

تحت الرعاية السامية لصاحب الجلالة الملك محمد السادس نصره الله وأيده
UNDER HIGH PATRONAGE OF HIS MAJESTY KING MOHAMMED VI, MAY ALLAH ASSIST HIM

UNIVERSITÉ HASSAN II DE CASABLANCA
المدرسة العليا للأساتذة بالدار البيضاء
ECOLE NORMALE SUPÉRIEURE
جامعة الحسن الثاني بالدار البيضاء
UNIVERSITÉ HASSAN II DE CASABLANCA



الجمعية المغربية للأغشية وتحلية المياه
SMMD
Société Marocaine des Membranes et
de Dessalement

CONFERENCE PROGRAM

THE 5TH INTERNATIONAL CONGRESS OF AFRICAN MEMBRANE SOCIETY (AMSIC 5)

*Towards a Sustainable Future
with Membrane Science*

Chairpersons

SAAD ALAMI YOUNSSI, MOROCCO

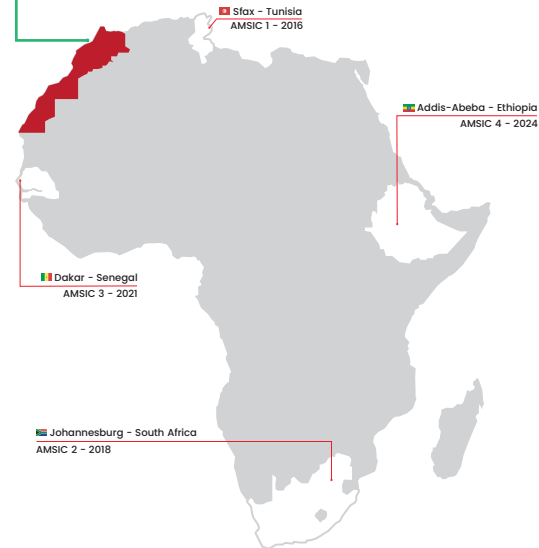
RAJA BEN AMAR, TUNISIA

Co-Chairs

- SARA CHERGAOUI, SWEDEN
- BRAHIM ACHIOU, MOROCCO
- HEIDI RICHARDS, SOUTH AFRICA
- ABDOULAYE DOUCOURE, USA
- MOUNIR BELBAHLOUL, MOROCCO
- ABAYNESH Y. GEBREYOHANNES, USA
- RAMATO ASHU TUFA, ITALY

Casablanca - Morocco

November 2-6, 2026



THE 5TH INTERNATIONAL CONGRESS OF AFRICAN MEMBRANE SOCIETY (AMSIC 5)

Towards a Sustainable Future with Membrane Science

Casablanca - Morocco

November 2-6, 2026

Supported by



الجمعية المغربية
وزارة التعليم العالي
والتعليم العالي والبحث
RECHERCHE DES MEMBRANES
MINISTÈRE DE L'ÉDUCATION
SUPÉRIEURE ET DE LA RECHERCHE
SCIENTIFIQUE ET DE L'INNOVATION



جامعة الحسن الثاني بالدار البيضاء
UNIVERSITÉ HASSAN II DE CASABLANCA

المكتب الوطني للكهرباء والماء الصالح للشرب
Office National de l'Électricité et de l'Eau Potable



5th African Membrane Society Congress

Towards a Sustainable Future with Membrane Science

Monday Nov 2	DAY 0		
08:00 - 16:00	Workshop: Discover the power of membrane technologies for sustainable separations and global challenges (The program is detailed below). ENS Casablanca, Route d'El Jadida Km 9 Casablanca		
17:00 - 19:00	Registration Ground floor Idou Anfa Hotel - 85 Bd d'Anfa, Casablanca		
19:00 - 21:00	Reception (Welcoming cocktail) Idou Anfa Hotel - 85 Bd d'Anfa, Casablanca		
Tuesday Nov 3	DAY 1		
	Room1	Room2 (Main)	Room3
09:00 - 09:45		Official Opening Ceremony Azzeddine El Midaoui , Minister of Higher Education, Scientific Research and Innovation Houssine Azeddoug , President of Hassan II University of Casablanca Raja Ben Amar , President of African Membrane Society Tarik Hamane , ONEE. Director General Frank Lipnizki , President of the European Membrane Society Mohamed Amine , Director General of Watec Saad Alami Younssi (Chair of the conference) , Director of the Ecole Normale Supérieure of Casablanca	
Chair	Saad Alami Younssi		
09:45 - 10:30		Plenary talk 1: Menachem Elimelech USA__Membrane Technologies for Desalination and Water Reuse: Where Are We Now? <i>Rice University, USA</i>	
10:30 - 10:40		Group photo	

10:40 - 11:10	Coffee Break 1st Floor		
Chair	Raja Ben Amar & Anthony Szymczyk		
11:10 - 11:55		Plenary talk 2: Frank Lipnizki Membrane processes in biorefineries <i>Lund University, Sweden</i>	
11:55 - 12:40		Plenary talk 3: Michael Daramola Metal-Organic Framework-Based Membranes for Metal Recovery from E-Waste: Recent developments, opportunities, challenges and Implementable case studies <i>University of Pretoria, South Africa</i>	
12:40 - 14:00	Lunch Restaurant Ground Floor		
	Water treatment	Downstream processing	Medical and Pharmaceuticals
Chairs	Murielle Rabiller-Baudry	Ramato Tufa	Courfia Diawara
	Abdoulaye Doucouré	Jamal Benezha	Misgina Tilahun
14:00 - 14:30	Keynote 1: Volkan Filiz Thermally and Chemically Stable Isoporous Block Copolymer Membranes <i>Helmholtz-Zentrum Hereon, Germany</i>	Keynote 3: Lidietta Giorno Biocatalytic Membrane Reactors for Sustainable Production and Separation <i>ITM-CNR, Italy</i>	Keynote 5: Ranil Wickramasinghe Virus filtration for validating virus clearance in the processing of small viral vectors <i>University of Arkansas, Kingdom of Saudi Arabia</i>
14:30 - 15:00	Keynote 2: Adel Zrelli Decentralized Water Treatment Using a Solar Photocatalytic Membrane Reactor: Insights from Paracetamol Removal on Clay-Based Ceramics <i>Innovative Processes and Environment, Tunisia</i>	Keynote 4: Walter Gregory Wesson The Fiber of Resilience: Why TIPS PVDF is Redefining the Frontlines of Seawater Desalination and Water Treatment <i>Memstar, Singapore</i>	Keynote 6: Loredana De Bartolo Advanced Membrane Platforms Shaping the Future of Tissue Engineering and Microphysiological Systems <i>ITM-CNR, Italy</i>
15:00 - 15:15	O1 [invited]: Pengrui Jin Contributions of Partition and Diffusion Energy Barriers to Lithium-Ion Selectivity. <i>University of Bath, United Kingdom</i>	O5: Solomon H. Tela Organic Solvent Nanofiltration and Online Raman Spectroscopy for Optimization of Catalytic Olefin Metathesis Reactions <i>NOVA University of Lisbon, Portugal</i>	O9: Wiame Boumzour Integrating Synthesis and Molecular Docking of Limonene-Derived β -Amino Alcohols for Membrane-Targeted Antimicrobial Applications. <i>ENS, Hassan II University of Casablanca, Morocco</i>
15:15 - 15:30	O2 : Mbongiseni L Dlamini High-Performance CNC-ZIF/Polyethersulfone Nanocomposite Membranes for Atrazine Removal from Water <i>University of the Witwatersrand (WITS), South Africa</i>	O6: Manal Idgharnane Natural pozzolan-based graphene oxide membrane crosslinked with urea for enhanced dye filtration. <i>FST, Hassan II University of Casablanca, Morocco</i>	O10: Vincenza Calabrò Multi-Scale In-Silico Design, Experimental Synthesis, and Sustainability Assessment of Antimicrobial Mixed Matrix Membranes for Air and Water Purification <i>University of Calabria, Italy</i>
15:30 – 15:45	O3: Stanislas Ndayishimiye Separation of Total Organic Carbon and Inorganic Nutrients from Biotreated Wastewater by Using Ultrafiltration Membrane. <i>University of Burundi, Burundi</i>	O7: Valentia Pheladi Letswalo A tin disulfide/vanadium carbide MXene (SnS ₂ /V ₂ CT _x) Schottky junction on a cellulose acetate thin film membrane for photocatalytic degradation of perfluorononanoic acid (PFNA). <i>University of Johannesburg, South Africa</i>	O11: Fatima Ezzahra Oujaha Optimization of clay-based microfiltration membrane for the pretreatment of pharmaceutical wastewater <i>FST, Hassan II University of Casablanca, Morocco</i>

15:45 – 16:00	O4: Tarik EL-JADDI Advanced and innovative process using reconditioned membranes to address the challenges of treated wastewater reuse (NANOSELECT NEXT STEP project) <i>Chemdoc Water Technologies, France</i>	O8: Imen Bousrih Membrane Distillation Crystallization for Water and Gypsum Recovery from Pulp and Paper Industry <i>Aalborg University, Denmark</i>	O12: Iva Valerieva Boncheva Performance of PES and PES/PVP membranes for recovery of bioactive compounds from aromatic herbs <i>University of Chemical Technology and Metallurgy, Bulgaria</i>
16:00 – 17:30	Coffee Break Stand Exhibition & Poster Session 1st Floor		
Wednesday Nov 4	DAY 2		
	Room1	Room2 (Main)	Room3
Chair	Menachem Elimelech & Sara Chergaoui		
09:00 - 09:45		Plenary talk 4: Ingolf Voigt Design of porosity in ceramics for selective transport and efficient separation in membrane application <i>Fraunhofer Institute for Ceramic Technologies and Systems IKTS, Germany</i>	
09:45 - 10:30		Plenary talk 5: Khalid Tahri Desalination: An Opportunity for a Resilient and Sustainable Drinking Water Supply in Morocco <i>ONEE, Morocco</i>	
10:30 - 10:50	Coffee Break Stand Exhibition 1st Floor		
	Industrial applications	Energy	Carbon capture and Gas separation
Chairs	Aaddane Abdellah	Mohamed Ouammou	Loredana De Bartolo
	Adel Zrelli	Maryam Khadim Mbacke	Khalid Tahri & Abdelhadi EL Bachiri
10:50 - 11:20	Keynote 7: Abdoulaye Doucouré Safeguarding environmental quality in chip manufacturing facilities through tailored filtration and separation schemes <i>Donyatek, Tergys (industries), USA</i>	Keynote 9: Misgina Tilahun Membrane-enabled electrochemical processes: From H ₂ Production to NH ₃ Cracking <i>VITO, Belgium</i>	Keynote 11: Ramato Tufa Advanced membrane-electrode assembly design for integrated CO ₂ capture and conversion <i>University of Calabria, Italy / University of British Columbia, Canada</i>
11:20 - 11:50	Keynote 8: Heidi Richard Membrane Distillation for Treatment of Biofloculant Treated Leachate <i>University of Witwatersrand, South Africa</i>	Keynote 10: Mama El Rhazi Innovative Functional Materials for Sustainable Energy and Environmental Protection: Applications in Hydrogen Evolution and Electrochemical Detection <i>University Hassan II of Casablanca, Morocco</i>	Keynote 12: Zachary Smith Advancing PIMs for Gas and Solvent Separations. <i>MIT, United States</i>
11:50 - 12:05	O13: Farshid Pajoumshariati High-Quality Water Production from Treated Pulp and Paper Industry Wastewater Using Membrane Technology <i>University of Montpellier, France</i>	O17: Sawadogo Boukary Anaerobic Membrane Bioreactor under Sahelian Climate: Treatment of Brewery and Sugar Industry Effluents in Burkina Faso <i>Institute 2iE, Burkina Faso</i>	O21 [invited]: Dharmjeet Madhav Enzyme-Enhanced Membrane Reactor for Integrated CO ₂ Capture and Controlled Mineralization <i>KULeuven, Belgium</i>

12:05 – 12:20	O14: Junru Wang Low-Cost, Dendrite-Suppressing Cellulose Acetate Based Quasi-Solid Electrolyte for Stable Aqueous Zinc-Ion Batteries <i>KULeuven, Belgium</i>	O18: Fatima Zahra Kamli Next-generation materials: double halide perovskites for photovoltaic applications <i>ENS, Hassan II University of Casablanca, Morocco</i>	O22: Bouchra Belaïssaoui Membrane Module Design for Gas Absorption and desorption: Flow configurations and Modeling Approaches <i>Université de Lorraine, CNRS, LRGP, France</i>
12:20 – 12:35	O15: Abdulrahman Babatunde Ameen Comparative Analysis of Membrane and Conventional Water Treatment Technologies in Lagos, Focusing on Contaminant Removal and Health Risks. <i>Igbinedion University Okada Edo State Nigeria, Nigeria</i>	O19: Adli Amal Insights into PEM Water Electrolysis through Advanced Numerical Modeling <i>Hassan II University of Casablanca, Morocco</i>	O23: Jeong-Hoon Kim Principal Researcher Membrane-Based Resource Recovery of H ₂ , CO and CO ₂ from FINEX Off-Gas in the Steel Industry: One- and Two-Stage Processes Using Polysulfone Hollow-Fiber Membranes <i>Korea Research Institute of Chemical Technology (KRICT), South Korea</i>
12:35-12:50	O16: Achetouk Amar Ab initio prediction of material X as a promising anode for Li-ion and Na-ion batteries: stability, adsorption, and storage capacity <i>University Hassan II of Casablanca, Morocco</i>	O20: Sanaa Chemchoub Nickel, Not Platinum: Sustainable Electrocatalysts for Alcohol Fuel Cells and ORR <i>FSTM, University Hassan II of Casablanca, Morocco</i>	O24: Olawumi Sadare Optimization Driven Scale-up and Performance Evaluation of Polyelectrolyte Nanofiltration Membranes <i>Aston University, UK</i>
12:50 - 14:15	Lunch Restaurant Ground Floor		
Chairs	Michael Daramola & Mama El Rhazi		
14:15 -15:00		Plenary talk 6: Murielle Rabiller-Baudry Fouling, cleaning, aging: interactions among three key factors in controlling the filtration of dairy liquids <i>University of Rennes, France</i>	
15:00 – 15:45		Plenary talk 7: Catia Algieri Performance and Perspectives of Photocatalytic Membrane Reactors for Advanced Wastewater Treatment <i>ITM-CNR, Italy</i>	
15:45– 16:20	Coffee Break Stand Exhibition 1st Floor		
	Green Material	Desalination	Modelling
Chairs	Ranil Wickramasinghe	Hafsi Mahmoud	Lidietta Giorno
	Ayse Asatekin	Amine Ezzahi	Heidi Richard
16:20 – 16:50	Keynote 13: Maryam Khadim Mbacke Hydraulic Performance and Ion Selectivity of Millet Husk-Derived CTA2CGLY Nanofiltration Membrane. <i>Amadou Mahtar MBOW University, Senegal</i>	Keynote 15: Hafida Ayyoub Application of Aerobic Ceramic Membrane Bioreactors for Fish Canning Wastewater Treatment: Insights from Pilot-Scale Operation and Machine Learning Modelling <i>Ibn Tofail University of Kenitra, Morocco</i>	Keynote 17: Anthony Szymczyk Early-stage detection of membrane wetting through electrokinetic leakage monitoring. <i>University of Rennes, France</i>

16:50 - 17:20	Keynote 14: Catia Giovanna Lopresto Sustainability and Green Metrics in Membrane Technology: Towards a Zero-Impact Manufacturing Processes <i>University of Calabria, Italy</i>	Keynote 16: Courfia K. Diawara Scientific issues and implementation of a West African International Master's Degree in Desalination and Water Reuse. <i>Assane Seck University of Ziguinchor, Senegal</i>	Keynote 18: Mustapha Hajji CFD-Based Modeling of Concentration Polarisation and Flow Dynamics in Reverse Osmosis Feed Channels using COMSOL Multiphysics and MATLAB <i>ONEE, Morocco</i>
17:20 - 17:35	O25: Sanaa Adlane Investigation of the filtration efficiency and cost-effectiveness of low silica X zeolite/polystyrene membrane deposited on pyrophyllite support <i>FSTM, Hassan II University of Casablanca, Morocco</i>	O29: Charaf Bahij SWRO brine diffusion and environmental impact: Identified influencing parameters and key stressors, extent area of diffusion, assessment process and magnitude of environmental impact <i>ONEE, Morocco</i>	O32: Stefan Panglisch Development of a Scaling Monitoring Platform for Early Detection and Characterization of Membrane Scaling. <i>University of Duisburg-Essen, Germany</i>
17:35 - 17:50	O26: Faith Maria Muramba Modification of cellulose acetate-supported thin film composite membrane with amine-functionalized ZIF-8 (NH ₂ -ZIF-8) nanofillers <i>University of Johannesburg, South Africa</i>	O30: Gagara Soumana Critical Aspects of Operations and Maintenance of Containerized Water Treatment Plant Systems: A Case Study of Reverse Osmosis for Brackish Water in the Sahel Region, Africa <i>United Nations Support Office in Somalia (UNSOS), Somalia</i>	O34: Afef Attia PES/Clay Mixed Matrix Membranes Enabling Efficient Recalcitrant Chloramphenicol Removal: A Joint Experimental and DFT Approach. <i>University of Sfax, Tunisia</i>
17:50 - 18:05	O27: Jamyla Naim Eco-friendly synthesis of a coffee waste-derived Montmorillonite/CuO nanocomposite for efficient photocatalytic dye removal <i>FSTM, Hassan II University of Casablanca, Morocco</i>	O31: Youness Kouzi Using Counter-current Cascades to Mitigate RO Membrane Ageing in Desalination <i>FSTM, Hassan II University, Morocco – University of Rennes, France</i>	O35: Achraf Chahbi Study of Nanofiltration Membrane Process by Langevin Dynamic Model. <i>University Hassan II, Casablanca, Morocco</i>
18:05 - 18:20	O28: Phatsimo Matshediso Extraction of cellulose from elephant dung for the development of adsorbents for water purification <i>Botswana Institute for Technology, Botswana</i>	O32: Mohamed Idrisse Nitrate Ion Transport through Reverse Osmosis and Nanofiltration Membranes: Hydrodynamic and Model Transfer Approach <i>Ibn Tofail University of Kenitra, Morocco</i>	O36: Yassine Arid Molecular Modeling of Polyamide-Based Mixed-Matrix Membranes for Desalination: From Polymer Construction to Structural Validation <i>University Mohammed V of Rabat, Morocco</i>
Thursday Nov 5	DAY 3		
	Room1	Room2 (Main)	Room3
Chairs	Frank Lipnizki & Abaynesh Gebreyohannes		
09:00 - 09:45		Plenary talk 8: Stefan Panglisch From Trace Levels to Treatable Brines: Hybrid Ion Exchange-CCRO and Adsorptive Concentrate Treatment for PFAS-Contaminated Groundwaters <i>University of Duisburg-Essen, Germany</i>	
09:45 - 10:30		Plenary talk 9: Ayse Asatekin	

		Zwitterionic Amphiphilic Copolymer (ZAC) Membranes for Challenging Separations <i>Tufts University, USA</i>	
10:30 - 10:20	Coffee Break Stand Exhibition 1st Floor		
	Emerging Membranes	Resource recovery	Valorization and Sustainable Processing
Chairs	Stefan Panglisch	Ranil Wickramasinghe	Mohamed Bouhria & Elhassani Abdelhadi
	Brahim Achiou	Zachary P. Smith	Mounir Belbahloul
10:20 - 10:50	Keynote 19: Fred Molelekwa From water scarcity to water security: The critical role of membrane technology in expanding access to safe drinking water in Africa <i>Tshwane University of Technology, South Africa</i>	Keynote 21: Mads Koustrup Jørgensen Membrane based biorefining of grass-based food proteins <i>Aalborg University, Denmark</i>	Keynote 23: Cejna Anna Quist Jensen Valorization of industrial waste streams <i>Aalborg University, Denmark</i>
10:50 - 11:20	Keynote 20: Sara Chergaoui From Passive Separation to Active Interfacial Engineering: Emerging Opportunities for Membrane-Controlled Phase Transitions <i>Lund University, Sweden</i>	Keynote 22: Wiliam A. Tarpeh Ligand-functionalized membranes and adsorbents for ion-selective refining of critical minerals from wastewaters <i>Stanford University, USA</i>	Keynote 24: Moustapha Sene Strengthening the development of water and sanitation infrastructure in West Africa <i>SenEngineering, Senegal</i>
11:20- 11:35	O37: Sara Ouardi Idrissi In situ surface functionalization of ceramic membranes by polycarbazole for water treatment. <i>FSTM, Hassan II University of Casablanca, Morocco</i>	O40: Emery Nkurunziza Determination of good operating conditions of bipolar membrane electrodialysis system for separation and recovery of nutrients from a synthetic aqueous waste <i>University of Burundi, Research Center in Natural Sciences and Environment, Burundi</i>	O43: Irina Valtcheva Investigation of irreversible fouling during nanofiltration of hydro-alcoholic extract from spent lavender <i>University of Chemical Technology and Metallurgy, Bulgaria</i>
11:35 - 11:50	O38: Nouhaila Makrouni Functional MXene Nanomaterial-Based Ultrafiltration Membranes for enhanced wastewater Treatment <i>FSTM, Hassan II University of Casablanca, Morocco</i>	O41: Lebo Galeromelwe PAN Composite Membrane for Enhanced Adsorption Removal of Nitrate and Phosphate from Aqueous Solutions <i>Botswana International University of Science and Technology, Botswana</i>	O44: Abdellah Halloub Pervaporation for Organic Solvent Recovery from Complex Mixtures: Ring-Closing Metathesis as a Case Study <i>Nicolaus Copernicus University in Torun, Poland</i>
11:50 -12:05	O39: Marouane Boukhari Optimization of Low-Cost Microfiltration Membrane Based on Moroccan Perlite and Micronized Phosphate for Water Treatment <i>FSTM, Hassan II University of Casablanca, Morocco</i>	O42: Demoulin Camille A sustainable combination of pre-treatment and filtration mode to up-grade mango pulp by microfiltration <i>CIRAD, France</i>	O45: Khadir Abderrahim Improvement of the El Ouatia demineralization plant performances <i>ONEE, Morocco</i>
12:05 - 13:30	Lunch Restaurant Ground Floor		
Chair	Ingolf Voigt & Cejna Anna Quist Jensen & Abdoulaye Doucouré		
13:30 – 14:15		Panel session 1 : Membrane Technology in Africa	

	Inorganic material	Sustainability and Circular economy	Scale-up, commercialization, innovation
Chairs	Soumana Gagara	Wiliam A. Tarpeh	Volkan Filiz
	Moustapha Sene	Misgina Tilahun	Fred Molelekwa
14:15 – 14:45	Keynote 25: Raja Ben Amar Sustainable Valorization of Waste-Derived Adsorbents for Circular Textile Wastewater Reuse through Hybrid Adsorption-Membrane Systems <i>University of Sfax, Tunisia</i>	Keynote 27: Lamia Housni From industrial water autonomy to shared territorial resilience: OCP Green Water’s circular approach to non-conventional water in Morocco <i>OCP Green Water, Morocco</i>	Keynote 29: Amos Adeniyi Triblock Terpolymers for Next-Generation Membranes: Advances, Challenges, and Future Directions in Water Treatment <i>Cape Peninsula University of Technology, South Africa</i>
14:45 – 15:15	Keynote 26: Brahim Achiou Valorization of Moroccan clay materials for sustainable ceramic membrane fabrication <i>FSTM, Hassan II University of Casablanca, Morocco</i>	Keynote 28: Otmane Abousselham Scaling seawater reverse osmosis for water security and circular economy in Morocco <i>OCP Green Water, Morocco</i>	Keynote 30: Ivo Vankelecom Membrane development and upscaling at MTG@KU Leuven <i>KULeuven, Belgium</i>
15:15- 15:30	O46: Mounia Baidou Development of a Multilayer Ceramic-Polymer/Graphene Oxide Nanocomposite Membrane from Moroccan Geomaterials for Advanced Treatment of Textile Wastewater <i>Moulay Ismail University of Meknès, Morocco</i>	O48: Oussama Salhi Towards Sustainable Wastewater Treatment: From Nano-Hydroxyapatite to Eco-Ceramic Membrane Technologies <i>FSTM, Hassan II University of Casablanca, Morocco</i>	O50: Chimezie Anyakora From Advanced Fiber Media Design for Biotherapeutics Production to Vaccine Manufacturing Readiness in Capacity-Constrained Environments: Bridging the Gaps to Create Resilient Healthcare Infrastructure Networks <i>Pan Atlantic University/ Bloom Public Health, Lagos, Nigeria</i>
15:30 – 15:45	O47: Hajer Aloulou Eco-Friendly Fenton Degradation of Organic Dyes Using Iron-Doped Natural Sand <i>University of Sfax, Tunisia</i>	O49: Anouar Mohamed Sustainable Adsorption Systems for Water Treatment: Integration of Response Surface Methodology and Machine Learning for Process Optimization <i>FSTS, Hassan I University of Settat, Morocco</i>	O51: Yakhya Ndiaye Towards African Technological Sovereignty in Membrane Manufacturing for Water Security and Sustainable Industrial Development. <i>SenEngineering International SA, Senegal</i>
15:45 – 16:05	Coffee Break Stand Exhibition 1st Floor		
Chair	Murielle Rabiller-Baudry & Ayse Asatekin		
16:05 – 16:45		Panel Session 2 : Women Scientists of Africa	
16:45 – 17:30		Closing Ceremony and Prize Announcements EMS – AMSIC – SMMD	
19:30 - 22:30	Gala dinner		
Friday Nov 6	DAY 4: Social Program		
09:30 - 13:30	Visit of Hassan II Mosque in Casablanca and Lunch in a traditional restaurant		

Poster Session

N	Name and Affiliation	Poster title
P1	W. Garcia-Vasquez <i>GreenNOVATION, France</i>	Method for reliable ion-exchange membrane resistance measurement under industrially relevant conditions
P2	Aloulou Hajer <i>University of Sfax, Tunisia</i>	Clay-Based Mixed Matrix Membranes for Diclofenac Removal and Enhanced Antifouling Performance
P3	Mourabit Rajae <i>UM6P, Morocco</i>	Low-Cost Natural Clay Phosphate Ceramic Membranes: Fabrication, Characterization and Applications in Wastewater Treatment and Desalination
P4	El Mejjarmi Noha <i>Hassan II University, Morocco</i>	Review on Low-Cost Ceramic Microfiltration Membranes Based on Moroccan Natural Materials for Industrial Wastewater Treatment
P5	Wiame Boumzour <i>Hassan II University, Morocco</i>	Synthesis and Molecular Docking of Limonene-Derived β -Amino Alcohols as Potential Membrane-Active Antimicrobial Agents
P6	Afef attia <i>University of Sfax, Tunisia</i>	Photocatalytic Cleanability of ZnO-Decorated Ceramic Membranes for Rhodamine B Removal
P7	Anouar Mohamed <i>Hassan I University, Morocco</i>	Eco-Friendly Removal of Cationic Dyes Using Activated Carbon from Arundo donax: Optimization and Machine Learning Modeling
P8	El Asraoui Ihssane <i>ENS, University Hassan II, Morocco</i>	Toward efficient hydrogen storage: a review on solid-state materials
P9	Fatima Zahra Kamli <i>University Hassan II, Morocco</i>	Synthesis, structural, and microwave properties of (Ni1/3Ta2/3)4+ co-substituted MgTiO ₃ ceramic
P10	Habtamu Belachew Ayele <i>Universidade Nova de Lisboa, Portugal</i>	Ratiometric Luminescent Oxygen-Sensitive Polyamide Membrane for In situ Monitoring of Biofouling
P11	Nouhaila Sajid <i>Faculty of Science and Technology of Mohammedia, Hassan II University of Casablanca, Mohammedia, Morocco.</i>	Synthesis of zeolitic materials from coal fly ash via hydrothermal conversion for heavy-metal removal
P12	Zahot Omar <i>ENS, Hassan II University, Morocco</i>	Correlation between the dielectric properties and photovoltaic performance of solid-state-synthesized K1-xCsxNbO ₃ perovskite: Experimental characterization and simulation using SCAPS-1D
P13	Mounir Belbahloul <i>ENS, University Hassan II, Morocco</i>	Mitigating Water Pollution with Bio-Adsorbents for Methylene Blue Removal
P14	El Bachiri Abdelhadi <i>ENS, University Hassan II, Morocco</i>	Synthesis and Characterization of Vanadium-Doped Semiconducting Oxides Thin Films via Spin Coating for On-Grid Desalination Applications
P15	Souhil Imane <i>ENS, University Hassan II, Morocco</i>	Green adsorption for sustainable dye removal: Preparation of bio-adsorbents using experimental design
P16	Dahmane Amina <i>ENS, University Hassan II, Morocco</i>	Waste-Derived Lignin and Chitosan-Based CS/PVA Aerogels for Enhanced Methylene Blue Removal via Post-Immersion Functionalization
P17	Dounia Beqqour <i>University Hassan II, Morocco</i>	Preparation of PpPD/PVA membrane using ferric chloride oxidant for dye removal
P18	Mouad Houfairi	Natural Support-Based Nanozeolite Membranes for Water–Organic Solvent Separation

	<i>University Hassan II, Morocco</i>	
P19	Imane Bousdig <i>FSTM, University Hassan II, Morocco</i>	Development of Low-Cost Ceramic Membranes from Moroccan Natural Geomaterials for Sustainable Seawater Pretreatment in Desalination Processes
P20	Aouay Feryel <i>Faculty of Sciences of Sfax, Tunisia</i>	Bifunctional ceramic membranes from spent coffee grounds for selective removal of pharmaceuticals and textile dyes
P21	Basma Bachiri <i>Ibn Tofail University, Morocco</i>	Electrodialysis Powered by Solar Energy: A Sustainable and Scalable Pathway to Water Security
P22	Jbel Abderrahim <i>Ibn Tofail University, Morocco</i>	Optimization and Prediction of Tetracycline Removal by Nanofiltration Using Response Surface Methodology and Machine Learning
P23	Oumaima Hachim <i>Hassan II University, Morocco</i>	High-performance membranes derived from waste extracted cellulose and clay supports for water remediation
P24	Nomcebo Princess Motsa <i>University of Pretoria, South Africa</i>	DFT-Guided Design of PGM-CeO ₂ Single-Atom Catalysts for Catalytic Membrane Reactor-Based High-Purity Hydrogen Production from Ammonia
P25	Hicham Maoujoud <i>Faculty of Science and Technology Casablanca, Morocco</i>	Development and efficiency evaluation of novel cleaning agents for mitigating fouling in Reverse Osmosis membranes
P26	Nouaamane El Alami <i>Faculty of Science and Technology Fes, Morocco</i>	First-Principles Investigation of the Electronic and Optical Properties of S–Cd Codoped SrTiO ₃ for Enhanced Photocatalytic Hydrogen Production
P27	Chaimaa Bellegraoui <i>Hassan II University, Morocco</i>	AI-Driven Biomass Valorization into Sustainable Materials: A Pathway Toward Carbon Footprint Reduction and Circular Economy
P28	Vincenza Calabro <i>University of Calabria, Italy</i>	Multi-Scale In-Silico Design, Experimental Synthesis, and Sustainability Assessment of Antimicrobial Mixed Matrix Membranes for Air and Water Purification.
P29	Chibani Neyla <i>University of Sfax, Tunisia</i>	Iron-Modified Natural Sand as a Heterogeneous Fenton Catalyst for Methylene Blue and Textile Wastewater Treatment
P30	Alum Ogechi Lilian <i>University of Nigeria, Nsukka</i>	Enhancing Water Security in Nigeria: Comparative Performance of Conventional and Membrane Filtration for Drinking Water Quality in Enugu State
P31	Amal Adli <i>University Hassan II, Casablanca, Morocco.</i>	Numerical Investigation of PEM Electrolyzers for Green Hydrogen Production
P32	Ahmida Benchellal <i>Ibn Tofail University, Faculty of Sciences, Kenitra, Morocco</i>	Synthesis and Structural Characterization CuCoPO ₄ Thin Films Deposited by the SILAR Technique for Energy Applications
P33	Mohamed El Hasnaoui <i>Faculty of Sciences, Ibn-Tofail University, Kenitra, Morocco</i>	Biocomposite-based EVA/VeoVa Vinyl Resin polymer reinforced with microcrystalline cellulose and carbon nanoparticles. Thermal and electrical investigations
P34	Hatim Machkour <i>Faculty of Sciences, Chouaib Doukkali University, El-Jadida, Morocco</i>	Synthesis and Characterization of Cu ₂ SnS ₃ Thin Films by Sol-Gel Spin Coating for Photovoltaic Applications
P35	Nouhaila Benaïssa <i>Faculty of Sciences, Chouaib Doukkali University, El-Jadida, Morocco.</i>	Layer-Dependent Growth and Electrical Performance of Sb ₂ S ₃ Thin-Film Chalcogenide Solar Cells for Photovoltaic Applications

P36	Salma Lakrimi <i>Faculty of Sciences and Technology of Fez, Sidi Mohamed Ben Abdellah University, Morocco.</i>	Beyond Hydrogen Evolution Rates: Assessing the Industrial Relevance of Solar Photocatalytic Systems through a Performance–Stability–Cost Framework
P37	Nouaman EL Alami <i>Faculty of Sciences and Technology of Fez, Sidi Mohamed Ben Abdellah University, Morocco.</i>	Stacking-Dependent Electronic and Optical Properties of SrTiO ₃ /LaCrO ₃ Heterostructures: A DFT-mBJ Investigation for Photocatalytic Water Splitting
P38	Harmoul Mohamed <i>Faculty of Science and Technology, University Hassan 1st, Settat, Morocco</i>	Adsorption of Methylene Blue from Aqueous Solutions Using Natural Moroccan Clay: Kinetics and Isotherm Studies
P39	Ayoub Amahrous <i>Faculty of Science and Technology, University Hassan 1st, Settat, Morocco</i>	Functional Properties of Quinoa Starch (<i>Chenopodium quinoa</i> Willd.) and Its Utilization in Cosmetics
P40	Josef Schneider <i>University of Chemistry and Technology Prague, Czech Republic</i>	Carbon-Supported Ionic Liquid-Cellulose Triacetate Membranes for Improved CO ₂ /N ₂ and CO ₂ /CH ₄ Separation
P41	Farshid Pajoumshariati <i>University of Montpellier, France</i>	Comparative Evaluation of Specific Oxygen Uptake Rate in Membrane Bioreactor and Aerobic Granular Sludge Systems: Effect of Biomass Structure and Organic Loading
P42	Zakarya Chafiq Elidrissi <i>Faculty of Sciences and Technologies of Mohammedia Hassan II University of Casablanca, Morocco</i>	Stable Integration of MoS ₂ Nanosheets onto Ceramic Substrate via In-Situ Hydrothermal Growth for Water Treatment

THE 5TH INTERNATIONAL CONGRESS OF THE AFRICAN MEMBRANE SOCIETY (AMSIC-5)

AMSIC-5 HIGHER EDUCATION MEMBRANE WORKSHOP

Location: Audiovisual room, Building B. Ecole Normale Supérieure of Casablanca (ENSC), Hassan II University of Casablanca, Casablanca, Morocco

Date: Monday, November 2, 2026

Schedule: 08:00 - 15:00

Format: One class - 50 students

7 Expert Courses • 8 International Instructors • 1-Day Intensive Training

Instructors	Zachary P. Smith Massachusetts Institute of Technology (MIT), USA	Saad Alami Younssi Université Hassan II de Casablanca (UH2C), Morocco
	Ranil Wickramasinghe University of Arkansas (UARK), USA	Abaynesh Y. Gebreyohannes Osmoses Inc., USA
	Raja Ben Amar University of Sfax, Tunisia	Abdoulaye Doucoure TERGYS, USA
	Brahim Achiou Hassan II University of Casablanca (UH2C), Morocco	Ramato A. Tufa University of Calabria (UNICAL), Italy

Opening (plenary)

07:45 - 08:00	Arrival and check-in of participants
08:00 - 08:10	Welcome address and presentation of the host institution <i>Saad Alami Younssi, Director of the Ecole Normale Supérieure of Casablanca</i>
08:10 - 08:20	Introduction of instructors, speakers and workshop format (<i>Sara Chergaoui & Ramato Tufa</i>)
Topical Courses* - one class (all 50 students)	
08:20 - 09:00	TC1 - Membrane Materials (<i>Brahim Achiou & Saad Alami Younssi</i>)
09:00 - 09:40	TC2 - Nonwoven Membranes (<i>Abdoulaye Doucoure</i>)

09:40 - 10:10	Coffee break	
10:10 - 10:50	TC3 - Water/Wastewater Treatment (<i>Raja Ben Amar</i>)	
10:50 - 11:30	TC4 - Membrane Bioreactors and Fouling (<i>Abaynesh Y. Gebreyohannes</i>)	
11:30 - 12:10	TC5 - Membranes for Biotech/Pharma (<i>Ranil Wickramasinghe</i>)	
12:10 - 12:45	Lunch	
Afternoon sessions		
12:45 - 13:25	TC6 - Membranes for Gas Separation (<i>Zachary P. Smith</i>)	
13:25 - 14:05	TC7 - Electrochemical Carbon Capture (<i>Ramato A. Tufa</i>)	
14:05 - 14:50	<p>WA-MS Panel**</p> <p>Introduction to the World Association of Membrane Societies (WA-MS) (<i>Frank Lipnizki</i>)</p> <p>Educational perspective in Africa (<i>Abdoulaye</i>)</p> <p>Panel discussion: Strengthening membrane education, training and research capacity in Africa - cooperation with WA-MS, EMS, academia and industry</p> <p>Moderators: <i>Sara Chergaoui & Ramato Tufa</i> Panelists: <i>Ranil Wickramasinghe, Frank Lipnizki, Raja Ben Amar, Abaynesh, Heidi Richard, Abdoulaye Doucoure, Mounir Belbahloul</i></p>	
14:50 - 15:00	Closing remarks, feedback and certificates of attendance (<i>Sara Chergaoui & Ramato Tufa</i>)	

تحت الرعاية السامية لصاحب الجلالة الملك محمد السادس نصره الله وأيده
UNDER HIGH PATRONAGE OF HIS MAJESTY KING MOHAMMED VI, MAY ALLAH ASSIST HIM



THE 5TH INTERNATIONAL CONGRESS OF AFRICAN MEMBRANE SOCIETY (AMSIC 5)

Towards a Sustainable Future with Membrane Science

Casablanca – Morocco

November 2-6, 2026

Supported by



المكتب الوطني للكهرباء والماء الصالح للشرب
Office National de l'Électricité et de l'Eau Potable

