023	Poster Room	18:30	20:30	Ionic liquids separation from organic solvent using silicone-based composite membrane
P2-OR-21	11th July 2023	Poster Room	18:30	20:30	Osmotically assisted reverse osmosis (OARO) process for the concentration and recovery of organic solvents in industrial wastewater
P2-OR-22	11th July 2023	Poster Room	18:30	20:30	Effect of pore forming agent on the porous structure of PDMS membranes and solvent recovery by low-pressure membrane filtration from an ink solution
P2-OR-23	11th July 2023	Poster Room	18:30	20:30	Just Click 'em Together: Controlling Swelling in New Polymers of Intrinsic Microporosity by Cross-linking with the CuAAC Reaction
P2-OR-24	11th July 2023	Poster Room	18:30	20:30	Separation and purification of plastic waste pyrolysis oils using organic solvent nanofiltration
P2-OS-01	11th July 2023	Poster Room	18:30	20:30	separation
P2-OS-02	11th July 2023	Poster Room	18:30	20:30	Effect of Chemical structure of the polymer-based draw solute on solute leakage through forward osmosis membrane
P2-OS-03	11th July 2023	Poster Room	18:30	20:30	Development of organic solvent forward osmosis membrane for pharmaceutical production processes
P2-OS-04	11th July 2023	Poster Room	18:30	20:30	Novel membrane systems for non-heated and non-pressurized concentration
P2-OS-05	11th July 2023	Poster Room	18:30	20:30	Ultra-fast mass transport through Janus forward osmosis membranes: Performance and mechanism
P2-OS-06	11th July 2023	Poster Room	18:30	20:30	Heavy metals removal by forward osmosis process with zeolite membrane
P2-RO-01	11th July 2023	Poster Room	18:30	20:30	Co-solvent assisted interfacial polymerization toward regulating morphology and performance of polyamide reverse osmosis membranes
P2-RO-02	11th July 2023	Poster Room	18:30	20:30	Fundamental investigation on controlling factors of permeability of organic solvents in silicone membrane
P2-RO-03	11th July 2023	Poster Room	18:30	20:30	Relationship between fluorine content of the fluorine-based polyamide membrane and the permeance of organic solvents
P2-RO-04	11th July 2023	Poster Room	18:30	20:30	waters
P2-RO-05	11th July 2023	Poster Room	18:30	20:30	Degradation diagnosis of chlorine-exposed polyamide reverse osmosis membrane by electrochemical impedance spectroscopy
P2-RO-06	11th July 2023	Poster Room	18:30	20:30	Preparation and Characterization of high permeability reverse osmosis membrane using interfacial polymerization
P2-RO-07	11th July 2023	Poster Room	18:30	20:30	ATRP
P2-RO-08	11th July 2023	Poster Room	18:30	20:30	Effect of feed spacer on mass transfer coefficient and calcium sulfate scaling phenomena in reverse osmosis desalination
P2-SP-01	11th July 2023	Poster Room	18:30	20:30	Self-standing, electrically-conductive, silane-crosslinked, symmetric alginate nanofiltration membranes: Tweaking the performance
P2-SP-02	11th July 2023	Poster Room	18:30	20:30	Constructing discontinuous silicon-island structure with low surface energy based on the responsiveness of hydrophilic layers to improve the anti-fouling property of membranes
P2-SP-03	11th July 2023	Poster Room	18:30	20:30	Novel Positively Charged Metal-Coordinated Nanofiltration Membrane for Lithium/Magnesium Separation
P2-SP-04	11th July 2023	Poster Room	18:30	20:30	In-situ grafting of hydrophilic molecules on hollow fiber membranes using electron beam modification
P2-SP-05	11th July 2023	Poster Room	18:30	20:30	Molecular layer by layer synthesis of polyacrylonitrile-supported oligoamide membrane for efficient removal of PFAS pollutants



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P2-SP-06	11th July 2023	Poster Room	18:30	20:30	Preparation of COF nanoparticles-hydrogel modified membranes for removal of PFAS pollutants: Effect of COF density and hydrogel chemistry
P2-SP-07	11th July 2023	Poster Room	18:30	20:30	Nano hydrophilic layer developed by atmospheric-pressure plasma to improve dehydration performance of organosilia membranes
P2-SP-08	11th July 2023	Poster Room	18:30	20:30	via metal-free atom transfer radical polymerization for highly efficient removal of particulate pollutants in water.
P2-SP-09	11th July 2023	Poster Room	18:30	20:30	Electrified liquid separations membranes made of functionalized poly-ether ether ketone blended with polysulfone
P2-SP-10	11th July 2023	Poster Room	18:30	20:30	Harnessing the power of surface modification for developing nanoplastic-resistant membranes for water/wastewater treatment
P2-SP-11	11th July 2023	Poster Room	18:30	20:30	Silk sericin-coated polyamide thin-film composite membranes with anti-scaling properties
P2-SP-12	11th July 2023	Poster Room	18:30	20:30	Structural optimization of Pebax-based composite membrane for high-efficiency CO ₂ capture
P2-SP-13	11th July 2023	Poster Room	18:30	20:30	Hybridization of advanced membrane processes for a blue economy at the water-energy nexus
P2-SP-14	11th July 2023	Poster Room	18:30	20:30	Fabrication of anti-leakage Hyflon/Poly(4-methyl-1-pentene) hollow fiber composite membrane for Extra-corporeal Membrane Oxygenation (ECMO) system
P2-SP-15	11th July 2023	Poster Room	18:30	20:30	Proton-blocking anion-exchange membranes modified by various structures of amine compounds
P2-SP-16	11th July 2023	Poster Room	18:30	20:30	Development of highly crosslinked biodegradable polyethylene glycol membranes and its surface modification using inkjet printing
P2-SP-17	11th July 2023	Poster Room	18:30	20:30	Investigation of Novel Low-Fouling Polymerisable Bicontinuous Microemulsion Layer Spray Coated on UF PES Membranes for MBR Application
P2-SP-18	11th July 2023	Poster Room	18:30	20:30	Advancing Water Filtration Technologies with 3D Printing: Fabrication of Surface-Patterned Membranes with Lower Organic Fouling and Higher Permeability
P2-VP-01	11th July 2023	Poster Room	18:30	20:30	Experimental study of water vapor permeation performance through PFSA capillary membranes in a wide range of conditions and analysis via the solution-diffusion model
P2-VP-02	11th July 2023	Poster Room	18:30	20:30	Effect of Polysulfone polymer concentration on pervaporation dehydration of ethanol-water mixture
P2-VP-03	11th July 2023	Poster Room	18:30	20:30	Fabricating MOF-303 via mixed-linker strategy to stabilize structure and enhance pervaporation performance for alcohol dehydration
P2-VP-04	11th July 2023	Poster Room	18:30	20:30	Electrospun PDMS/CNT-PVDF membrane for ammonia recovery in wastewater using membrane distillation
P2-VP-05	11th July 2023	Poster Room	18:30	20:30	SPEEK-based membranes for energy-efficient separation in dehumidification applications
P2-VP-06	11th July 2023	Poster Room	18:30	20:30	Surface and pathway increased polyvinyl alcohol-carboxymethyl cellulose(PVA-CMC) membrane for pervaporation dehydration of epichlorohydrin(ECH)/isopropanol(IPA)/water ternary feed mixture
P2-VP-07	11th July 2023	Poster Room	18:30	20:30	Study on ammonia recovery and concentration via membrane distillation process
P2-VP-08	11th July 2023	Poster Room	18:30	20:30	Enhancement of vacuum-assisted air gap membrane distillation performance by incorporation of clay nanoparticles in PVDF electrospun nanofiber membranes for water desalination
P2-VP-09	11th July 2023	Poster Room	18:30	20:30	Zwitterionic silicon quantum dots polyamide membrane for pervaporation dehydration of isopropanol
P2-VP-10	11th July 2023	Poster Room	18:30	20:30	Effect of carboxybetaine dopamine nanoparticles modified polyamide composite membranes fabricated by interfacial polymerization on pervaporation separation



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P2-VP-11	11th July 2023	Poster Room	18:30	20:30	Sodium alginate composite membrane blended with polyoxometalates for pervaporation dehydration of isopropanol aqueous solution
P2-VP-12	11th July 2023	Poster Room	18:30	20:30	Improved pervaporation dehydration performance of thin-film nanocomposite membrane induced by incorporating functionalized 2D MoS ₂
P2-VP-13	11th July 2023	Poster Room	18:30	20:30	Preparation of cellulose ester membranes containing quaternary ammonium salts for dehumidification
P2-WT-01	11th July 2023	Poster Room	18:30	20:30	systems
P2-WT-02	11th July 2023	Poster Room	18:30	20:30	Near dissolved organic matter microfiltration (NDOM MF) coupled with UVC LED disinfection to maximize the efficiency of water treatment for the removal of Giardia and Cryptosporidium
P2-WT-03	11th July 2023	Poster Room	18:30	20:30	Solar Steam Generator with Highly Water-Permeable Metal-Organic Framework Membranes
P2-WT-04	11th July 2023	Poster Room	18:30	20:30	Photocatalytic membranes of hierarchical porous nanoisland structure using PGMA-co-POEM comb copolymer and TTIP
P2-WT-05	11th July 2023	Poster Room	18:30	20:30	wastewater
P2-WT-06	11th July 2023	Poster Room	18:30	20:30	Robust loose nanofiltration membrane with fast solute transfer for dye/salt separation
P2-WT-07	11th July 2023	Poster Room	18:30	20:30	Enhancing stability of tannic acid-Fe III nanofiltration membrane for water treatment: Intercoordination by metal-organic framework
P2-WT-08	11th July 2023	Poster Room	18:30	20:30	Improving removal efficiency of various micropollutants from water by polymer-enhanced ultrafiltration using oxidized alginate featuring less viscous and lower fouling tendency
P2-WT-09	11th July 2023	Poster Room	18:30	20:30	Directly blended graphene oxide on poly(vinyl pyrrolidone) functionalized poly(vinylidene fluoride) composite membranes for effective removal of various charged dyes and their antifouling effects
P2-WT-10	11th July 2023	Poster Room	18:30	20:30	Hollow fiber membrane for water treatment created and characterized utilizing EVOH polymer
P2-WT-11	11th July 2023	Poster Room	18:30	20:30	The potential of cobalt-incorporated AlPO ₄ -5 fillers in the separation enhancement and organic fouling mitigation of polyethersulfone ultrafiltration membranes
P2-WT-12	11th July 2023	Poster Room	18:30	20:30	Adsorption of tryptophan from water using dynamic membrane (DM) filtration system
P2-WT-13	11th July 2023	Poster Room	18:30	20:30	Surface modification of PES/aPEEK TFC membrane for Wastewater Treatment
P2-WT-14	11th July 2023	Poster Room	18:30	20:30	CQDs/TiO ₂ /PES tubular ultrafiltration membranes for heavy metal separation
P2-WT-15	11th July 2023	Poster Room	18:30	20:30	Investigation of zwitterionic carbon quantum dots added into cellulose acetate/thermoplastic polyurethane ultrafiltration membrane for copper ions separation
P2-WT-16	11th July 2023	Poster Room	18:30	20:30	SophiA: Sustainable Off Grid Water Technologies for Drinking and Deionised Water for Hospitals in Africa
P2-WT-17	11th July 2023	Poster Room	18:30	20:30	The use of combined membrane technologies for the concentration of chloride-type wastewater
P2-WT-18	11th July 2023	Poster Room	18:30	20:30	Development of prediction model platform for turbidity in water treatment plant
P2-WT-19	11th July 2023	Poster Room	18:30	20:30	A unique approach to the preparation of biofouling-resistant ultrafiltration membranes
P2-WT-20	11th July 2023	Poster Room	18:30	20:30	Submerged vacuum membrane distillation for nutrient recovery from anaerobic digestate
P2-WT-21	11th July 2023	Poster Room	18:30	20:30	Novel QD-incorporated PVDF membrane for in-situ fouling detection
P2-WT-22	11th July 2023	Poster Room	18:30	20:30	Facile self-assembly-based fabrication of a polyvinylidene fluoride nanofiber membrane with immobilized titanium dioxide nanoparticles for dye wastewater treatment
P2-WT-23	11th July 2023	Poster Room	18:30	20:30	Uncovering the potential of nanofiltration membranes for removal of ammonia, nitrate, and nitrite
O3.MP-01	11th July 2023	Room 1	09:00	09:25	Realizing Enhanced Thermal Storage and Water Production in a pilot-scale hybrid MD-CSP/PV



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O3.MP-02	12th July 2023	Room 1	09:25	09:50	Concentration of isopropanol using pervaporation pilot-scale system and simulation of membrane performance in a single-stage process
O3.MP-03	12th July 2023	Room 1	09:50	10:15	Development and Industrial-Scale Fabrication of Next-Generation Low-Energy Membranes for Desalination
O3.MP-04	12th July 2023	Room 1	10:15	10:40	
O3.BD-05(KN)	12th July 2023	Room 1	11:10	11:35	Virus adhesion to archetypal membrane surfaces: Implications for virus removal in water treatment systems
O3.BD-06	12th July 2023	Room 1	11:35	12:00	Factors influencing performance of ion exchange membrane chromatography for protein purification
O3.BD-07	12th July 2023	Room 1	12:00	12:25	Development of PEG-coated PFOB/PLC core-shell microparticles via SPG membrane emulsification to prevent MΦ phagocytosis
O3.AS-01	12th July 2023	Room 1	15:10	15:35	The Aseanian Membrane Society: Council Meeting
O3.AS-02	12th July 2023	Room 1	15:35	16:00	
O3.AS-03	12th July 2023	Room 1	16:00	16:25	
O3.AS-04	12th July 2023	Room 1	16:25	16:50	
O3.SK-01	12th July 2023	Room 1	17:10	17:30	In Memory of Professor Shoji Kimura
O3.SK-02	12th July 2023	Room 1	17:30	17:50	Prof. Shoji Kimura contributions to Membrane Science
O3.SK-03	12th July 2023	Room 1	17:50	18:10	Remembering my friend and colleague: Professor Shoji Kimura
O3.SK-04	12th July 2023	Room 1	18:10	18:30	Prof. Shoji Kimura, pioneer and world leader of membrane R & D
O3.SK-05	12th July 2023	Room 1	18:30	18:50	Prof. Shoji Kimura Contribution to Desalination around the world
O3.FL-01	12th July 2023	Room 2	09:00	09:25	Nanobubble-assisted chemical free pretreatment for delay wetting and scaling in membrane distillation
O3.FL-02	12th July 2023	Room 2	09:25	09:50	Design of Experiments to Optimize Membrane Cleaning for Nanofiltration of Kraft Black Liquor
O3.FL-03	12th July 2023	Room 2	09:50	10:15	Qualifying membrane cleaning efficiency by the streaming potential
O3.FL-04	12th July 2023	Room 2	10:15	10:40	
O3.FL-05	12th July 2023	Room 2	11:10	11:35	Antibiofouling Laser-Induced Graphene Electroconductive Filters and Membranes
O3.FL-06	12th July 2023	Room 2	11:35	12:00	Effect of Protein Fouling on Filtrate Flux and Virus Breakthrough Behaviors during Virus Filtration Process
O3.FL-07	12th July 2023	Room 2	12:00	12:25	Inhibition of Silica Polymerization with Functional Polymers for Silica Scale Mitigation in Reverse Osmosis Desalination
O3.ES-01	12th July 2023	Room 2	15:10	15:35	Intelligent Water Treatment for water preservation combined with simultaneous energy production and material recovery in energy intensive industries. The intelWATT project
O3.ES-02	12th July 2023	Room 2	15:35	16:00	Resilient water innovation for smart economy with membrane technology
O3.ES-03	12th July 2023	Room 2	16:00	16:25	Membrane contactors for CO ₂ capture and purification Unit at demonstrator scale on industrial operating conditions
O3.ES-04	12th July 2023	Room 2	16:25	16:50	Demonstration of concentrated solar power coupled with advanced desalination system in the gulf region
O3.GS-01	12th July 2023	Room 3	09:00	09:25	Hydrogen sulfide permeation and hydrocarbon separation properties in cellulose triacetate hollow fiber membrane for high hydrogen sulfide contained natural gas sweetening applications
O3.GS-02	12th July 2023	Room 3	09:25	09:50	Automated conception of membrane separation processes for multi-component gas treatment
O3.GS-03	12th July 2023	Room 3	09:50	10:15	Process Simulation of Traditional and State-of-the-Art Polymeric Membranes: A Step to Understand the Academia-Industry Knowledge Gap
O3.GS-04	12th July 2023	Room 3	10:15	10:40	sweetening
O3.MJ-01	12th July 2023	Room 3	11:10	11:35	Meet the Editors of the Journal of Membrane Science



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O3.MJ-02	12th July 2023	Room 3	11:35	12:00	
O3.MJ-03	12th July 2023	Room 3	12:00	12:25	
O3.NS-01	12th July 2023	Room 3	15:10	15:35	Bioinspired to Multifunctional Membranes
O3.NS-02	12th July 2023	Room 3	15:35	16:00	Separation of Full and Empty Capsid Viral Particles using Multi-modal Membranes
O3.NS-03	12th July 2023	Room 3	16:00	16:25	Printing precise porosity
O3.NS-04	12th July 2023	Room 3	16:25	16:50	Toward higher selectivity membrane separations
O3.NS-05	12th July 2023	Room 3	17:10	17:35	Membrane strategies for precise molecular separations
O3.NS-06	12th July 2023	Room 3	17:35	18:00	High performance countercurrent membrane purification (HPCMP) – A new approach for protein purification
O3.NS-07	12th July 2023	Room 3	18:00	18:25	Spacers for flat sheet membrane modules
O3.NS-08	12th July 2023	Room 3	18:25	18:50	Novel Cellulosic Membrane for Dialysis Applications
O3.CC-01(KN)	12th July 2023	Room 4	09:00	09:25	Rubbery Organic Frameworks- ROF membranes for enhanced selective CO ₂ capture
O3.CC-02	12th July 2023	Room 4	09:25	09:50	Importance of comprehending the chemistry of pre-crosslinking in designing multilayered structures and its superior CO ₂ gas permeance
O3.CC-03	12th July 2023	Room 4	09:50	10:15	Importance of Surface Chemistry to Form Ultra-Thin Film on Hollow Fiber Surface for Carbon Capture
O3.CC-04	12th July 2023	Room 4	10:15	10:40	(Cu-Mg)TBC MOF embedded phosphonium based supported ion liquid membrane for CO ₂ /N ₂ separation
O3.CC-05	12th July 2023	Room 4	11:10	11:35	Development of CO ₂ molecular gate membrane module systems for pre-combustion CO ₂ capture
O3.CC-06	12th July 2023	Room 4	11:35	12:00	Novel membrane and system designs to enable energy and capital efficient carbon capture
O3.CC-07	12th July 2023	Room 4	12:00	12:25	Bi-objective optimization of CO ₂ membrane separation process
O3.MF-01(KN)	12th July 2023	Room 5	09:00	09:25	Recent advances in alkaline-stable anion-exchange membranes for fuel cell and electrolyzer applications
O3.MF-02	12th July 2023	Room 5	09:25	09:50	Accurate evaluation of hydrogen crossover in water electrolysis systems for wetted membranes
O3.MF-03	12th July 2023	Room 5	09:50	10:15	Stabilizing the catalyst layer for durable alkaline membrane fuel cells
O3.MF-04	12th July 2023	Room 5	10:15	10:40	A new plasma assisted electrolytic deposition process to improve the electrochemical performance of novel aluminum anode
O3.SP-01(KN)	12th July 2023	Room 6	09:00	09:25	Development of micro patterned membranes for CO ₂ separation
O3.SP-02	12th July 2023	Room 6	09:25	09:50	Emerging photothermal membrane distillation (PMD) process and engineering membranes with different surface wettability to alleviate membrane scaling in this process
O3.SP-03	12th July 2023	Room 6	09:50	10:15	Investigating up-scalability of Na/K ion-separating membranes in electrodialysis to enable resource recovery from greenhouse wastewater
O3.SP-04	12th July 2023	Room 6	10:15	10:40	Fabrication of a Janus polydopamine/patterned polyvinylidene fluoride with anti-fouling and anti-wetting in membrane distillation
O3.IM-01	12th July 2023	Room 7	09:00	09:25	Anodized Metal Oxides Could Replace Polymeric Ion-exchange Membranes?
O3.IM-02	12th July 2023	Room 7	09:25	09:50	Ultra-thin DDR-type zeolite membranes supported on hollow fibers for artificial membrane oxygenation
O3.IM-03	12th July 2023	Room 7	09:50	10:15	Ultra-permeable MOF-303 hollow fiber nanofiltration membranes with controlled crystal orientation
O3.IM-04	12th July 2023	Room 7	10:15	10:40	
O3.MF-05	12th July 2023	Room 7	11:10	11:35	electrolyzer
O3.MF-06	12th July 2023	Room 7	11:35	12:00	Electronic structure control of IrO ₂ by using conjugated polymer support and its effect on oxygen evolution reaction catalysis
O3.MF-07	12th July 2023	Room 7	12:00	12:25	Br ⁻ /OH ⁻ transport and hydration properties of anion exchange thin films



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O3.MM-01	12th July 2023	Room 8	09:00	09:25	Molecular dynamics study on water distribution and mobility in hydrated RO membranes.
O3.MM-02	12th July 2023	Room 8	09:25	09:50	The mechanisms of asymmetric membrane formation in nonsolvent-induced phase separation (NIPS)
O3.MM-03	12th July 2023	Room 8	09:50	10:15	Control of grain boundary in zeolite membranes for high efficient CO ₂ separation: A molecular dynamics simulation study
O3.MM-04	12th July 2023	Room 8	10:15	10:40	
O3.CM-05	12th July 2023	Room 8	11:10	11:35	Electrochemical membrane induces peroxydisulfate activation for water decontamination
O3.CM-06	12th July 2023	Room 8	11:35	12:00	Biocatalytic polyelectrolyte complex hollow fiber membranes
O3.CM-07	12th July 2023	Room 8	12:00	12:25	Green synthesis of robust composite biomedia for controlling membrane biofouling in anaerobic membrane bioreactors
O3.MX-01(KN)	12th July 2023	Room 9	09:00	09:25	Graphene oxide and metal organic framework based breathable barrier membrane for toxic vapors
O3.MX-02	12th July 2023	Room 9	09:25	09:50	Palladium-percolated networks enabled by low-loading nanorods for enhanced H ₂ separations
O3.MX-03	12th July 2023	Room 9	09:50	10:15	Functionalized two-dimensional nanosheets in mixed matrix membranes for gas separation
O3.MX-04	12th July 2023	Room 9	10:15	10:40	
O3.MX-05(KN)	12th July 2023	Room 9	11:10	11:35	MOF-based membranes for industrial olefin separation-top or flop?
O3.MX-06	12th July 2023	Room 9	11:35	12:00	Solution-based <i>in-situ</i> synthesis of multivariate zeolitic imidazolate frameworks for enhanced C ₂ H ₄ /C ₂ H ₆ kinetic separation
O3.MX-07	12th July 2023	Room 9	12:00	12:25	Mixed-matrix membranes towards ethylene/ethane separation: rational design and transport mechanism
O3.WT-01(KN)	12th July 2023	Room 10	09:00	09:25	Electrodialysis for Metal Removal and Recovery
O3.WT-02	12th July 2023	Room 10	09:25	09:50	Multi-pronged approach for effective reverse osmosis (RO) treatment of high silica groundwater
O3.WT-03	12th July 2023	Room 10	09:50	10:15	Incorporating nanofiltration membranes into zero liquid discharge system for efficient processes forward sustainable environment
O3.WT-04	12th July 2023	Room 10	10:15	10:40	The membrane-based zero liquid discharge system with salt reclamation: A case study in coal chemical industry of China
O3.WT-05	12th July 2023	Room 10	11:10	11:35	Nutrients recovery from wastewater using composite electrically conducting membranes
O3.WT-06	12th July 2023	Room 10	11:35	12:00	State of the development of an industrial ZLD HSBRO process to recover and reuse trivalent chromium from electroplating wastewater at TRL 8
O3.WT-07	12th July 2023	Room 10	12:00	12:25	Withdrawn
O3.NF-01(KN)	12th July 2023	Room 11	09:00	09:25	Synthesizing Novel Nanofiltration Membranes for Ultrafast Precision Ionic/Molecular Separations
O3.NF-02	12th July 2023	Room 11	09:25	09:50	Preparation of high-performance loose nanofiltration membranes
O3.NF-03	12th July 2023	Room 11	09:50	10:15	Hydrophobic PVDF / siloxane nanofiltration membranes
O3.NF-04	12th July 2023	Room 11	10:15	10:40	Ultrahigh-water permeable polyamide nanofiltration membranes using cleavable diamine
O3.NF-05(KN)	12th July 2023	Room 11	11:10	11:35	Extraction of Li ⁺ from brine: from liquid-liquid extraction to membranes
O3.NF-06	12th July 2023	Room 11	11:35	12:00	Nanovehicle-assisted monomer shuttling enables highly permeable and selective nanofiltration membranes for water purification
O3.NF-07	12th July 2023	Room 11	12:00	12:25	Constructing nano-channels in polymeric membrane and its applications in UF and NF membrane process
O4.BD-01(KN)	13th July 2023	Room 1	09:00	09:25	Capture of monoclonal antibodies using electrospun membrane affinity chromatography
O4.BD-02	13th July 2023	Room 1	09:25	09:50	A novel separation-sensing membrane for dynamic monitoring of blood glucose



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O4.BD-03	13th July 2023	Room 1	09:50	10:15	Long-lasting PMP membrane for Extracorporeal Membrane Oxygenation (ECMO) system: Fundamental research and greenly scale-up production
O4.BD-04	13th July 2023	Room 1	10:15	10:40	Polyolefin hollow fiber membranes via hybrid induced phase separation method for oxygenation application
O4.BD-05(KN)	13th July 2023	Room 1	11:10	11:35	Intracellular delivery using biofunctional peptide-modified extracellular vesicles
O4.BD-06	13th July 2023	Room 1	11:35	12:00	Separation-sensing membranes for dynamic blood sieving and biosensing
O4.BD-07	13th July 2023	Room 1	12:00	12:25	Investigation of polysulfone membranes as reusable air filters
O4.BD-08	13th July 2023	Room 1	12:25	12:50	Sponge-like Cryogel Particles Modified with Phospholipid Membrane toward Bioseparation
O4.BD-09(KN)	13th July 2023	Room 1	15:10	15:35	delivery
O4.BD-10	13th July 2023	Room 1	15:35	16:00	Potassium ion-responsive star copolymer with controlled aggregation/dispersion transition and its potential application as a macrophage probe
O4.BD-11	13th July 2023	Room 1	16:00	16:25	Microencapsulated bufalin: from membrane preparation to microspheres tailoring, and sustained release
O4.BD-12	13th July 2023	Room 1	16:25	16:50	Exosome-mimicking liposomal nanocarriers for rejuvenation of senescent stem cells
O4.NM-01(KN)	13th July 2023	Room 2	09:00	09:25	Design and synthesis of polymer membranes based on theoretical principles
O4.NM-02	13th July 2023	Room 2	09:25	09:50	How the roughness and type of material can influence the silane coating? – relation between material features and membrane efficiency in membrane distillation process
O4.NM-03	13th July 2023	Room 2	09:50	10:15	Photoreaction-induced phase inversion for porous membrane manufacturing by DLP type 3D printer
O4.NM-04	13th July 2023	Room 2	10:15	10:40	Closed-loop recyclable membranes enabled by covalent adaptable networks for circular membrane industry
O4.NM-05(KN)	13th July 2023	Room 2	11:10	11:35	New routes for a more sustainable polymeric membrane preparation
O4.NM-06	13th July 2023	Room 2	11:35	12:00	Use of alkali lignin to reduce polyvinylidene fluoride amount and increase membrane performance
O4.NM-07	13th July 2023	Room 2	12:00	12:25	γ -Valerolactone as a green solvent for the preparation of ultrafiltration and microfiltration membranes
O4.NM-08	13th July 2023	Room 2	12:25	12:50	PHB-based biodegradable polymer composite films to replace conventional packaging materials
O4.NM-09(KN)	13th July 2023	Room 2	15:10	15:35	From natural phenols to sustainable polymers: A platform approach of Biobased Building Blocks
O4.NM-10	13th July 2023	Room 2	15:35	16:00	Tropical Plant Xylem as a Water Filter
O4.NM-11	13th July 2023	Room 2	16:00	16:25	Rectifying and antiport of cations by metal-organic framework-based nanochannel membrane
O4.NM-12	13th July 2023	Room 2	16:25	16:50	Non-aqueous interfacial polymerization: The untraveled route for preparing hybrid thin film composite membranes
O4.GS-01	13th July 2023	Room 3	09:00	09:25	Aluminium carbon molecular sieves membranes (Al-CMSM) for CH ₄ polishing obtained from methanation of CO ₂
O4.GS-02	13th July 2023	Room 3	09:25	09:50	Xenon recovery from medical mixtures by polymeric membranes
O4.GS-03	13th July 2023	Room 3	09:50	10:15	Silicone rubbery polymer thin film composite membranes for post-combustion CO ₂ capture
O4.GS-04	13th July 2023	Room 3	10:15	10:40	
O4.EC-05(KN)	13th July 2023	Room 3	11:10	11:35	Ion-exchange membranes with ultrahigh charge densities for highly selective ion separations
O4.EC-06	13th July 2023	Room 3	11:35	12:00	Ion-selective microporous polymer membranes with hydrogen-bond and salt-bridge networks for aqueous organic redox flow batteries
O4.EC-07	13th July 2023	Room 3	12:00	12:25	
O4.EC-08	13th July 2023	Room 3	12:25	12:50	
O4.EC-09	13th July 2023	Room 3	15:10	15:35	Electric field-based ionic control of selective separation layers for ion resource recovery



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O4.EC-10	13th July 2023	Room 3	15:35	16:00	The Implementation of Flow-electrode Capacitive Deionization on Pilot Scale
O4.EC-11	13th July 2023	Room 3	16:00	16:25	Membrane structure dependent water transport in electrodialysis: implications for osmotic electrodialysis
O4.EC-12	13th July 2023	Room 3	16:25	16:50	Selective recovery of silver ions from copper-contaminated effluents using electrodialysis
O4.CC-01(KN)	13th July 2023	Room 4	09:00	09:25	Scale-up and field testing of Polaris membranes for CO2 capture
O4.CC-02	13th July 2023	Room 4	09:25	09:50	Field Test of Pilot-Scale CO2 Separation Membrane Processes from Flue Gases
O4.CC-03	13th July 2023	Room 4	09:50	10:15	Hybrid membrane and solvent acid gas enrichment for enhanced CO2 capture at gas plants
O4.CC-04	13th July 2023	Room 4	10:15	10:40	100% Carbon Capture from a Carbon Dioxide-Argon Flue Gas using Polaris Membrane
O4.CC-05	13th July 2023	Room 4	11:10	11:35	Scalable fabrication of nanoporous graphene membrane for energy-efficient carbon capture
O4.CC-06	13th July 2023	Room 4	11:35	12:00	CO2 Fischer-Tropsch synthesis by dehydration membrane reactor
O4.CC-07	13th July 2023	Room 4	12:00	12:25	Membrane gas-solvent contactors for efficient carbon dioxide capture.
O4.CC-08	13th July 2023	Room 4	12:25	12:50	Direct CO2 mineralization via membrane contactor using seawater reverse osmosis brine
O4.DS-09(KN)	13th July 2023	Room 4	15:10	15:35	Adjusting the vapor-induced phase separation parameters to develop competitive poly(vinylidene difluoride) membranes for membrane distillation
O4.DS-10	13th July 2023	Room 4	15:35	16:00	Acid/base pretreatment of reverse osmosis concentrate with onsite electrochemical production of reagents
O4.DS-11	13th July 2023	Room 4	16:00	16:25	3-phase biofouling control for seawater reverse osmosis (RO)
O4.DS-12	13th July 2023	Room 4	16:25	16:50	A diafiltration-nanofiltration-reverse osmosis (DiaNF-RO) process for brine management in seawater reverse osmosis (SWRO) desalination
PL.02	13th July 2023	Convention Hall	14:00	15:00	Joao Crespo, University of Lisbon, Portugal
O4.MF-01(KN)	13th July 2023	Room 5	09:00	09:25	Development of composite membranes based on acid-grafted polybenzimidazole for polymer electrolyte membrane fuel cell
O4.MF-02	13th July 2023	Room 5	09:25	09:50	Polymer ion-sieving membranes enable high-performance aqueous organic redox flow batteries
O4.MF-03	13th July 2023	Room 5	09:50	10:15	Effects of a nanophase-separated structure on mechanical properties and proton conductivities of block polymer electrolyte membranes infiltrated with an inorganic acid
O4.MF-04	13th July 2023	Room 5	10:15	10:40	Rational design for ultra-alkaline-stable anion exchange membranes for fuel cells
O4.MF-05	13th July 2023	Room 5	11:10	11:35	Proton conductive, highly durable polyphenylene ionomer membranes containing trifluoromethyl groups for fuel cells
O4.MF-06	13th July 2023	Room 5	11:35	12:00	Preparation and optimization of novel anisotropic proton-exchange membranes with enhanced through-plane conductivity
O4.MF-07	13th July 2023	Room 5	12:00	12:25	Novel approach focusing on gas transport for design of polymer electrolytes
O4.MF-08	13th July 2023	Room 5	12:25	12:50	Design of PTFE nanofiber reinforced composite membrane for highly durable polymer electrolyte membrane fuel cells
O4.MF-09(KN)	13th July 2023	Room 5	15:10	15:35	Filling-type membranes used from molecule separation to ion conduction
O4.MF-10	13th July 2023	Room 5	15:35	16:00	Development of highly stable pore-filled ion exchange membrane containing poly(terphenyl piperidinium) for fuel cell
O4.MF-11	13th July 2023	Room 5	16:00	16:25	
O4.MF-12	13th July 2023	Room 5	16:25	16:50	
O4.SP-01(KN)	13th July 2023	Room 6	09:00	09:25	Combining TIPS and soft lithography to pattern microporous membranes: process and applications



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O4.SP-02	13th July 2023	Room 6	09:25	09:50	Antifouling properties of sulfobetaine zwitterion forward osmosis membranes against protein foulants and microplastics
O4.SP-03	13th July 2023	Room 6	09:50	10:15	Highly permeable chlorine-resistant forward osmosis membrane by grafting novel sulfonamide monomers
O4.SP-04	13th July 2023	Room 6	10:15	10:40	Between facilitated transport and solution diffusion- an integrated material approach
O4.SP-05	13th July 2023	Room 6	11:10	11:35	Novel monovalent selective anion exchange membrane design for the simultaneous separation of chloride and fluoride from sulfate in electrodialysis
O4.SP-06	13th July 2023	Room 6	11:35	12:00	Towards fouling resistant anion exchange membranes for electrodialysis applications in food and bio-based industries, using a sacrificial layer approach
O4.SP-07	13th July 2023	Room 6	12:00	12:25	Surface-confined swelling approach using in a selectivity-reinforced PVDF membrane for vanadium flow batteries
O4.SP-08(KN)	13th July 2023	Room 6	12:25	12:50	Single-step polyelectrolyte complex coating on hollow fibers yields nanofiltration or biocatalytic properties
O4.FT-09(KN)	13th July 2023	Room 6	15:10	15:35	Construction of carbon-organosilica-based hybrid membrane with CO ₂ -philic molecular sieving properties
O4.FT-10	13th July 2023	Room 6	15:35	16:00	Flue gas purification with PIM membranes and swollen composite membranes
O4.FT-11	13th July 2023	Room 6	16:00	16:25	Energy efficient olefin-paraffin separations with OptiperM™ facilitated transport membrane system
O4.FT-12(KN)	13th July 2023	Room 6	16:25	16:50	Development of CO ₂ separation membranes by interfacial polymerization
O4.MH-01	13th July 2023	Room 7	09:00	09:25	Charged nanoporous membranes: emerging applications and advanced characterization
O4.MH-02	13th July 2023	Room 7	09:25	09:50	A new generation of microbial quantifying technique for integrity monitoring of RO plant: effect of mechanical, physical and chemical damage on virus rejection
O4.MH-03	13th July 2023	Room 7	09:50	10:15	Development of the hollow fiber membrane with highly enhanced compaction resistance for osmotically assisted reverse osmosis
O4.MH-04	13th July 2023	Room 7	10:15	10:40	Elucidating the mechanism of improved multi-component transport in novel microporous poly(arylene) ethers for membrane-based gas separations
O4.MH-05	13th July 2023	Room 7	11:10	11:35	Understanding the characteristics and transport of two-dimensional confined water in between MoS ₂ layers
O4.MH-06	13th July 2023	Room 7	11:35	12:00	Investigation of green solvent alternatives for PVDF membrane fabrication
O4.MH-07	13th July 2023	Room 7	12:00	12:25	How do the ionic activity and hydration shell influence the equilibrium of ion-exchange membranes with a multi-electrolyte solution?
O4.MH-08	13th July 2023	Room 7	12:25	12:50	Zeta potential of layer-by-layer assembled polyelectrolyte membranes: misinterpretation due to the electrokinetic leakage phenomenon
O4.MH-09	13th July 2023	Room 7	15:10	15:35	Concentration of produced water from oil & gas industry using forward osmosis followed by nanofiltration for the recovery of the draw solution
O4.MH-10	13th July 2023	Room 7	15:35	16:00	High-throughput techniques for membrane formation
O4.MH-11	13th July 2023	Room 7	16:00	16:25	microscopy
O4.MH-12	13th July 2023	Room 7	16:25	16:50	Raman Analysis of Bio-based PVDF/Cyrene Ultrafiltration Membrane Incorporating Hydrophilic-induced Additives
O4.CM-01(KN)	13th July 2023	Room 8	09:00	09:25	Dry-spun carbon nanotube membranes – towards ultrafiltration all carbon catalytic membrane reactors
O4.CM-02	13th July 2023	Room 8	09:25	09:50	Studying the behavior of a polymeric membrane in a membrane reactor for hydroformylation
O4.CM-03	13th July 2023	Room 8	09:50	10:15	processes



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O4.CM-04	13th July 2023	Room 8	10:15	10:40	CHITOSAN-BASED REACTIVE MEMBRANE FOR THE DEGRADATION OF CONTAMINANTS OF EMERGING CONCERN
O4.CM-05	13th July 2023	Room 8	11:10	11:35	Geomimetic, ultrafast, and one-step preparation of N-doped reduced TiO ₂ membrane through an atmospheric thermal plasma spraying approach for photodegradation of antibiotics
O4.CM-06	13th July 2023	Room 8	11:35	12:00	Phthalocyanine doped nanofiber membranes for persistent pollutants remediation from wastewaters.
O4.CM-07	13th July 2023	Room 8	12:00	12:25	Porous catalytic polymer-based multi-composite membranes for liquid-phase chemical hydrogen storage systems
O4.CM-08	13th July 2023	Room 8	12:25	12:50	Electrochemical oxidation of 1-propanol using a proton exchange membrane reactor
O4.CM-09	13th July 2023	Room 8	15:10	15:35	Catalytic nanofiber membrane reactors for sustainable water technologies: Transformation of emerging pollutants and Upcycling of microplastics
O4.CM-10	13th July 2023	Room 8	15:35	16:00	Performances of ZnO-zeolite nanocomposites and UF based zeolite membrane for Paracetamol removal in hybrid system under UV irradiation
O4.CM-11	13th July 2023	Room 8	16:00	16:25	Robust 2D MXene-PVA-TiO ₂ photothermal-catalytic membrane distillation system for synergistic solar-driven desalination and dye degradation
O4.CM-12	13th July 2023	Room 8	16:25	16:50	Photocatalytic removal of micropollutants from water via a visible light active Bi ₂ WO ₆ polymer membrane
O4.MX-01(KN)	13th July 2023	Room 9	09:00	09:25	Nanomaterials incorporated hydrophilic/hydrophobic dual layer membrane for enhanced separation of aqueous mixtures
O4.MX-02	13th July 2023	Room 9	09:25	09:50	Efficient separation of methanol/dimethyl carbonate mixtures by UiO-66 MOF incorporated chitosan mixed-matrix membrane
O4.MX-03	13th July 2023	Room 9	09:50	10:15	BORON NITRIDE NANOSHEET-BASED NANOCOMPOSITE MEMBRANES
O4.MX-04	13th July 2023	Room 9	10:15	10:40	
O4.MX-05	13th July 2023	Room 9	11:10	11:35	Ultra-gas permeable mixed matrix membrane composed of polymer of intrinsic microporosity (PIM-1) and surface-modified silica nanoparticles
O4.MX-06	13th July 2023	Room 9	11:35	12:00	PolyMOF nanoparticles constructed from PIM-based scaffolds for scalable mixed-matrix gas separation membranes
O4.MX-07	13th July 2023	Room 9	12:00	12:25	
O4.MX-08	13th July 2023	Room 9	12:25	12:50	
O4.MX-09	13th July 2023	Room 9	15:10	15:35	Mixed matrix membranes (MMMs) using a series of emerging Massey University Frameworks (MUFs) for CO ₂ separation
O4.MX-10	13th July 2023	Room 9	15:35	16:00	CO ₂ separation using zeolite highly filled Mixed Matrix Membrane
O4.MX-11	13th July 2023	Room 9	16:00	16:25	Aligned 1D MOF nanosheet based mixed matrix membranes for molecular gas separation
O4.MX-12	13th July 2023	Room 9	16:25	16:50	Experimental and gas permeability model evaluations of 6FDA-polyimides MMMs with ZIF-8 for CO ₂ separation
O4.WT-01(KN)	13th July 2023	Room 10	09:00	09:25	Development of transfer-free regular through-pore polyimide composite membranes for water treatment
O4.WT-02	13th July 2023	Room 10	09:25	09:50	Ultrasonication-assisted Fouling Control during Gravity-driven Ceramic Membrane Filtration of Primary Municipal Wastewater
O4.WT-03	13th July 2023	Room 10	09:50	10:15	e-Fuels wastewater treatment using anaerobic-MF-NF treatment train
O4.WT-04	13th July 2023	Room 10	10:15	10:40	Membrane development and application for pharmaceutical wastewater treatment



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O4.WT-05(KN)	13th July 2023	Room 10	11:10	11:35	Direct nanofiltration for drinking water treatment
O4.WT-06	13th July 2023	Room 10	11:35	12:00	Graft polymerization of oppositely charged monomers on NF membrane efficiently improves the removal of carbamazepine from treated secondary wastewater effluents
O4.WT-07	13th July 2023	Room 10	12:00	12:25	Gels based on macrocycle for iodine capture in aqueous and vapor phases
O4.WT-08	13th July 2023	Room 10	12:25	12:50	Low-pressure reverse osmosis membrane based on cellulose nanofiber and carbon nanotubes nanocomposite membrane
O4.WT-09(KN)	13th July 2023	Room 10	15:10	15:35	Wastewater
O4.WT-10	13th July 2023	Room 10	15:35	16:00	Capillary nanofiltration membranes for drinking and fit for purpose water production
O4.WT-11	13th July 2023	Room 10	16:00	16:25	reuse
O4.WT-12	13th July 2023	Room 10	16:25	16:50	Dual-functional membranes for the treatment of microorganics: water matrices and cost aspects
O4.NF-01(KN)	13th July 2023	Room 11	09:00	09:25	Retention and degradation of micropollutants by nanoporous reactive membranes
O4.NF-02	13th July 2023	Room 11	09:25	09:50	Role of the forces in steroid hormone micropollutant adsorption in the nanopores of vertically aligned carbon nanotube membranes
O4.NF-03	13th July 2023	Room 11	09:50	10:15	Interfacial wettability regulation enables one-step upcycling of end-of-life polymeric microfiltration membrane
O4.NF-04	13th July 2023	Room 11	10:15	10:40	Permanent and ultrasensitive liquid-phase molecular sieving via robust crystalline framework membranes
O4.NF-05	13th July 2023	Room 11	11:10	11:35	Regulating interfacial polymerization via multi-functional calcium carbonate based interlayer for highly permselective nanofiltration membrane
O4.NF-06	13th July 2023	Room 11	11:35	12:00	Polymeric fluorine-free ionomers and their complexes with polyelectrolytes for thin-film composite nanofiltration membranes
O4.NF-07	13th July 2023	Room 11	12:00	12:25	Carbon Nanomembranes (CNMs): Molecular and ionic transport in tortuous sub-nm channels
O4.NF-08	13th July 2023	Room 11	12:25	12:50	Solar-driven photodegradation of steroid micropollutants by membranes
O4.NF-09(KN)	13th July 2023	Room 11	15:10	15:35	Nanofiltration membranes with crumpled polyamide films: Transport mechanisms and performances
O4.NF-10	13th July 2023	Room 11	15:35	16:00	Towards standardization of single-ion permeability measurements in reverse-osmosis and nanofiltration
O4.NF-11	13th July 2023	Room 11	16:00	16:25	Enhanced organic solvent nanofiltration of aligned Kevlar composite membrane by incorporated with nanospheres
O4.NF-12	13th July 2023	Room 11	16:25	16:50	
O5.BD-01(KN)	14th July 2023	Room 1	09:00	09:25	Insulin patch system using biocompatible ionic liquids as an alternative to injection
O5.BD-02	14th July 2023	Room 1	09:25	09:50	Multiple enzyme immobilization in specific place of stimulus-responsive isoporous membrane bioinspired from cells compartmentalization
O5.BD-03	14th July 2023	Room 1	09:50	10:15	Chitosan/GO membranes performing on-site serum separation from whole blood
O5.BD-04	14th July 2023	Room 1	10:15	10:40	Photo-responsive polymer membranes realize novel cell manipulation
O5.BI-05(KN)	14th July 2023	Room 1	11:10	11:35	Cell entry of amphiphilic membrane-permeable peptides and its analogs by real-time ¹⁹ F NMR
O5.BI-06	14th July 2023	Room 1	11:35	12:00	Spontaneously formed lipid nanodisc as a minimal cell membrane model
O5.BI-07	14th July 2023	Room 1	12:00	12:25	Changes in phospholipid composition of Caco-2 cells during cell differentiation
O5.BI-08	14th July 2023	Room 1	12:25	12:50	Elucidation of the role of arachidonic acid-containing phospholipids in liver regeneration.
O5.NM-01	14th July 2023	Room 2	09:00	09:25	The Photocuring 3D-Printed Phantoms with Spontaneously Generated Submicron- to Nano-Porous Structures Created by Phase Separation
O5.NM-02	14th July 2023	Room 2	09:25	09:50	Application of polyimide porous membrane to siloxane-polymer filtration



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O5.NM-03	14th July 2023	Room 2	09:50	10:15	A new generation of expanded PTFE membranes for harsh chemical filtration
O5.NM-04	14th July 2023	Room 2	10:15	10:40	
O5.NM-05(KN)	14th July 2023	Room 2	11:10	11:35	Self-organized nanoporous water-treatment membranes: design, syntheses, MD simulations, and advanced measurements for the liquid crystals and confined water molecules
O5.NM-06	14th July 2023	Room 2	11:35	12:00	Modification of Ultrafiltration Membranes to Enhance the Adsorption of Cations and Anions
O5.NM-07	14th July 2023	Room 2	12:00	12:25	Organic solvent separation using intercalating carbon nanotube-interlayered thin film composite membrane
O5.NM-08	14th July 2023	Room 2	12:25	12:50	The influence of anion-exchange membrane nanostructure onto ion transport: Adjusting membrane performance through fabrication conditions
O5.EC-01	14th July 2023	Room 3	09:00	09:25	Combining wastewater treatment and CO ₂ valorization in artificial photosynthesis – a role of proton exchange membranes
O5.EC-02	14th July 2023	Room 3	09:25	09:50	Developing ion exchange membranes with ultrahigh charge density
O5.EC-03	14th July 2023	Room 3	09:50	10:15	harvesting
O5.EC-04	14th July 2023	Room 3	10:15	10:40	Fabrication of monovalent selective ion exchange membrane: roles of ionic control and alternating current
O5.EC-05	14th July 2023	Room 3	11:10	11:35	Bipolar membranes for electrochemical CO ₂ capture
O5.EC-06	14th July 2023	Room 3	11:35	12:00	Lithium recovery from brines by flow capacitive deionization
O5.EC-07	14th July 2023	Room 3	12:00	12:25	Impact of ion-ion correlated motion on salt transport in ion exchange membranes
O5.EC-08	14th July 2023	Room 3	12:25	12:50	The impact of electroosmosis on the electric potential across ion-exchange membranes and the implications for (reverse) electrodialysis
O5.DS-01	14th July 2023	Room 4	09:00	09:25	Solvent-activated thin-film nanocomposite membranes molecularly tuned with supramolecular cavities for efficient water desalination and boron removal
O5.DS-02	14th July 2023	Room 4	09:25	09:50	Membrane Distillation as a Competitive Inland Concentrate Management Technology: An Integrated Techno-economic and Environmental Life Cycle Assessment
O5.DS-03	14th July 2023	Room 4	09:50	10:15	desalination
O5.DS-04	14th July 2023	Room 4	10:15	10:40	Pressure-driven distillation using air-trapping membranes for fast and selective water desalination
O5.DS-05	14th July 2023	Room 4	11:10	11:35	Ion-ion selective nanofiltration membrane as an effective pretreatment strategy for seawater desalination
O5.DS-06	14th July 2023	Room 4	11:35	12:00	polymerization
O5.DS-07	14th July 2023	Room 4	12:00	12:25	Desalination and salt recovery from real brines using superhydrophobic graphene oxide membrane
O5.DS-08	14th July 2023	Room 4	12:25	12:50	Tailoring the Specific Crosslinking Site of Graphene Oxide Framework Nanosheets for Controlled Nanofiltration of Salts and Dyes
PL.03	14th July 2023	Convention Hall	14:00	15:00	Benny Freeman University of Texas at Austin, USA
O5.MC-01(KN)	14th July 2023	Room 5	09:00	09:25	Supported ionic liquid membrane contactor for Mg ²⁺ /Li ⁺ selective separation
O5.MC-02	14th July 2023	Room 5	09:25	09:50	Membrane-assisted controlled crystallization of CaCO ₃ in an integrated CO ₂ capture and utilization process
O5.MC-03	14th July 2023	Room 5	09:50	10:15	Hollow fiber membrane supported metal organic framework-based packed bed for gas/vapor adsorption
O5.MC-04	14th July 2023	Room 5	10:15	10:40	Hybrid hollow fiber membranes with highly selective absorbents encapsulated in sub-micron carbon capsules: A new technology for gas separation
O5.MC-05(KN)	14th July 2023	Room 5	11:10	11:35	Continuous Rotary Membrane Emulsification
O5.MC-06	14th July 2023	Room 5	11:35	12:00	membrane
O5.MC-07	14th July 2023	Room 5	12:00	12:25	Membrane nanoprecipitation for the continuous production of zein nanoparticles



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O5.MC-08	14th July 2023	Room 5	12:25	12:50	Design and tuning of polymeric particles by membrane contactors
O5.FT-01(KN)	14th July 2023	Room 6	09:00	09:25	Follow fiber membrane modules for post-combustion CO ₂ capture
O5.FT-02	14th July 2023	Room 6	09:25	09:50	Large-scale Hollow Fiber Hybrid Facilitated Transport Membrane Modules For Efficient CO ₂ Removal From Flue Gas Streams – Design, Development And Pilot Testing Performances
O5.FT-03	14th July 2023	Room 6	09:50	10:15	Intrinsically porous 3d printed membranes for targeted purification
O5.FT-04	14th July 2023	Room 6	10:15	10:40	Effect of Mimic Enzyme ZC on CO ₂ Separation Performance of PAMAM Dendrimer/PVA Hybrid Membranes for CO ₂ Separation
O5.OS-05	14th July 2023	Room 6	11:10	11:35	Development of novel pH-responsive draw solution with imine bond as dynamic covalent chemistry
O5.OS-06	14th July 2023	Room 6	11:35	12:00	chemicals
O5.OS-07	14th July 2023	Room 6	12:00	12:25	Surface modification of FO membrane for improving ammoniacal nitrogen (NH ₄ ⁺ -N) rejection: Investigating the factors influencing NH ₄ ⁺ -N rejection
O5.OS-08	14th July 2023	Room 6	12:25	12:50	Approaching ratio as guideline to design optimal substrate for high performance forward osmosis membrane for concentrating lithium enriched brine
O5.AL-01	14th July 2023	Room 7	09:15	09:30	Developing a New Membrane Process
O5.AL-02	14th July 2023	Room 7	09:30	09:45	Membrane-based fractionation of complex mixtures
O5.AL-03	14th July 2023	Room 7	09:45	10:00	The OSN journey – a dream come true
O5.AL-04	14th July 2023	Room 7	10:00	10:15	Elevating polymeric membranes to challenges in the chemical industry
O5.AL-05	14th July 2023	Room 7	10:15	10:30	Imagining membranes for molecular separations
O5.MH-05	14th July 2023	Room 7	11:10	11:35	condition
O5.MH-06	14th July 2023	Room 7	11:35	12:00	Mixed-Linker Strategy for Enhancing and Stabilizing Structural Flexibility of MOF Membranes for Improved CO ₂ Separation Properties
O5.MH-07	14th July 2023	Room 7	12:00	12:25	Iso-porous membranes as supports for thin film composite membranes
O5.MH-08	14th July 2023	Room 7	12:25	12:50	Improving the stability of supported ionic liquid membranes (SILMs) for the fractionation of light paraffins from natural gas streams
O5.CM-01(KN)	14th July 2023	Room 8	09:00	09:25	Micro-structured ceramic membranes for heterogenous catalytic reactions
O5.CM-02	14th July 2023	Room 8	09:25	09:50	Degradation of herbicide micropollutants by TiO ₂ -coated poly(vinylidene fluoride) membrane under simulated solar irradiation
O5.CM-03	14th July 2023	Room 8	09:50	10:15	Poly(vinylidene fluoride) membrane with immobilized TiO ₂ for degradation of low concentrated steroid hormones in a photocatalytic membrane reactor
O5.CM-04	14th July 2023	Room 8	10:15	10:40	Robust and self-cleaning properties of loose nanofiltration membranes for rapid mass transfer dye/salt separations
O5.CM-05	14th July 2023	Room 8	11:10	11:35	Ultra-high permeance flux in a MIL-88B(Fe,Co)@Al ₂ O ₃ membrane reactor for photocatalytic phenol degradation
O5.CM-06	14th July 2023	Room 8	11:35	12:00	One-Pot Synthesis Membrane Reactor for CO ₂ Conversion Reaction
O5.CM-07	14th July 2023	Room 8	12:00	12:25	Parametric study for designing water permselective membrane reactors for methanol synthesis
O5.CM-08	14th July 2023	Room 8	12:25	12:50	Combined reaction system of NH ₃ decomposition and CO ₂ methanation using hydrogen permeable membrane reactor and its 1D model analysis



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O5.MX-01	14th July 2023	Room 9	09:00	09:25	Grafting poly(ethylene glycol) chain on the 2D GO nanosheets for excellent CO ₂ permeance mixed-matrix membranes
O5.MX-02	14th July 2023	Room 9	09:25	09:50	Improved CO ₂ separation performance from PIM-1/MOF-74 and acid-hydrolyzed PIM-1/MOF-74 thin film nanocomposite membranes
O5.MX-03	14th July 2023	Room 9	09:50	10:15	Compatibility control in mixed-matrix membranes for gas separation
O5.MX-04	14th July 2023	Room 9	10:15	10:40	separation
O5.MX-05	14th July 2023	Room 9	11:10	11:35	Surface engineering of composite membranes for controlling the separation characteristics in water and waste-water treatment
O5.MX-06	14th July 2023	Room 9	11:35	12:00	Biochar supported Fe/Zn nanomaterial TFN PES membrane for salt removal
O5.MX-07	14th July 2023	Room 9	12:00	12:25	Engineering confined membrane space for extraction of biofuel from aqueous solutions
O5.MX-08	14th July 2023	Room 9	12:25	12:50	MOF-303 incorporated chitosan mixed matrix membrane for pervaporation separation of methanol/MTBE mixture
O5.WT-01(KN)	14th July 2023	Room 10	09:00	09:25	Treatment of wastewater streams from a new generation of bioplastic industry by membranes
O5.WT-02	14th July 2023	Room 10	09:25	09:50	plant
O5.WT-03	14th July 2023	Room 10	09:50	10:15	Porous polymeric multi-composites with a tailored nickel microenvironment as catalytic flow-through membrane reactors for efficient p-nitrophenol degradation
O5.WT-04	14th July 2023	Room 10	10:15	10:40	Achievement of biocide control case in dyeing wastewater reclaim RO system in China
O5.WT-05	14th July 2023	Room 10	11:10	11:35	Applying pressure-driven distillation to water reuse: challenges and solutions
O5.WT-06	14th July 2023	Room 10	11:35	12:00	framework
O5.WT-07	14th July 2023	Room 10	12:00	12:25	Polyamide-ceramic composite membranes for high temperature reverse osmosis
O5.WT-08	14th July 2023	Room 10	12:25	12:50	
O5.NF-01	14th July 2023	Room 11	09:00	09:25	Controllable construction of novel positively charged polyamide nanofiltration membrane for lithium/magnesium separation
O5.NF-02	14th July 2023	Room 11	09:25	09:50	Highly positively charged nanofiltration membrane for Mg ²⁺ /Li ⁺ separation
O5.NF-03	14th July 2023	Room 11	09:50	10:15	membranes
O5.NF-04	14th July 2023	Room 11	10:15	10:40	pH-tunable and pH-responsive Polybenzimidazole (PBI) Nanofiltration Membranes for Li ⁺ /Mg ²⁺ Separation
O5.NF-05	14th July 2023	Room 11	11:10	11:35	Regulating overall resistance of nanofiltration membranes with a two-dimensional lamellar interlayer toward ultrafast water transport
O5.NF-06	14th July 2023	Room 11	11:35	12:00	Ion separation mechanism in a loose nanofiltration membrane
O5.NF-07	14th July 2023	Room 11	12:00	12:25	Thin film composite nanofiltration membranes based on polyurea and poly(amine-urea) for extreme acid/alkali conditions
O5.NF-08	14th July 2023	Room 11	12:25	12:50	