

Sunday, June 28, 2026

Hotel Belaröia, 27 Rue Jules Ferry, Montpellier (in front of "Montpellier Saint Roch" train station)	
17:00-20:00	🍷 WELCOME PARTY & REGISTRATION 🍷

Monday, June 29, 2026

8:00-9:00	REGISTRATION MOUSSERON Amphitheatre, ENSCM, Montpellier Chairs: A. JULBE (IEM, Univ Montpellier, FR), J. SERRA (ITQ, Univ Valencia, ES)
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9:00-9:30	Opening Ceremony
9:30-10:15	★★ PLENARY LECTURE: From Membranes to Membranes S. SARRADE (CEA - Energy Division, Paris - Saclay, FR)
10:15-11:00	★★ PLENARY LECTURE: Inorganic Membranes for Hydrogen-related Applications R. BREDESEN (SINTEF Industry, Oslo, NO)

11:00-11:30	COFFEE BREAK
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	MOUSSERON Amphitheatre	GODECHOT Amphitheatre
	H₂-day - 1a - Porous Membranes - Molecular Sieving Chairs: H. RICHTER (IKTS, DE), G. OLGUIN (Univ Valparaiso, CL)	H₂-day - 2a - Dense Ion Conducting Ceramics - Membranes & Devices Chairs: M.L. FONTAINE (SINTEF, NO), S. ESCOLASTICO (ITQ, Valencia, ES)
11:30-12:00	★ KEYNOTE: Carbon Molecular Sieve Membranes for High-Performance Hydrogen Separation M.A. LLOSA TANCO (Tecnalia, BRTA, ES)	★ KEYNOTE: Protonic ceramic membranes: from the composition choice to making devices S. RICOTE (Colorado School of Mines, US)
12:00-12:15	Ultrafast molecular sieving via two-dimensional fullerene membranes X. CHEN (East China Normal Univ, CN)	◆ Materials development for proton and oxygen ceramic electrochemical cells (Invited) O. JOUBERT (FRH2-CNRS, Nantes Univ, FR)
12:15-12:30	Microporous Structure Regulation of Silica-Based Membranes for Hydrogen Separation Under Moderate-Temperature Environments J. ZHONG (Changzhou Univ, CN)	◆ Ceramic Composite Membranes: Integrating Manufacturing, Reliability, and Sustainability (Invited) E. MERCADELLI (Inst. of Science, Technology & Sustainability for Ceramics, CNR, IT)
12:30-12:45	Hydrogen-Selective Silica Membranes: Correlating Gas Transport with Nanoporous Structure T. GREKOU (Centre for Research and Technology Hellas; Aristotle Univ of Thessaloniki, GR)	Insights into Degradation and Material Interactions of a Solar-Powered MIEC Membrane Reactor for Hydrogen Production S. BAUMANN (Forschungszentrum Jülich GmbH, DE)
12:45-13:00	Molecular Sieving Silica Membranes via Plasma-Induced Polymerization at Gas-Liquid Interface H. NAGASAWA (Hiroshima Univ, JP)	Data driven processing-performance insights into protonic ceramic fuel cells and electrolyzers R. O'HAYRE (Colorado School of Mines, US)

13:00-14:30	LUNCH BREAK	
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	MOUSSERON Amphitheatre	GODECHOT Amphitheatre
	H₂-day - 1b - Porous Membranes - H₂ Separation & Production Chairs: M.A. LLOSA TANCO (Tecnalia, ES), C. MA (Dalian Univ Technol, CN)	H₂-day - 3a - Metal-based Membranes - Reactors & Ammonia Cracking Chairs: N. ITOH (Utsunomiya Univ, JP), D.A. PACHECO TANAKA (Tecnalia, ES)
14:30-14:45	◆ Carbon and zeolite membranes in H₂-economy (Invited) H. RICHTER (Fraunhofer IKTS, DE)	★ KEYNOTE: Recent pilot-scale trial of metal membranes M. DOLAN (FORTESCUE, AU) or T. VILARINHO (FORTESCUE, FR)
14:45-15:00	Elegant customization of hybrid molecular sieve membranes for high-performance separations Y. PENG (Dalian Inst of Chemical Physics, Chinese Academy of Sciences, CN)	
15:00-15:15	Precursors and carbon-based membranes for gas separation in steel industry R. WYRWA (Fraunhofer IKTS, DE)	High purity H₂ recovery from NH₃-cracking with Pd membrane technology T. PETERS (SINTEF, NO)
15:15-15:30	Enhanced hydrogen production from ammonia decomposition by a silica membrane reactor G. OLGUIN (Pontificia Univ Catolica de Valparaiso, CL)	Intensified Ammonia Cracking Using Palladium-Based Membrane Reactors M. NIKBAKHT FINI (TNO, NL)
15:30-15:45	Compact Clay-based Microporous Membrane Reactors for Ethanol Steam Reforming I. REIMANIS (Colorado School of Mines, US)	◆ Re-engineering on-board hydrogen production: hollow fibre-based reactors for ammonia cracking (Invited) F.R. GARCIA GARCIA (Univ of Edinburgh, UK)
15:45-16:00	Development of High-Flux Al₂O₃/GO/Pd Composite Membranes: The Role of Graphene Oxide Interlayers in Enhancing Hydrogen Permeation and Selectivity C. HORI (Federal Univ of Uberlândia, BR)	Synergistically Enhanced Ammonia Decomposition via Electric Field Application and Hydrogen Membrane Separation S. UEMIYA (Gifu Univ, JP)

16:00-16:30	COFFEE BREAK	
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	MOUSSERON Amphitheatre	GODECHOT Amphitheatre
	H₂-day - 2b - Dense Ion Conducting Ceramics - Reactors & H₂ Processes Chairs: S. RICOTE (Colorado School of Mines, US), E. MERCADELLI (CNR-Faenza, IT)	H₂-day - 3b - Metal-based Membranes - Scale-up & Applications Chairs: T. PETERS (SINTEF, NO), C. HORI (Univ Uberlândia, BR)
16:30-17:00	★ KEYNOTE: Inorganic proton conducting membrane based membrane reactors A. NIJMEIJER (Shell Global Solutions International BV, NL)	★ KEYNOTE: Industrializing Metal-Ceramic Membranes: A Status Report on Proton Conductors and Pd-alloy Membranes P. VESTRE (CoorsTek Membrane Sciences, NO)
17:00-17:15	Efficient H₂ production from NH₃ by using Protonic Electrochemical Ceramic Reactors L. ALMAR (ITQ (CSIC-UPV), ES)	Deblending applications with Pd-based membranes separators J. MELENDEZ (Hydrogen Onsite S.L., ES)
17:15-17:30	Lessons learned – How to (not) operate and construct a solar-powered MIEC membrane reactor for syngas production N. NEUMANN (German Aerospace Center-DLR, DE)	Manufacturing trials of Palladium-Silver membrane joints for STEP Fuel Cycle F. DI CARLO (UK Atomic Energy Authority, UK)
17:30-17:45	A feasibility study on the preparation and application of a catalytic membrane reactor to carry out water splitting and POM reactions simultaneously I. RIZZARDI (Univ degli Studi di Genova, IT)	Early-Stage HAZID for Pd and CMS Membrane-Based Hydrogen Purification: Insights from the HERMES Project S. JORJANI (Fondazione Bruno Kessler, IT)

17:45-18:30	POSTER SESSION I & EXHIBITION	
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18:30-20:00	WINE & CHEESE PARTY	
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Tuesday, June 30, 2026

8:00-8:20

REGISTRATION

MOUSSERON Amphitheatre, ENSCM, Montpellier

Chair: I. VOIGT (IKTS, DE)

8:20-8:30 Daily Announcements

8:30-9:15 ★★ PLENARY LECTURE: Graphene and MOF-based Membranes for Molecular or Ion Separation
W. JIN (Nanjing Tech Univ, CN)

MOUSSERON Amphitheatre

GODECHOT Amphitheatre

Gas separation - 1 - Zeolite Membrane Preparation Strategies
Chairs: Z. LAI (KAUST, SA), M. MATSUKATA (Waseda Univ, JP)

Water treatment - 1 - MF, UF, NF Membrane Fabrication & Processing
Chairs: M.A. PIZZOCCARO (Univ Twente, NL), J. VAUGHAN (Univ of Queensland, AU)

9:20-9:35 ◆ Preparation and Gas Separation of Hollow Fiber Supported Zeolite Membranes (Invited)
X. GU (Nanjing Tech Univ, CN)

◆ Fabrication of asymmetric ceramic membranes in one step via phase inversion tape casting (Invited)
L. WINNUBST (Univ of Twente, NL)

9:35-9:50 Room-temperature water-based activation of zeolite nanosheets for high-yield membrane fabrication
K. CELEBI (Zhejiang Univ, CN)

Fuller's Earth-Based Low-Cost Ceramic Membrane for the Removal of Microplastic Microfibers from Domestic Laundry Wastewater
V.K. RAJA (National Institute of Technology Andhra Pradesh, IN)

9:50-10:05 Non-thermal ultraviolet detemplation of DD3R zeolite membranes for gas separation
P. DU (Nanjing Tech Univ, CN)

3D-Printed Mullite Ceramic Membranes for High-Flux Oil/Water Separation
C. SALAMEH (IEM, Univ Montpellier, FR)

10:05-10:20 Fast and Continuous fabrication of zeolite membranes for gas separations
R. ZHOU (Nanjing Tech Univ, CN)

Development of TiO₂ Ultrafiltration Membranes via Nanoparticle Slurry Engineering and Dip-Coating Optimization
J. LEE (Korea Institute of Materials Science, KR)

10:20-10:35 Preparation of b-Oriented MFI-type Zeolite Membranes by in-situ Crystallization
Z. WANG (Zhejiang Univ, CN)

Nanofiltration-Based MXene-Modified Ceramic Membranes for Enhanced Divalent Ions Removal from Seawater
Y. MANAWI (QEERI/Hamad Bin Khalifa Univ, QA)

10:35-11:00 COFFEE BREAK

Gas separation - 2 - 2D & Carbon Molecular Sieve Membranes
Chairs: Z. LAI (KAUST, SA), H. NAGASAWA (Hiroshima Univ, JP)

Water treatment - 2 - From Treatment to Reuse: Challenging Water Streams
Chairs: D. MATTIA (Bath, GB), K.L. YEUNG (HKUST, HK)

11:00-11:15 ★ KEYNOTE: Ultrathin two-dimensional membranes for carbon capture: fundamental science-driven scalable fabrication
K.V. AGRAWAL (EPFL, CH)

Water reuse using ceramic membranes - exemplified by the water-intensive paper industry
C. PFLIEGER (Fraunhofer IKTS, DE)

11:15-11:30

Sodalite nanoparticle-infused polysulfone/polyethersulfone composite membrane for carbamazepine removal from pharmaceutical wastewater
M. DARAMOLA (Univ of Pretoria, ZA)

11:30-11:45 ◆ Precision Engineering of Carbon Molecular Sieve Membranes for Challenging Gas Separations (Invited)
C. MA (Dalian Univ of Technology, CN)

Advancing SWRO Desalination: Ceramic Membrane Filtration as a Next-Generation Pretreatment Solution
A. BELGADA (Univ Mohammed VI Polytechnic, MA)

11:45-12:00 Design of crosslinked carbon molecular sieves, ultramicroporous, gas separation membranes
D. WANG (The University of Sydney, AU)

Nanostructured TiO₂ Inorganic Membranes Prepared via Supercritical CO₂ Processing for Coupled Filtration and Ionic Sorption of Radioactive Effluents
M. DUCHATEAU (CEA-ISEC, Marcoule, FR)

12:00-12:15 ★ KEYNOTE: 2D nanochannels-aided graphene-wrapped zeolite membranes
K. KANEKO (Shinshu Univ, Nagano, JP)

Surface-Engineered PVDF-TiO₂-PEG Hollow Fiber Membranes with Pluronic P123 Coating for Photocatalytic Pervaporation of Wetland Water
M. ELMA (Lambung Mangkurat Univ, ID)

12:15-12:30

◆ Recent advances and steps toward commercialisation of membrane percrystallisation (Invited)
J. VAUGHAN (Univ of Queensland, Brisbane, AU)

12:30-14:00 LUNCH BREAK

Gas separation - 3 - Membrane Design & Transport Mechanisms
Chairs: K.V. AGRAWAL (EPFL, CH), X. WANG (Nanjing Tech Univ, CN)

Water treatment - 3 - Membrane Design, Interfaces & Fouling Control
Chairs: W.S. HUNG (Taiwan Univ, TW), L. WINNUBST (Univ Twente, NL)

14:00-14:15 ★ KEYNOTE: Microstructure engineering of carbon contained ceramic composite structure for molecular separation
M. KANEZASHI (Hiroshima Univ, JP)

◆ Controlled modification of the surface properties of ceramic membranes for water filtration (Invited)
C. MARICHY (CNRS, Univ Claude Bernard Lyon 1, FR)

14:15-14:30

◆ Alkylphosphonic Acid-Grafting: a PFAS-Free strategy to produce hydrophobic ceramic membranes (Invited)
M. PIZZOCCARO-ZILAMY (Forschungszentrum Jülich GmbH, DE)

14:30-14:45 Novel borocarbonitride-based membranes for efficient gas purification
C. CASTILLA MARTINEZ (IEM, Univ Montpellier, FR)

Industrialisation of Grignard-based functionalisation of inorganic membranes
B. COEN (A-membranes, BE)

14:45-15:00 Design for switching preferential permeation of non-adsorptive/adsorptive mixtures at temperatures ranging from ambient to extremely low temperature
K. ISHIZAKI (Hiroshima Univ / Nippon Sanso, JP)

Electrically assisted microfiltration with lead-free BCTZ ceramic membranes
C. CONIDI (CNR-ITM, IT)

15:00-15:15 Comprehensive study on CO₂/CH₄ gas permeation characteristics of DDR-type zeolite membrane
H. MADOKORO (NGK Corporation, JP)

Data-driven control of biofilm membrane reactor with ceramic membranes
Z. MALETSKYI (Norwegian Univ of Life Sciences, NO)

15:15-15:30 Incorporating High-Valent Metal into Zeolite Membranes for CO₂ Separation
L. PENG (Nanjing Tech Univ, CN)

Unifying and Predicting Oil-Water Membrane Fouling with a Physics-Aware Learning Framework
S.Y. GÓMEZ GONZÁLEZ (Federal Univ of Santa Catarina, BR)

15:30-15:45 Insights into nanopore size distribution of silica-based membranes: explaining the advantageous hydrogen to carbon dioxide selectivity
G. OLGUIN (Pontificia Univ Católica de Valparaíso, CL)

New Additive-Manufactured Inorganic Membranes: Architectures and Performances
J. ANQUETIL (TAMI Industries, FR)

15:45-16:15 COFFEE BREAK

Gas separation - 4 - Zeolite Membranes: From Mechanisms to Process Design
Chairs: X. GU (Nanjing Tech Univ, CN), K. CELEBI (Zhejiang Univ, CN)

Water treatment - 4 - Next-Generation 2D Membranes for Water
Chairs: C. PFLIEGER (IKTS, DE), J. DONG (Univ Cincinnati, US)

16:15-16:45 ★ KEYNOTE: Affinity-Based Olefin/Paraffin Separation Using Ag⁺-Exchanged Zeolite Membranes: From Molecular Mechanisms to Energy-Efficient Processes
M. MATSUKATA (Waseda Univ, JP)

★ KEYNOTE: Inherently Stable 2D Siloxene Membranes for Molecular Separations
D. MATTIA (Univ of Bath, GB)

16:45-17:00 Unveiling the Molecular Mechanism of CO₂ Permeance Decline in CHA Zeolite Membranes: The Role of Trace Hydrocarbons
H. TAKABA (Kogakuin Univ, JP)

Influence of swelling and adsorption processes on the performance of graphene oxide membranes
D. PETUKHOV (New York Univ Abu Dhabi, AE)

17:00-17:15 Zeolite membranes for gas separation: multi-scale approach from molecular insights to process design
M. KUZNETSOVA (Univ Lorraine, CNRS, FR)

◆ Interfacial Reactivity of Hydrophilic 2D Membranes: Ab Initio Insights into Water/h-BN and Water/GO Systems (Invited)
M.L. BOCQUET (ENS, CNRS, Sorbonne Univ, Paris, FR)

17:15-17:30 ◆ High-Silica CHA Zeolite Membranes with Ultrahigh Kr/CF₄ Selectivity for High-Purity Krypton Purification (Invited)
X. WANG (Nanjing Tech Univ, CN)

Tailoring Graphene Oxide Membranes via Polymer Intercalation and Crosslinking for Efficient Desalination
A. DARMAWAN (Diponegoro Univ, ID)

17:30-17:45 Oriented MFI zeolite membranes for efficient Freon/hexafluoropropylene separation
Y. ZHANG (Nanjing Tech Univ, CN)

◆ Piezoelectric-responsive graphene membranes for simultaneous water production and electricity generation (Invited)
W.S. HUNG (National Taiwan Univ of Science and Technology, TW)

17:45-18:30 POSTER SESSION II & EXHIBITION (Beer & Prezels served from 18:30)

19:00-22:00 Scientific Committee Meeting & Dinner (Ma première Cantine, 4 Place Jean Jaurès, Montpellier)

Wednesday, July 1, 2026

8:00-8:20

REGISTRATION

MOUSSERON Amphitheatre, ENSCM, Montpellier

Chair: A. NUJMEIJER (Shell, NL)

8:20-8:30 Daily Announcements

8:30-9:15 ★★ **PLENARY LECTURE: How to use thermodynamic tricks to build and operate high-performance CO2 permeable membranes**

I. METCALFE (Newcastle University, UK)

MOUSSERON Amphitheatre

GODECHOT Amphitheatre

PhD students - Session 1

PhD students - Session 2

Chairs: A. NUJMEIJER (Shell, NL), I. METCALFE (Newcastle Univ, UK)

Chairs: D. WANG (Univ Sydney, AU), S. ROUALDES (Univ Montpellier, FR)

9:20-9:23 **Advances and challenges in reducing surface roughness to improve Pd-based membranes for H2 purification**

G. ASCHIERI (Rey Juan Carlos Univ, ES)

Lithium recovery from seawater desalination brines using ion-sieve electrospun nanofibrous membranes: the role of nanofiber design

N. NADZRI (Nanyang Technological Univ, SG)

9:24-9:27 **Pd-based Membranes for Hydrogen Purification in Presence of Ammonia**

W. DEW (Norwegian Univ of Science and Technology, NO)

Membranes based on new charged 2D nanomaterial

E. ROLLAND (CEA Saclay, FR)

9:28-9:31 **Pressurized ammonia decomposition aimed at improving decomposition and hydrogen recovery**

S. ITO (Utsunomiya Univ, JP)

Thiourea-functionalized graphene oxide ceramic nanofiltration membranes for ion rejection from saline wastewater

S. KIM (Ewha Womans Univ of Seoul, KR)

9:32-9:35 **Upscaling Study of Carbon Molecular Sieve Membranes to Multichannel Configurations**

R. FERRETTI (Eindhoven Univ of Technology, NL)

Enhancing stability of graphene oxide ceramic membranes: overcoming adhesion and swelling limitations for dye removal

Y. KOUZI (Univ Hassan II of Casablanca, MA)

9:36-9:39 **Hydrogen-Selective Silica Membranes: Correlating Gas Transport with Nanoporous Structure**

T. GREKOU (Centre for Research and Technology Hellas, GR)

Engineering PFAS-free hydrophobic ceramic membranes for membrane distillation: phosphate anchoring

F. ALTINBAS (Univ of Twente, NL)

9:40-9:43 **Hydrogen Permeable CoOx-SiO2 Membranes for Separation and Reaction: Synthesis and Characterization**

P. SRIVASTAVA (Univ of Houston, US)

Ligand-Assisted Cobalt Catalysts for Enhanced Dye Removal under Dark for Membrane Technology Applications

J. K. KOH (Univ of Sydney, AU)

9:44-9:47 **Cold Sintering as a Low-Temperature Route to Develop Porous Ceramic Membranes for Gas Permeation**

S. CANEVER (Federal Univ of Santa Catarina, BR)

3D-Printed ZnO/SiOC Gyroid Monoliths as Photocatalytic Flow-Through Reactors for Water Treatment

C. YOUSSEF (Univ Montpellier, FR)

9:48-9:51 **Mixed-Linker-Directed Seed-Free Growth of CO2-Selective MOF-303 Membranes**

L.T. CHI (National Taiwan Univ, TW)

Environmentally Friendly Fabrication of Asymmetric Alumina Membranes for Water Treatment via Phase Inversion Tape Casting

I. LAMBERS (Univ of Twente, NL)

9:52-9:55 **Green Solvent Synthesis and Membrane Engineering of Two-dimensional metal-organic frameworks Zn2(bim)4**

J. BOSMAN (Forschungszentrum Jülich, DE)

Evaluation of Spring Turbulence Promoter on Fouling Mitigation during the Microfiltration of Clove Basil Extract

K. RODRIGUES DORNELES (Univ Federal de Uberlândia, BR)

9:56-9:59 **Effect of Membrane Morphology and Activation Strategy on CO2 Separation in CAU-23 Membranes**

C.-H. CHUANG (National Taiwan Univ, TW)

From Industrial Waste to Functional Interfaces: Multi-Scale Image Analytics of Porosity-Roughness Interplay in Spent Bleaching Earth Ceramic Membranes

A. RAHMA (Institut Teknologi Kalimantan, ID)

10:00-10:03 **Aluminum Formate-Based Mixed Matrix Membrane for Enhanced Gas Separation Performance**

N. KHOIROH (Univ of Queensland, AU)

High performance hybrid membranes for solvent-based separations: Towards sustainable chemical production

K. ALAM (KU Leuven & VITO, BE)

10:04-10:07 **MOF-303 Tubular Membranes via PVA-Assisted Secondary Growth for Efficient CO2/N2 and CO2/CH4 Separation**

Y.-M. CHEN (National Taiwan Univ, TW)

Exploring the physicochemical properties of atomic layer deposited alumina layers for solvent-resistant nanofiltration membranes

H.SONDHI (Univ of Twente, NL)

10:08-10:11 **Critical Role of Interfacial Mass Transfer in MOF Membrane for Gas Separation**

L.-W. HSIAO (National Taiwan Univ, TW)

Physics Guided Neural Networks to Predict OSN Ceramic Membrane Performance

P.J. PICCARD (Hasselt Univ & VITO, BE)

10:12-10:15 **Biomimetic material modified polyetherimide membranes on CO2/N2 separation enhancement**

T.-Y. FU (Univ of Sydney, AU)

Systematic Fabrication and Functional Modification of PVDF Flat-Sheet Membranes for Ammonia Recovery via Membrane Distillation

C. RADAA (Univ Mohammed VI Polytechnic, MA)

10:16-10:19 **Investigating Dual-Phase Molten-Hydroxide Membranes for CO2 Separation: Lowering Operating Temperatures**

J. GRAY (Newcastle Univ, UK)

Rapid Synthesis of Ultrathin Zeolite Membranes with Exceptional Separation Performance

H. WU (Nanjing Tech Univ, CN)

10:20-10:23 **Direct CO2 reduction to methane in a pressurized dual-stage protonic steam-electrolysis reactor**

I. QUINA GARCÍA (Univ Politècnica de València, ES)

A Sacrificial Seed Layer Strategy for Hierarchical MFI Zeolite Membranes with Enhanced Butane Isomer Separation Performance

J. LI (Zhejiang Univ, CN)

10:24-10:27 **Exploring the role of the local environment in electrode-membrane assemblies for the electroconversion of CO2**

M. PAYA (Univ Montpellier, FR)

Gel-Recycling-Assisted Mild Synthesis of MFI Zeolite Membranes for Efficient Butane Isomer Separation

K. YU (Nanjing Tech Univ, CN)

10:28-10:31 **Thermo-chemical and -mechanical Stability of Materials in Membrane Reactors for Renewable Syngas Production**

K. STRECKEL (Forschungszentrum Jülich, DE)

Acceleration of Cyclopentanol Dehydrogenation Using Hydrogen Sieving Properties of CHA-Type Zeolite Membranes

D. KONDO (Utsunomiya Univ, JP)

10:32-10:35 **Methane steam reforming intensified by an oxygen-ion conducting membrane reactor**

P. SINTES (Univ Politècnica de València, ES)

COFFEE BREAK

POSTER SESSION III

(Dedicated to PhD Student Award Competition)

LUNCH BREAK

Gas separation - 5 - Molten Salt & Oxygen Transport Membranes

Chairs: S. BAUMANN (FZ Jülich, DE), L. ALMAR LIANTE (Univ Politècnica de València, ES)

Water treatment - 5 - Reactive & Catalytic Membrane Processes

Chairs: A. BUEKENOUDT (VITO, BE), A.K. AN (HKUST, HK)

14:00-14:30 ★ **KEYNOTE: Electrochemical Pumping of CO2 and O2 Using Molten Carbonate Electrolytes**

M. FONTAINE (SINTEF, NO)

★ **KEYNOTE: Treatment of recalcitrant pollutants in a dual membrane reactor system: Experimental and Modelling Study**

K.L. YEUNG (Hong Kong Univ of Science and Technology, HK)

14:30-14:45 **Ammonia separation using molten salt membranes: a sustainable approach to reduce energy and carbon footprint**

S. LIGUORI (Clarkson Univ, US)

Ti4O7 Porous Electrodes for Bio-refractory Micropollutants Removal in a Pilot-Scale Laboratory Studies: Application to the Degradation of Herbicides, Pharmaceuticals and Chemicals

M. GIBERT-VILAS (E2Lim, ENSIL-ENSCI, Univ Limoges, FR)

14:45-15:00 **Development of dual phase Oxygen Transport Membranes and high temperature joining tests with metals**

P. FEDELI (Ricerca sul Sistema Energetico - RSE SpA, Milano, IT)

Clay-titania hybrid films as novel photocatalysts

M. OGAWA (Shinshu Univ, JP)

15:00-15:15 **CFD Analysis of Oxygen Transport in Surface-Engineered MIEC Ceramic Membranes under Sweep-Gas Operation for Solar Thermochemical Reactors**

O.R. UZIEL (ITQ, Univ Politècnica de València, ES)

A Ti-Ti4O7 reactive electrochemical membrane for efficient pharmaceutical compounds degradation

J. RICHARD (IEM, CNRS, Univ Montpellier, FR)

15:15-15:30 **Model-supported analysis of surface exchange and ambipolar conductivity in STF25 oxygen transport membranes**

K. WILKNER (Forschungszentrum Jülich GmbH, DE)

Integration of Ceramic Membrane Nanofiltration and Catalytic Ozonation for Antibiotics Removal from Water

S. BROSSILLON (IEM, Univ Montpellier, FR)

15:30-15:45 **CFD-Based Multiphysics Analysis of Oxygen Permeation through Dense BSCF and LSCF Perovskite Membranes**

Univ of Brasília, BR - To be confirmed

From Transport-Integrated Ceramic Hollow Fibre Membranes to Catalytic Beads for Reactive Water Treatment

Z. WU (Aston University, UK)

COFFEE BREAK

Special Session - 1 - Membrane Design for Sensors

Chair: M. BALAGUER RAMÍREZ (Univ Politècnica de València, ES)

Special Session - 2 - Advanced Tools for Membrane Design & Processing

Chair: L. WINNUBST (Univ Twente, NL)

16:15-16:30 **Advanced Gas Separation via Atomic and Molecular Layer Deposition: From Membranes to Sensing Devices**

M. BECHELANY (IEM, CNRS, Univ Montpellier, FR)

Supercritical CO2 processes: a smart strategy for membrane preparation & modification

A. HERTZ (CEA - ISEC, Marcoule, FR)

16:30-16:45 **Machine Learning-Guided Optimization of ZnO-to-ZIF-8 Membrane Conversion: Predictive Framework for High-Quality MOF layer Synthesis**

K. DEDECKER (IEM, CNRS, Univ Montpellier, FR)

Acoustic Emission for Unveiling Gas Transport Mechanisms in Porous Membranes

E. LE CLEZIO (IES, Univ Montpellier, FR)

GALA DINNER

(City Hall - Hôtel de Ville, 1 Place Georges Frêche, Montpellier)

18:30-23:00

Thursday, July 2, 2026	
8:00-8:20	REGISTRATION
	MOUSSERON Amphitheatre, ENSCM, Montpellier Chair: T. TSOTSIS (Univ Southern California, US)
8:20-8:30	Daily Announcements
8:30-9:15	★★ PLENARY LECTURE: Inorganic Membranes for Water Treatment I. VOIGT (Fraunhofer IKTS, DE)
	MOUSSERON Amphitheatre
	GODECHOT Amphitheatre
	Membrane Reactors - 1 - Catalytic reactors, Fundamentals & Transport Chairs: T. TSOTSIS (Univ Southern California, US), W.A. MEULENBERG (FZ Jülich, DE)
	Membranes for Complex Liquid Processing - 1 - Organic & Industrial Liquids Chairs: M.W.J. LUITEN-OLIEMAN (Univ Twente, NL), Z. WANG (Zhejiang Univ, CN)
9:20-9:50	★ KEYNOTE: Membrane reactors with Carbon Membranes F. GALLUCCI (1 CUBE BV and ZEFIRA BV, NL)
	★ KEYNOTE: A sustainable and economic membrane-based process to re-refine used lubricant oil A. BUEKENHOUDT (VITO NV, BE)
9:50-10:05	Vacuum-Driven Carbon Molecular Sieve Membrane Reactor for On-Purpose Propylene Production: Reactor Design, Modeling, and Process Evaluation D. LIU (Univ of Delaware, US)
	Industrial Application of Ceramic Membrane Ultrafiltration for Purification of Refinery Oil Streams J. LIN (Arizona State Univ, US)
10:05-10:20	◆ Carbon molecular sieve membranes for gas separation and membrane reactors (invited) D.A. PACHECO TANAKA (Tecnalia, ES)
	Robust tailored ceramic membranes for high temperature separations: Key enabling technology for decarbonization of chemical industries P. VANDEZANDE (VITO NV, BE)
10:20-10:35	Investigating the Interplay of Membrane Mass Transport and Reaction Kinetics in Integrated Catalytic Membrane Reactors I. ELSHERBINY (Fraunhofer IKTS, DE)
	MOF UiO-66 membranes for MeOH/organic separation X. LIU (Tianjin Univ, CN)
10:35-10:50	Optimized Mass & Heat Transport in an Experimental Solar-Heated Membrane Reactor for Hydrogen and Syngas Production N. KRUSE (German Aerospace Center - DLR, DE)
	Scale-Up and Pilot-Scale Demonstration of Acid-Resistant Hybrid Silica (HybSi) Membranes for Pervaporation-Enhanced Esterification Reaction M. NIKBAKHT FINI (TNO, NL)
10:50-11:15	COFFEE BREAK
	Membrane Reactors - 2 - Electrochemical Reactors & Energy Applications Chairs: R. O HAYRE (Colorado School of Mines, US), D. LIU (Univ Delaware, US)
	Membranes for Complex Liquid Processing - 2 - Membrane Design & Applications Chairs: P. VANDEZANDE (VITO, BE), M. OGAWA (Shinshu Univ, JP)
11:15-11:45	★ KEYNOTE: Manufacturing of Proton Conducting Cells W.A. MEULENBERG (Forschungszentrum Jülich GmbH, DE)
	★ KEYNOTE: Increasing hydrophobicity of ceramic membranes by post-deposition nitrogen annealing of molecular layer deposition grown hybrid layers M.W.J. LUITEN-OLIEMAN (Univ of Twente, NL)
11:45-12:00	Protonic Ceramic Membranes for E-Fuel Synthesis D. SCHMIDER (EIFER Karlsruhe, DE)
	Tight ceramic membrane based reactive extraction for recovery of biobased (di)carboxylic acids P. MONDAL (VITO NV, BE)
12:00-12:15	Single-Stage Electrochemical Ammonia Cracking to Compressed Hydrogen A.C. DOS SANTOS TEIXEIRA (ITQ, CSIC, Univ Politècnica de València, ES)
	Development and Application of Asymmetric Alumina Hollow Fiber Membranes for Genipap (Genipa americana L.) Extract Clarification M. REIS (Federal Univ of Uberlandia, BR)
12:15-12:30	AAO-based fully transparent plasmonic membranes for thermal catalysis S. KMENT (CATRIN, Palacky Univ Olomouc, CZ)
	◆ Microfiltration / Ultrafiltration and skim milk fouling: inorganic vs polymer membranes (invited) M. RABILLER-BAUDRY (ISCR, Univ Rennes, CNRS, FR)
12:30-14:00	LUNCH BREAK
	Membrane Reactors - 3 - Catalysis & Process Intensification Chairs: F.GALLUCCI (1 CUBE, ZEFIRA BV, NL), F.GARCIA-GARCIA (Univ Edinburgh, UK)
	Special Session - 3 - Membranes for Energy & Resource Recovery Chairs: J. LIN (Arizona State Univ, US), M. BECHELANY (Univ Montpellier, FR)
14:00-14:30	★ KEYNOTE: Membrane Contactor Reactors (MCR): An Efficient Platform Technology for Converting Waste Carbon Resources into Liquid Chemicals and Fuels T. TSOTSIS (Univ of Southern California, US)
	★ KEYNOTE: Lithium Extraction from Low-grade Brines Z. LAI (King Abdullah Univ of Science and Technology, SA)
14:30-14:45	Flow-membrane reactor to achieve equilibrium shift in esterification while avoiding phase separation N. ITOH (Utsunomiya Univ, JAPAN, JP)
	★ KEYNOTE: Flexible LAMP Composite Membrane for Lithium-Selective Electrodialysis with Superior Cation Rejection A.K. AN (Hong Kong Univ of Science and Technology, HK)
14:45-15:00	Thermo-chemical and -mechanical Stability of Materials in Membrane Reactors for Renewable Syngas Production K. STRECKEL (Forschungszentrum Jülich GmbH, DE)
15:00-15:15	★ KEYNOTE: Oxygen transport membranes applied to carbon capture and intensified catalysis M. BALAGUER RAMÍREZ (ITQ, CSIC, Univ Politècnica de València, ES)
	Innovative MOF-Based Membrane Technologies for Metal Recovery from E-Waste B. HAN (NTU, SG)
15:15-15:30	
	2D Silicalite Nanosheet-Polymer Composite Anion Exchange Membranes J. DONG (Univ of Cincinnati, US)
15:30-16:00	COFFEE BREAK
17:00	Montpellier City Walk (2-hour guided tour from the Tourist Office – Starting from 17:00)

Friday, July 3, 2026	
8:30-8:50	REGISTRATION
	MOUSSERON Amphitheatre
8:50-9:00	Daily Announcements
	Industry Pitches Chairs: D. VOIRY & M. DROBEK (Univ Montpellier, FR)
9:00-10:30	Series of short presentations by ICIM-18 sponsors (detailed list to be announced)
10:30-11:00	COFFEE BREAK
	Final Plenary Session Chairs: W. JIN (Nanjing Tech Univ, CN); J. SERRA (Univ Valencia, ES) & A. JULBE (Univ Montpellier, FR)
11:00-11:45	★★ PLENARY LECTURE: Zeolite Membranes for Molecular Separation, Membrane Reactors and Energy Storage J. LIN (Arizona State Univ, USA)
11:45-12:30	🏆 Award Ceremony
12:30-13:00	📢 Announcement ICIM-19
13:00-13:15	Concluding Remarks
13:15-15:00	🍷 TAPAS PARTY