Poster program

Water treatment

P 1.1 **Real-Time Fluid Dynamics Analysis for Surface-Patterned Thin-Film Composite Membranes in Spacer-Filled Channel using Particle Image Velocimetry**; Maharshi Patel; University Duisburg-Essen

P 1.2 **Ion Exchange Behavior in Polyelectrolyte Multilayer Nanofiltration Membranes: Impact on Salt Rejection Measurements**
Áron Bóna; University of Pannonia

P 1.3 **Biofouling visualization in spacer-filled membrane filtration channels using OCT and CT**
Kees Theo Huisman; Hamad Bin Kalifa University

P 1.4 **A three-step water remediation scheme for contaminant removal and recovery of valuable species**
Subhash Kumar; Indian Institute of Science

P 1.5 **Extraction of curcumin and its concentration using organic solvent nanofiltration**
Milana M. Mavinkurve; Indian Institute of Science

P 1.6 **Preparation and characterization of metal organic frameworks/graphene oxide composite membranes for water purification**
Mustafa Ersöz; Selcuk University

Membranes

P 2.1 **Fabrication and characterization of anti-biofouling membranes immobilized with live quorum-quenching bacteria using polymers**
Jinwoo Kim; Kyungpook National University

P 2.2 **Recycled polycarbonate as source material for membrane preparation via NIPS**
Daniel Breite; IOM Leipzig

P 2.3 **Nutrient recovery using ceramic membrane contactors**
Sarah Trepte; Fraunhofer IKTS

P 2.4 **Effect of crosslinking on the properties of polystyrene-co-vinylbenzyl chloride copolymer based anion exchange membrane for fuel cells**; Züleyha Saraç; Gebze Technical University

P 2.5 **Effect of quarternization agent on the ionic conductivity of polysulfone/MXene nanocomposite anion exchange membranes**
Çiğdem Taşdelen-Yücedağ; Gebze Technical University

P 2.6 **Formation and Characterization of Controlled Porous Membranes Using Block Copolymers**
Didem Aydin; Selcuk University

P 2.7 **Transport of methylene blue dye into graphene-based polymeric membrane**
Ilkay Hilal Gübbük; Selcuk University

Electrodialysis

P 3.1 **Circular chemical use: producing acid and base with bipolar electrodialysis from IEX regenerate**
Timon Rijnaarts; KWR Water

P 3.2 **An ultra-high pressure osmotic membrane module and apparatus for osmotic energy and desalination of hypersaline brine: design, construction and evaluation**; Haofei Guo; SaltPower

P 3.3 **Optimizing bipolar membrane electrodialysis for continuous carbon capture with an alkaline absorbent**
Sara Vallejo Castaño; Wetsus

P 3.4 **Testing of Electrodialysis with bipolar membrane at semi-industrial scale for in-situ reactant production**
Antonia Filingeri; University of Palermo

P 3.5 **Determination of selectivity coefficients of ion exchange membranes at various process conditions**
Natália Václavíková; MemBrain

P 3.6 **The use of membrane processes for lithium carbonate production – a comparative study between electrodialysis and membrane crystallisation**; Veronika Kúdelová; MemBrain

Energy applications

P 4.1   **Thin-Film Nafion-Polyethylene Composite Separator Membranes for Zinc Polyiodide Flow Battery**
Anupam Das; University Duisburg-Essen

P 4.2   **The roles of the membrane in the alkaline water electrolysis in interplay with water components**
Ankitkumar Kansara; University Duisburg-Essen

P 4.3   **The Ultimate project: A Case Study on Resource Valorization with Electro-chemical membrane processes from Greenhouse Wastewater**; Tavishi Guleria; KWR Water

Health

P 5.1   **Novel Membrane Oxygenator with Combined Kidney Support – From Membrane Bundle Parameters to Device Development**
Ana Martins Costa; University of Twente

P 5.2   **Mechanical Stability of Microporous Membranes for Liquid Atomization and Dosing**
Rene Pfister; Ostschweizer Fachhochschule

P 5.3   **3D printing of a microfluidic oxygenator**
Wiebke Wiessner; RWTH Aachen University

Biotechnology

P 6.1   **Inoculation techniques of single capillary membrane with Streptomyces coelicolor**
Piroska Lajtai-Szabó; University of Pannionia

P 6.2   **Analysis of Impeller-Induced Shear Stress Distribution on a Membrane Surface in a Circular Test Cell for Porous Membranes.**
Masoud Haghshenasfard; TU Dresden

Process engineering

P 7.1   **Hybrid separations for solvent recovery, distillation versus with pervaporation – an economic comparison**
Elmar Boorsma; Pervatech

P 7.2   **Organic Solvent Nanofiltration and Data-driven Approaches**
Pieter-Jan Piccard; vito

P 7.3   **Predicting Protein Rejection In Membrane Separations Using Machine Learning Techniques**
Gbenga Daniels; Louisiana State University

P 7.4   **Statistical Investigation of Gypsum Crystallization Kinetics**
Azmain Akib Akash; Louisiana State University

P 7.5   **Membrane contactors and potassium-based solvents for biogas upgrade and direct CO2 utilization**
Dimitrios Koutsonikolas; Centre for Research & Technology Hellas

P 7.6   **INNOMEM – Open Innovation Test Bed For Nano-Enabled Membranes**
Kristianne Tempelman; EMI Twente

P 7.7   **The Open Membrane Database: a data hub for membrane technology**
Stefan Herrmann; University of Twente

Gas and vapor separation

P 8.1   **Development of a Hollow Fiber Membrane Based Enthalpy Exchanger**
Lisa Krüger; RWTH Aachen University

P 8.2   **Polymer Blending for Advanced Gas Separation Membrane Materials**
Pieter-Jan Piccard; vito