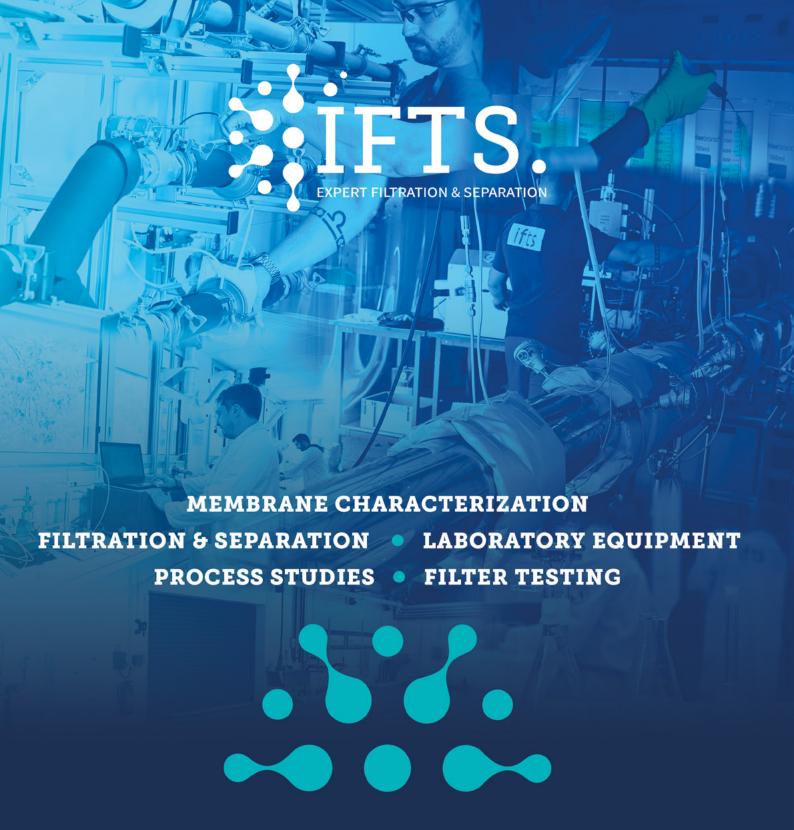


PROGRAM as of March 27, 2025

14TH WORLD FILTRATION CONGRESS

BORDEAUX FRANCE 30 JUNE - 4 JULY 2025





A team of experts in Filtrations and Separations supporting industrial needs from Test method Development, to the Design and manufacturing of Test equipment.

The world leading centre for the evaluation of separation technologies and the assessment of filtration performances.

www.ifts-sls.com

EDITORIAL

The Société Française des Séparation Fluides Particules (SF2P, France) will be organizing the next World Filtration Congress (WFC14) in Bordeaux from June 30 to July 4. Held every 3 to 4 years, World Filtration Congresses take place in a member country of the International Filtration Delegates Association.

The aim of the WFC is to create a meeting place for scientists, engineers and applicators from all over the world, specialists in filtration and separative techniques, to discuss the latest advances in science and technology. The WFCs have enabled the development of processes in line with the socio-economic challenges of each era. Our committee wishes to preserve this tradition by placing WFC 14 at the heart of the challenges facing the world today and tomorrow. We hope that the project we have prepared will have the support of our entire community.

The congress will provide an opportunity to discuss the technical and scientific challenges and innovations in the field of fluid-particle separations. The scientific committee is keen to highlight the involvement of all these processes in environmental and sustainable development issues. Particular attention will be paid to a fast-growing area, the valorization of natural resources, in line with the biorefinery concept, of biosourced molecules to replace petrochemical products. Filtration and separative techniques for more sustainable processes, as well as water, climate and energy issues will also be addressed.

A trade show, bringing together solution providers, prime contractors, designers, consultants, etc., and specific forums will enable visitors to discover the innovations on display and to take advantage of discussions and debates with other professionals. Exchanges between academic researchers and industrial partners will be intensified through specific communications open to exhibitors, or through the creation of meeting spaces. The aim is to promote opportunities for friendly interaction during the event to discuss key topics in the field of separative techniques and filtration. The expected number of participants is 150 exhibitors and 700 scientific researchers.

SF2P's ambition is to offer the best possible welcome to experts from all over the world who will be attending WFC14, and to organize an exceptional event. That's why we've chosen Bordeaux as our host city, renowned for its economic, scientific and, of course, tourist appeal. We look forward to meeting you in Bordeaux, which will also seduce you with its diverse cultural, artistic, gastronomic and architectural heritage.

Vincent EDERY
Managing Director IFTS

Professor PONTALIER
President of SF2P



SHORT COURSES

Registration required

12:00

WELCOME DESK

ROOM DI

LIQUID FILTRATION: BASICS

Eugène VOROBIEV

13:30 - 15:30

- Basics of filtration with cake formation (constant pressure, constant rate, variable pressure and variable rate regimes).

COFFEE BREAK

- Compressible and non-compressible filter cakes.

16:00 - 18:00

- Determination of the specific resistance of the cake and the resistance of the filter media.
- Examples of calculations and sizing.
- Characterization of suspensions and cakes (porosity, permeability, specific surface area, etc.).
- Filtration regimes without cake formation and intermediate regimes.

ROOM D2

13:30 - 15:30

COFFFF **BREAK**

16:00 - 18:00

LIQUID FILTRATION: EQUIPMENT

Wu CHEN

- Introduction

- Key Particles and Liquid Properties in Solid/Liquid Separation
- Straining Equipment
- Cake Filters
- Depth Filters
- Membrane Filters
- Gravity Separators
- Centrifugal Separators
- Pre-treatment Coagulation, Flocculation & Filter Aids

ROOM H2

LIQUID FILTRATION CENTRIFUGAL SEPARATION IN BIOPHARMACEUTICAL INDUSTRY

Wallace LEUNG

13:30 - 15:30 COFFEE

BREAK

16:00 - 18:00

- 1 Common host cells for recombinant protein processes; extracellular vs. intracellular protein; metrics protein yield, centrate solids, throughput, cell viability.
- 2 Centrifugal sedimentation
- 3 Batch and semi-batch, disk stack, decanters
- 4 Commercial applications to biopharmaceutical separations
- 5 Selection and sizing
- 6 Troubleshooting
- 7 Separation, flocculation, classification, and dewatering

Workshop (each participant needs to bring a problem to the workshop)

ROOM E1

GAS/PARTICLE SEPARATION TECHNOLOGIES

13:30 - 15:30

COFFEE **BREAK**

16:00 - 18:00

- **Aurélie JOUBERT**
- Filter media: theory, application for indoor environments and HVAC systems with focus on microbial aerosol capture, application for flue gas treatment with bag filters
- Scrubbers: theory, application for flue gas treatment
- Electrostatic precipitators: theory, application for indoor environments, application for flue gas treatment
- Cyclones: theory and application for flue gas treatment



ROOM E2

13:30 - 15:30

COFFEE BREAK

16:00 - 18:00

GLOBAL FILTRATION MARKETS: OPPORTUNITY AND TRENDS

Christine SUN

1. Introduction to the Global Filtration Market

- Overview of the global filtration market
- Air and liquid filtration applications
- Filtration concepts and value proposition
- Key drivers for continuous growth, emerging trends, and opportunities

2. Filter Media Technologies and Opportunities

- Advancements in filter media materials
- Performance optimization and efficiency trends
- Market opportunities across different industries

3. Advanced Filtration Technologies

- Innovations in filtration system design
- Integration of AI, nanotechnology, and smart filtration
- Sustainability and regulatory compliance considerations

4. Future Outlook and Strategic Planning

- Predicted market trends and forecasts
- Strategies for market entry, expansion, and competitive positioning
- The role of innovation and sustainability in shaping the future

ROOM F1

MEMBRANES: BASICS

Patrice BACCHIN

1. Introduction to Membrane Separation Processes

- Definition and fundamental principles
- Classification of membrane processes
- Comparison with other separation technologies
- Industrial applications and case studies

2. Membrane Structures, Operating Parameters, and Characterization

- Relationship between structure and function: pore size, selectivity, permeability
- Definition and measurements of operating parameters characterizing selectivity and performance
- Membrane characterization techniques

3. Limitations of Membrane Processes: Fouling and Solutions

- Types of fouling
- Mechanisms and impact on performance
- Initiation to modeling
- Prevention and cleaning strategies

13:30 - 15:30

COFFEE **BREAK** 16:00 - 18:00

PROGRAM MONDAY, 30 JUNE 2025

SHORT COURSES

Registration required

ROOM F2

13:30 - 15:30

COFFFF

BREAK

16:00 - 18:00

MEMBRANE: MANUFACTURING TECHNOLOGIES AND APPLICATIONS

Raja BEN AMAR

1. Membrane from material to process

- Membrane preparation and fabrication methods
- Membrane structure and characterization techniques (porosity, pore size, filtration layer, surface functionality)
- Membrane transfer mechanism (according to the membrane structure and pore size)

2. Membrane processes and limitation in terms of permeate flux and solutes-membrane interactions:

- Influence of the pore size and membrane structure (symmetric and asymmetric) and chemical composition (hydrophobic-hydrophilic, mineral-polymeric)

3. Membrane structure - Applications relationship:

- hydrophilic = aqueous filtration with pore size depending on the application (MF, UF, NF, RO)
- oil/water separation = hydrophobic
- food processing applications = ceramic membranes (sterilization, cleaning, ...)
- gaz filtration = hydrophobic (MF or UF for water solution degassing, membrane distillation) dense membrane for gaz separation

4. New trends:

- Low-cost membrane fabrication and potential applications
- Membrane treatment for circular economic approach with a case study

ROOM HI

FILTER MEDIA: LIQUID FILTRATION TESTING BASICS

Nicolas PETILLON

- Introduction to Liquid filter testing
- Standardization organizations and test standards
- Industries, National and International Quality assurance in testing laboratories
- Types and applications of liquid clarification filters
- Types: Depth, Precoat, Cartridges, Membranes, Design and operation parameters, Fields of Application
- Types and characteristics of filtering media
- Granular, woven, non-woven, membranes
- Characteristics of liquids and particles

13:30 - 15:30 COFFEE

BREAK 16:00 - 18:00

■ Liquid filtration ■ Gas filtration ■ Membrane ■ Sustainable development



INTERNATIONAL

FILTRATIONS

INSIGHTS, ISSUES & INNOVATIONS

GLOBAL DECISION MAKERS, THOUGHT LEADERS, ENGINEERS, END USERS, AND OTHERS READ INTERNATIONAL FILTRATION NEWS



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		ROOM H	AMPHI A	ROOM F
8:00 - 19	9.30	космп	AMELITA	ROOMI
10:15 - 11		АМРНІ А		
11:00 - 12	2:00	АМРНІ А		Autonomous
12:00 - 13	3:30			
13:30 - 14	4:10	Keynote: Richard LYDON Water stress across the globe - how can future filtration solutions impact this?	Keynote: Kyung-Ju CHOI Current and Sustainable Upcoming Filter Media	Keynote: Wallace LEUNG Developing nanofibrous filter with low energy consumption and high efficiency
		FUNDAMENTALS, MODELLING AND SIMULATION 1	FILTER ELEMENTS AND MEDIA 1	PETROLEUM AND BIO-BASED MEDIA
14:10 - 14	4:30	Predictive model of solid-liquid filtration and mechanical dewatering with compressible filter cakes	Nuances of measurements of nonwoven filter media, ceramic, and electrospun membranes with capillary flow porometry	Sustainable silk fibroin filtration solutions for healthier environments
14:30 - 14	4:50	Evaluation of filtration diffusivity and internal pressure- porosity- permeability profiles during consolidation of compressible filter cakes based on the predictive model	New Developments in Woven Wire Filtration Media - 3D High Performance Filter Cloth for increased volume flow	Life cycle assessment of biobased polymer air filters: a comparative study with petroleum-based materials
14:50 - 1:	5:10	Correlating Particle Properties with 3D Pore Space Parameters in Cake Filtration: A Model-Based Approach	Specialty- and high-performance polymers for meltblown technology: selection, processing, and resulting media properties	Aerosol filtering materials from biobased polyamide as fabricated via melt blowing and electrospinning
15:10 - 15	5:30	Experimental estimation of the model parameters for the CFD-DEM simulation of filtration processes	Composite-cloths: Combining smallest pores sizes and mechanical robustness in one filter medium	Preparation and performance study of bio-based air filter media
15:30 - 15	5:50	Model analysis for filter aid filtration	LENZING Lyocell Enhanced Fibrillation - latest developments from Lenzing AG confer a sustainable competitive advantage in high-efficiency filter media design	A Study on the PTFE Fibrous Nonwoven Fabricated by Electrospinning Technique as Dust Filtration Media
15:50- 16	6:30			
		FUNDAMENTALS,MODELLING AND SIMULATION 2	FILTER ELEMENTS AND MEDIA 2	NEW MEDIA FOR GAS FILTRATION
16:30 - 16	6:50	Insights into imperfections - considerations on the assessment of non-ideal filter cakes	Investigation of wire mesh filter elements regarding their backwashing properties for regeneration in cake filtration	Keynote: Santosh CHAVAN Reimagining Filtration:
16:50 - 1'	7:10	An effective digital approach to improve pleated filter performance	Ultrasonic self-cleaning of wire mesh filter elements in filtration of iron oxides	Reticulated & Activated Carbon Impregnated PU Foams for Modern Filtration Challenges
17:10 - 17	7:30	Pressure-Driven Polymeric Membranes Model, Considerations and Applications	ProTex- energy saving filter media	Purenat, the new media that reinvents photocatalysis
17:10 - 17 17:30 - 18			ProTex- energy saving filter media	



TUESDAY, 1 JULY 2025

Pleasy Lecture: Herman NIRSCHL			■ Liquid filtration ■ Gas filtration	■ Membrane ■ Sustainable development
Person Century Centu	ROOM D	АМРНІ В	АМРНІ С	ROOM E
Report Extracrition Technologies	Registration and Exhibition open			
Keynote: Zhawaiang ZHONG Horosos Reengineering with All-Partication Membranes for Swater Purification and Santication Catalytic Membranes for PM-5 Santing membrane Maintenance of PM-5 Santing membrane with ethanol-water mixtures Catalytic Membranes for PM-5 Santing membranes with ethanol-water mixtures Catalytic Membranes for PM-5 Santing membrane Catalytic Membranes for PM-5 Santing membranes Catalytic Membranes Cata	Opening Ceremony			
Keynote: Zhaoxiang ZHONG Process Reengineering with ARP-Purification Membranes for Catalytic Membrane ilbers for Water Purification and Santbation FUNDAMENTALS, MODELING AND SIMULATION Membranes for Dispase upgrading AND SIMULATION An every as cermeation unit for investigating SIMI-1 and CRM-1 gain permetrion under real social of cardillation An every as cermeation unit for investigating SIMI-1 and CRM-1 gain permetrion under real social of cardillation An every as cermeation unit for investigating SIMI-1 and CRM-1 gain permetrion under real social of cardillation Integrated with true Peduptotion for polymide membrane formation for polymide membrane format	Plenary Lecture: Herman NIRSCHL Processing in Separation Technologies			
Proceeding - Processes of the influence of flow rate sources for Application of the influence of the source of the	Lunch			
An expass permeation unit in the responsibility of the properties of the sevent of the	Process Reengineering with Air-Purification Membranes for	Catalytic Membrane Filters for Water Purification	Development of membranes and membrane processes	Some thought regarding filtration
Molecular insights inside the IPM-I and CPM-I age permettion under real-world conditions Membrane with ethanol-water mixtures Membrane with ethanol-water mixtures Membrane with ethanol-water mixtures Membranes benchmarking Free energy surface landscape of interfacial polymerization for polyamide membrane formation for polyamide membranes for polyamide membranes formation for polyamide membranes formation for polyamide membranes for polyamide filtration in reverse esemptic. A trade-of between pressure drop and filtration on Nerroporticle collection filtration for polyamide membranes filtration for membranes filtration for membranes of filtration for membranes filtration for membranes for polyamide polymer periodic polyamide polymer periodic polyamide pol				BIOREFINERY
Membrane for PM25 Capture Integrated with Urea Production under Solar Irradiation The Impact of Discharge Electrode Position on Nanoparticle Collection of Pedyamide membrane formation The Impact of Discharge Electrode Position on Nanoparticle Collection of Pedyamide membrane formation Freeosition on Nanoparticle Collection of Integration in reverse osmosis. A trade-off between pressure drop and filtration chip using low frequency ultrasound Precoating Humidity Precoating Humidity In Elitration Cycles Performance Precoating Humidity Precoating Humidity In Elitration Cycles Performance Analysis of the influence of the sewing thread on the performance of Elitration Poster INDUSTRIAL CAS CLEANING MemBrane Technology / Applications of a cyclone performance of Industrial Resource Recovery Membrane Efficiency in Industrial Resource Recovery Study on the influence of flow rate on gas flow distribution in an electric field manipulation Experimental study of adsorption behavior of CLSI over microchannel reactors Experimental study of adsorption behavior of CLSI over microchannel reactors Poster session Membrane Efficiency in Industrial Resource Recovery Poster session	for Investigating PIM-1 and cPIM-1 gas permeation		- A modelling approach using MEMSIC simulation tool for innovative	from microalgae extracts using
Precoating Humidity In Filtration Cycles Performance Precoating Humidity In Filtration Cycles Performance Analysis of the influence of the sewing thread on the performance of filter bags Modeling and simulation of separation processes in hollow fiber modules Membrane Technology Application One dimensionless number to rule all dimensionless number to rule all dimensionless characteristics of a cyclene performance Optimizing Membrane Elements for Enhanced Efficient in a green biorefinery Finance quorum quenching membranes Optimizing polymer experimental research Modeling and simulation of separation processes in hollow fiber modules Membrane Technology Applications One dimensionless number to rule all dimensionless number of rule all dimensionless of haracteristics of a cyclene performance Stimuli-responsive polymer enhanced membrane filtration for separation in an electric field manipulator. Experimental study of adsorption behavior of CH3I over microchannel reactors Poster session Attade-off between pressure drop and filtration repressure drop and filtration repressure drop and filtration fine pressure drop and filtration fine pressure drop and filtration of pressure drop and filtration of pressure drop and filtration of pressure filtration for membrane filtration for particular drop and survivation and filtration of policy filter and food proteins by membrane and dead-end filtration Production of plant-based feed and food proteins by membrane and dead-end filtration Production of plant-based feed and food proteins by membrane and dead-end filtration Production of plant-based feed and food proteins by membrane and dead-end filtration Production of plant-based feed and food proteins by membrane and dead-end filtration Production of plant-based feed and food proteins by membrane in organic solvent manofilitation complex media separation for great particular for separation for great particular for separation for great particular for separation for membrane filtration of biological particles on a	Membrane for PM2.5 Capture Integrated with Urea Production	of interfacial polymerization	technique using CO2	of pre-treatment and filtration mode to upgrade mango pulp
Precoating Humidity in Filtration Cycles Performance In Justian Cycles Performance Modeling and simulation of separation processes in hollow fiber modules Analysis of the influence of the sewing thread on the performance of filter bags INDUSTRIAL CAS CLEANING Membrane Elements for Cast Cleaning Optimizing Membrane Elements for Enhanced Efficiency in Industrial Resource Recovery Study on the influence of flow rate on gas flow distribution in an electric field manipulator. Experimental study of adsorption behavior of CH3I over microchannel reactors Poster session Modeling and simulation of simulation of simulation of separation performance in membrane bioreactors Accumulation of biological particles on a model filter: kinetics of growth and morphological analysis Production of plant-based feed and food proteins by membrane and dead-end filtration MEMBRANE TECHNOLOGY / NF WASTE WATER TREATMENT Optimizing Membrane Elements for Enhanced Efficiency in Industrial Resource Recovery Optimizing Membrane Elements for Enhanced Efficiency in Industrial Resource Recovery Optimizing Membrane Elements for Enhanced Efficiency in Industrial Resource Recovery Optimizing Membrane Elements for Enhanced Efficiency in Industrial Resource Recovery Optimizing Membrane Elements for Enhanced Efficiency in Industrial Resource Recovery Study on the influence of flow rate on gas flow distribution in an electric field manipulator. Experimental study of adsorption behavior of CH3I over microchannel research Stimuli-responsive polymer enhanced membranes for Chemical Free Water Treatment Experimental study of adsorption behavior of CH3I over microchannel reactors Novel and Highly Selective Membranes Based on 2 & 3D Porous Nanomaterials Biomimetic Guttation Feature in Two-dimensional Hydrotalcite Membranes for Self-sustaining nanofiltration Self-sustaining nanofiltration and Growth performances		A trade-off between pressure drop and	filtration chip using low frequency	for efficient single-cell protein production
Analysis of the Initiative of the Initiative of Separation processes in hollow fiber modules whether the process of Separation processes in hollow fiber modules whether modules whether modules whether hollows the separation of Separation processes for the Selective Indicators in organic solvent nanofiltration of Phydroformylation complex media separation process for the selective leaching and filtration of an autonomous process for the selective leaching and filtration of metal ions from mining waste of hydroformylation or Separation process for the selective leaching and filtration of metal ions from mining waste of the selective Indicators of Separation process for the selective Indicators or Separation process for the selective Indicators or Separation process for the selective Indicators or Separation process for Self-sustaining nanofiltration or Membranes for Chamber indicators of Self-sustaining nanofiltration or Membranes for Self-sustaining nanofiltration or Membranes for Self-sustaining nanofiltration or Separation process for Self-sustaining nanofiltration or Se		model of pervaporation for membrane crystallization	membranes: Optimizing polymer coatings for improved antifouling	coupling microwaves and high speed centrifugation based on vegetal cells
INDUSTRIAL GAS CLEANING MEMBRANE TECHNOLOGY / APPLICATIONS One dimensionless number to rule all dimensionless characteristics of a cyclone performance Study on the influence of flow rate on gas flow distribution in an electric field manipulator. Experimental research Experimental study of adsorption behavior of CH3I over microchannel reactors Poster session MEMBRANE TECHNOLOGY / APPLICATIONS NF WASTE WATER TREATMENT Impact of physico-chemical interactions in organic solvent nanofiltration of hydroformylation complex media separation of hydroformylation complex media separation by a PDMS membrane Next-generation, Sustainable membranes for Chemical Free Water Treatment Next-generation, Sustainable industrial practices through reuse of metal oil filtration elements Experimental study of adsorption behavior of CH3I over microchannel reactors Novel and Highly Selective Membranes Based on 2 & 3D Porous Nanomaterials Poster session	of the sewing thread on the	of separation processes	particles on a model filter: kinetics of growth	and food proteins by membrane and
One dimensionless number to rule all dimensionless characteristics of a cyclone performance Study on the influence of flow rate on gas flow distribution in an electric field manipulator: Experimental research Experimental study of adsorption behavior of CH3I over microchannel reactors Poster session Optimizing Membrane Elements for Enhanced Efficiency in Industrial Resource Recovery Optimizing Membrane Elements for Enhanced Efficiency in Industrial Resource Recovery Impact of physico-chemical interactions in organic solvent nanofiltration of phydroformylation complex media separation by a PDMS membrane Impact of physico-chemical interactions in organic solvent nanofiltration of physico-chemical physico-chemical interactions in organic solvent nanofiltration of physico-chemical interactions in organic solvent nanofiltration organic solvent nanofiltration of physico-chemical interactions i	Coffee Break - Exhibition - Poster			
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on gas flow distribution in an electric field manipulator: Experimental research Experimental study of adsorption behavior of CH3I over microchannel reactors Movel and Highly Selective Membranes Based on 2 & 3D Porous Nanomaterials Poster session Membranes Next-generation, Sustainable Nanofiltration Membranes Nanofiltration Membranes for Chemical Free Water Treatment Next-generation, Sustainable Nanofiltration Membranes for Chemical Free Water Treatment Next-generation, Sustainable Nanofiltration Membranes for Chemical Free Water Treatment Next-generation, Sustainable Nanofiltration Membranes of metal oil filtration elements Next-generation, Sustainable Nanofiltration Membranes of metal oil filtration elements Posterimental study of Automotive Membranes Self-sustaining nanofiltration Novel and Highly Selective Membranes Self-sustaining nanofiltration Novel and Highly Selective Membranes Self-sustaining nanofiltration Self-sustaining nanofiltration Poster session	to rule all dimensionless characteristics	Enhanced Efficiency in Industrial	in organic solvent nanofiltration of hydroformylation complex media separation	process for the selective leaching and filtration of metal ions
of adsorption behavior of CH3I over microchannel reactors Novel and Highly Selective Membranes Based on 2 & 3D Porous Nanomaterials Novel and Highly Selective Membranes and Growth performances Novel and Highly Selective Membranes and Growth performances Novel and Highly Selective Membranes of Self-sustaining nanofiltration Poster session	on gas flow distribution in an electric field manipulator:	membrane filtration for separation of lithium from lithium-ion	Nanofiltration Membranes	practices through reuse
	of adsorption behavior of CH3I		dimensional Hydrotalcite Membranes for	the Drinking Water by Moringa Oleifera seeds On broiler Chickens' Health
WELCOME RECEPTION	Poster session			
	WELCOME RECEPTION			



	ROOM H	AMPHI A	ROOM F
8:00 - 19:15	ROOMII	AMELITA	ROOMT
8:30 - 9:30	АМРНІ А		Advanced Filter
9:30 - 10:00			
	FUNDAMENTALS, MODELLING AND SIMULATION 3	TESTING AND CHARACTERISATION	FUNDAMENTALS IN MEDIA
10:00 - 10:20	Application of artificial intelligence technology in the filtration of difficult to be filtered material	New method to qualify liquid filters simulating real life conditions	Are iso-permeable media necessarily iso-efficient?
10:20 - 10:40	Predicting the impact of particle size and shape distributions on filtration performance of crystallized products	Measuring of the interference resistance of a filter medium - Is it really possible?	Solid volume fraction heterogeneities: benefits or drawbacks on fibrous filter performance?
10:40 - 11:00	Advances in multiscale modeling of solid bowl centrifuges	Exploring the transition between filter cake formation and deliquoring by inline surface position laser measurement	Effect of Submicronic and Nanometric Fibers on the Pressure Drop of Polydisperse Fiber Media
11:00 - 11:20	Combining mechanistic and data-driven approaches into a dynamic grey box model for decanter centrifuges	Advanced Fluorescence and Membrane-Based Techniques for Direct Detection and Characterization of Micro/Nanoplastics in Aquatic Environments	Model-based prediction of the influence of nonuniform fiber material distribution on the performance of filtering face pieces and pleated filters
11:20 - 11:40	Study of the compaction behaviour of suspended elastic-plastic particles during centrifugation	The effectiveness of various media types used in in-line incompressible liquid filter elements to separate solid nano particles in the range of 100nm-1µm in water, by means of laser light scattering and microscopic analysis.	3D X-ray tomographic microstructure analysis of dust-clogging inside nonwoven fibrous filter media
11:40 - 12:00	Highly accurate prediction of mini-hydrocyclone separation efficiency by coupling BP neural network and response surface method	Cycle Rate Analysis Method for Optimizing Filter Aid Selection	Simulation of electret filter media behavior through modeling of charge distributions, dielectrophoresis, and charge decay
12:00 - 13:30			
12h45 à 13h15			Forum LUM GMbh: M. Sylvain GRESSIER & Prof. Dr. Dr. Dietmar LERCHE Filtration efficiency monitored by particle counting and sizing using Single Particle Light-Scattering Technology® (SPLS)
13:30 - 14:10		Keynote: Urs PEUKER Recent findings in filter cake washing – fundamentals and application	Keynote: Vincent EDERY Air quality in aircraft cabins

WEDNESDAY, 2 JULY 2025

■ Liquid filtration ■ Gas filtration ■ Membrane ■ Sustainable development **АМРНІ В** АМРНІ С **ROOM D ROOM E** Registration and Exhibition open Plenary Lecture: Christine SUN Media Technologies, Trends, and Opportunities Coffee Break - Exhibition - Poster **EUROPEAN PROJECTS FOR AIR MEMBRANE FOULING /** MEMBRANE TECHNOLOGY / BIOREFINERY REGENERATION QUALITY AND HEALTH **APPLICATIONS** Inline spiking adaptation for enhanced virus filtration in continuous biopharmaceutical manufacturing chemical and biological determinants are relevant in homes with children under the age of five and what can we do to reduce exposure Response of the zeta potential to fouling status in Microfiltration and application for fouling monitoring Keynote: Frank LIPNIZKI Membrane processes in lignocellulosic biorefineries Sustainable power generation from salinity gradients via Pressure Retarded Osmosis (PRO): Membrane modifications or improved performance in canteen, homes, schools to create knowledge for improving indoor air quality and health K-HEALTHinAIR Bioactive and self-cleaning polymer membranes A novel cleaning agent specialized for organic induced fouling IAQ and health - LEARN how filtration is beneficial for children in schools Zwitterionic forward osmosis membranes for platelet concentration Ultrafiltration of hydrolysable tannins from sweet chesnut wood of ceramic membranes Integrated ozone-forward osmosis process for tannery wastewater treatment and reuse in agriculture membrane be an alternative to microporous membranes for membrane distillation? of organic and inorganic fouling by in-situ thermal conductivity measurements Keynote: Martin LEHMANN Exploring Explainable AI in Food Processing: Machine Learning Models for Skimmed Milk Microfiltration Transmission Ratio for UTP and GP Membranes Development of effective photocatalytic membrane reactors for the total removal/degradation of tetracycline from water Surface modifications inspired by nature for biofilm control in membrane processes Recycling end-of-life reverse osmosis membranes into tailored nanofiltration membranes via polyelectrolyte coatings Novel hexa-fluorinated intrinsically porous polyimide membranes f or the desalination of high saline water by air-gap membrane distillation Brake particle emission reduction by brake filters - an efficient option completing the toolbox A Biogenic Filter Material or Bio Refinery Applications Lunch Keynote: Su-En WU Keynote: Amlan CHAKRABORTY Keynote: Mads Koustrup JØRGENSEN Keynote: Peter CARTWRIGHT Improvement in the Filtration Performance of Shear-Enhanced Dynamic Microfiltration



Removal of PFAS using commercial polymeric microfiltration membranes coated with amphiphilic cyclodextrins

by Structure Design

for Machine Learning Applications in Air Filtration Systems

The Challenges of Ongoing Contamination of Drinking Water Supplies - What Can Be Done About It?

	ROOM H	АМРНІ А	ROOM F
	COAGULATION/ FLOCCULATION	TESTING AND CHARACTERISATION 2	AEROSOL FILTRATION
14:10 - 14:30	Recovery of phosphorus from lake sediment	Water Permeability Testing for Porous Materials	Modeling particle deposition in turbulent curved channel flow with structured surfaces
14:30 - 14:50	Suspension pelletisation and drainage using robust flocs	Introducing FiltVia: A Vision Analysis tool to automate the assessment of a filter cake resistance	Influence of vibration on gas-solid filtration performance of filters
14:50 - 15:10	Degradation of Cationic Polyacrylamide- Based Flocculants (CPAM) Upon Contact with Metallic Surfaces: Impacts on Flocculation, Thickening, and Dewatering Applications	Enhancing performance of filter presses with a filter plate-integrated sensor	Experimental study on optimal CADR filter thickness of indoor air purifier
15:10 - 15:30	Efficient Dewatering of Printing Industrial Wastewater: Application of Coagulation and Flocculation Techniques	Reducing of biofouling rate of polymer media during filtration of water contaminated with bacteria by coating with photoactive TiO2-metal layers	Fabrication and performance of novel environmentally-friendly micro-nano fibrous filter media
15:30 - 15:50	Dissolved organic carbon impacting the performance of contact filtration water treatment	The importance and necessity of establishing a comprehensive reference for filtration and separation in basic industries.	Enhanced nanoaerosol loading performance of multilayer PVDF nanofiber electret filters
15:50 - 16:30			
	ALTERNATIVE AND INNOVATIVE SEPARATION	FLOTTATION AND COMBINED PROCESSES	NEW MEASUREMENT METHODS
16:30 - 16:50	Study on the settling acceleration phenomenon due to density current and particle aggregation by applying horizontal DC electric field to fine particle slurry	Innovation in sewater reverse osmosis pre-treatment: Seadaf Filter as combined flotation and filtration at high velocity	Improving the quantification of microorganisms collected onto HVAC fibrous filters
16:50 - 17:10	Multidimensional process for wet classification of fine particles in a crossflow with superimposed electrical field	Seawater reverse osmosis pre-treatment Combination at Low Environmental Footprint	A method to determine the pressure drop of dust cakes on surface filters under low pressure conditions
17:10 - 17:30	Enhanced Dewatering of Mine Tailings: From Flocculation-Thickening to Filtration and Electrofiltration	Valédeau Drinking Water Treatment Plant (France), a flexible solution for territory security	Advances in welding fume separation by using a new measurement method
17:30 - 18:15			
18:15 - 19:15			

WEDNESDAY, 2 JULY 2025

■ Liquid filtration ■ Gas filtration ■ Membrane ■ Sustainable development ROOM D **АМРНІ В АМРНІ С** ROOM E MEMBRANE TECHNOLOGY / **FUNDAMENTALS** MF AND UF WATER TREATMENT Cost-effectiveness analysis of membrane technologies for nitrate removal in Moroccan groundwater: A comparison of ED, NF, and RO Influence of moisture on electret filters: a DNS study and Size-based Separation using a nove Membrane Filtration System process water streams using BOLL ceramic membrane filtration Effect of brackish water salinity on productivity of prototype based on humidification-dehumidification of air A phenomenological model to predict the porosity of nanometric particles Insight into molecular mechanism of protein-polysaccharide fouling during membrane separation ZIF-67/Bacterial cellulose membranes for dye removal and oil/water separation Characterization of concentration polarization layers during cross-flow ultrafiltration of cellulose nanocrystals suspensions using micro-PIV and SAXS Influence of Process Conditions and Different Ion(s) on Magnesium Sulfate Crystallization in Membrane Distillation Crystallization Optimization of an integrated hollow-fiber solar-powered VMD system for autonomous desalination New experimental results on pressure drop of a nanofiber filter Case study on the clogging phase of filter media during dust separation using a multi-layer model with offset for dust cake growth Development of low-cost pyrophyllite clay based microfiltration membrane for pretreatment of raw seawater for desalination Development of effective photocatalytic membrane reactors for the total removal/degradation of tetracycline from water performances of pozzolan membrane by incorporation of micronized phosphate and its application for industrial wastewater treatment Gas-Phase Media Properties: What's Important and Why Production of low-alcohol content wine by pervaporation Autonomous drinking water systems with energy storage Coffee Break - Exhibition - Poster MEMBRANE FORMATION / **INDOOR AIR TREATMENT** NF WATER TREATMENT **STRUCTURE** Recovery of homogeneous active catalysts in organic solvent nanof iltration: in-depth study of the benefits of using stable model complexes different from the pre-catalysts Influence of catalyst particle properties on NOx conversion in a combined exhaust gas cleaning Effect of Hydraulic Head Changes on the Performance of Gravity-Driven Membrane Systems Artificial Water Channels- toward Biomimetic Membranes for Desalination Experimental investigation of the effects of solar heating on the performances of an integrated solar-powered hollow fiber VMD module at semi-industrial scale Development of innovative hollow fibers and carbon hollow fibers PAN Filters Modified with CPC Surfactant and ZnO Nanoparticles for Efficient Filtration Nanofiltration using Polysulfone Membranes Efficient direct mechanical recycling of Li-ion battery production residues via ultrasonic delamination and dynamic cross-flow filtration Boron-nitride Nanosheets as Membrane Building Blocks for Water Purification and Gas Separations Development of nanofiltration membrane from cellulose triacetate made from millet husk and VOC by photo-oxidation using titania nanofiber photocatalyst



Poster session

INDEFI MEETING

	ROOM H	AMPHI A	ROOM F
8:00 - 19:15			
8:30 - 9:30	АМРНІ А		Water Filtration:
9:30 - 10:00			
	CENTRIFUGAL SEPARATION	HYBRID AND COMBINED PROCESSES	FUNDAMENDALS AND SIMULATION
10:00 - 10:20	Keynote: Deyou ZHANG New Technology of Separation Machinery	Hybrid process based on nanofiltration and catalytic ozonation for antibiotics removal and membrane fouling mitigation	Keynote: Tabea STERBACK Advanced simulation of adsorption
10:20 - 10:40	and its Engineering Application in Key Links of Lithium Industry	Nanofiltration and reverse osmosis for the recovery and purification of phosphorus from sewage sludge ash	processes for next-generation filter media development
10:40 - 11:00	Novel centrifugal classification of inclusion body from recombinant protein process	Metal-organic framework membrane design for efficient pervaporation separation	Numerical study of particle deposition on filter fibers: Effect of particle mobility after initial deposition
11:00 - 11:20	Oscillation characteristics of oil core induced by rotating rate of the tubular axial vortex separator	Membrane-Assisted Crystallization of Lithium Salts: Molecular Insights for Battery Recycling Applications	Impact of baffles on airflow distribution in industrial dust collectors: a numerical simulation study
11:20 - 11:40	Design and performance study of a hydrocyclone with wide operating window for downhole oil-water separation	Impact of induced gas flotation on ceramic membrane filtration efficiency in oil sands process-affected water treatment	Prediction of filter structures and filtration performance at compressed state via in-situ 3D imaging and numerical simulation
11:40 - 12:00	Design and Application Research of PVDF Fluoroplastic Centrifuge Extractor	Dynamic cross-flow filtration for continuous recovery of catalysts - Theory and industrial practice	The study of dust-holding characteristics of pleated non-uniform porous media: macroscale simulations
12:00 - 13:30			
13:30 - 14:10		Keynote: Prof. Dr. Dr. Dietmar LERCHE Analytical centrifugation (AC) has a strong cross-discipline impact inclusive of separation and filtration even 100 years after the breakthrough innovation of the ultracentrifuge that led to the Nobel Prize (Svedberg)	Keynote: Jennifer NIESSNER Indoor air quality - a counterpart to energy efficiency and thermal comfort?

THURSDAY, 3 JULY 2025

■ Liquid filtration ■ Gas filtration ■ Membrane ■ Sustainable development

ROOM D	АМРНІ В	АМРНІ С	ROOM E
Registration and Exhibition open			
Plenary Lecture: Hervé BUISSON Challenges and Opportunities in the Ag	e of Sustainability		
Coffee Break - Exhibition - Poster			
INDUSTRIAL GAS CLEANING	MEMBRANE TECHNOLOGY / APPLICATIONS	MEMBRANE FORMATION / STRUCTURE	WASTE WATER TREATMENT
Mitigation of nanoparticle emissions from a biomass power plant for district heating by application of pulse-jet cleaned filters	Membrane Hybrid Treatment Systems for the removal of Micro-pollutants from Reclaimed water	Modification of nanoporous filtration membranes by cold plasma polymerisation and application to heavy metals removal	A holistic approach to evaluating forward osmosis - reverse osmosis (FO-RO) hybrid systems for simultaneous water reuse and resource recovery
PIMs and MOF based Mixed Matrix Membranes for CO2 Capture	Disrupting autoinducer-2 bacterial communication to combat membrane biofouling in an MBR for wastewater treatment and water reuse	Lithium Recovery from Natural and Anthropic Brines via Solar-Driven Photothermal Membrane Crystallization	Choice of media for biofilters: importance of their characteristics for long-term performance control in wastewater treatment
Optimization design and application of magnetic separation technology for black powder in natural gas pipeline	Membrane filtration f or separating isoform DNA with adsorption technology	Novel thin film composite polyamide membranes with low fouling properties for water desalination	Enhancing Crystal Violet Removal through Glass-Based Phosphate: A Custom Design-Based Response Surface Methodology for Process Variable Optimization
In situ study in a municipal waste incinerator of the collection of particles contained in fumes by a downscaled wet scrubber	Integrated Electrocoagulation and Zwitterionic Modified Nanofiltration Membranes for Removal of Microcystin	Synthesis and Characterization of ZnO and ZnO@SiC Composites by the Sol-Gel Method: Evaluation of Photocatalytic Activity in the Degradation of Paracetamol	Reuse of treated wastewater for watering green spaces, a credible alternative
Absorption mass transfer and separation characteristics of efficient tubular natural gas dehydration	PFAS retention by hollow fiber nanofiltration and reverse osmosis membrane	Two-dimensional carbon-based material membranes for precise separation	Use of Ultrafiltration for Biosecurity in Fish Farming and Environmental Protection for a Blue Transformation of Aquaculture
Filtration characteristics of commercial scale DeNOx catalyst cartridge filter bags	Tin sulfide/vanadium carbide (SnS2/ V2CTx) MXene membrane with the potential application in water treatment	Solving Biomimetic: protein encapsulation and membrane incorporation	Extracting Nanoparticles from Contaminated Water
Lunch			
Keynote: Lauretta RUBINO VERT GPF-Retrofit Program for Cleaner Urban Mobility to Reduce Nanoparticle Emissions via Filtration within the HORIZON Europe AeroSolfd Project	Keynote: Anthony SZYMCZYK Electrokinetic and electrochemical characterization of porous polymer membranes	Keynote: Shuaifei ZHAO Closing CO2 loop in biogas production: Roles of membrane technology	Keynote: Eugène VOROBIEV Innovative physical pretreatments improve filtration properties of biomass and open the new opportunities for filtration and separation technologies

	ROOM H	AMPHI A	ROOM F
	ADVANCES IN FILTRATION AND SEPARATION	DEPTH FILTRATION AND FILTER AIDS	HVAC SYSTEMS
14:10 - 14:30	Evaluating the effect of key parameters on cake solids concentration and throughput in High Pressure Dewatering Rolls Mark-II	Evaluation of TSS removal from synthetic stormwater using construction and demolition waste fractions as porous media	Enhancement of design and performances of droplet separators for air handling units
14:30 - 14:50	Dynamic and continuous sieve filtration of highly viscous suspensions with large solids concentration - Theory and industrial practice	Design and validation of a locally assembled sand filter to remove iron from drinking water in Mali	Could general ventilation filters be used as acoustic silencers?
14:50 - 15:10	HiBar filter - An optimal solution for challenging filtration tasks?	Substantial enhancement in suspended particle capture during precoat filtration by modifying the precoat layer with fine bubbles	Gas Adsorption Test of HVAC Filter according to ISO 10121
15:10 - 15:30	Dead-end forward osmosis deep dewatering technology	From WWTP sludge to biopolymer: the innovative B-Plas technologies	Development of synthetic multilayer filter media with high performance and enhanced energy saving
15:30 - 15:50	Innovative mining process supported by enhanced two stage filtration concept	Intensification and practice of non-newtonian fluid filtration process	3D composites for more sustainable HVAC systems
15:50 - 16:30			
	FILTRATION/SEPARATION APPLICATIONS 1	MEMBRANE APPLICATIONS	PERSONAL PROTECTIVE EQUIPMENT
16:30 - 16:50	AGXX - an innovative technology to prevent microbial contamination in water and air filtration	Preparations and characterizations of low-cost porous ceramic membranes	Efficiency of Powered Air-Purifying Respirators in simulated wearing conditions
16:50 - 17:10	Novel Approach to Water Treatment Utilizing Nanoparticle Slurry and DC Electric Field	High-Performance MoS2 Nanofiltration Membrane for Dye Separation: Experimental and Modeling Analysis	A novel and universal product line for all respiratory protection filter needs
17:10 - 17:30	Impact of Surfactants on Water Droplet Capture and Coalescence by Single Fibers in Diesel	Application of Response Surface Methodology to analyze the impact of Operational Parameters in Membrane Bioreactor	Ultrathin transparent PTFE membrane prepared by mechanical exfoliation for efficient air aerosol filtration
17:30 - 18:15			
18:15 - 19:15			
20:00			

THURSDAY, 3 JULY 2025

		■ Liquid filtration ■ Gas filtration	■ Membrane ■ Sustainable developmen
ROOM D	АМРНІ В	АМРНІ С	ROOM E
MATERIAL AND SENSOR	FUNDAMENTALS, MODELING AND SIMULATION	MEMBRANE FORMATION / STRUCTURE	PRETREAMENT
Breakthrough sensor for adsorption filters	Sustainable Ingredient Innovation with membrane process modeling - application to nanofiltration and reverse osmosis	Preparation of ceramic flat membrane from the local kaolin intended for the filtration application	Dewatering properties of disrupted sludge through ultrasonication and re-flocculation
Development and advanced characterization of a biobased media for air filtration	Coupling Process Systems Engineering with Life Cycle Assessment for Sustainable Ultrafiltration	Fabrication of reverse osmosis membrane via co-solvent assisted interfacial polymerization for the treatment of semiconductor wastewater	Impact of polymer dosing modes on sludge conditioning and dewatering
More accurate measurements of the most penetrating particle size using aerosols classified by aerodynamic diameter	Direct contact membrane distillation module design for external heat recovery	Development of a Three-Stage Filtration System Using Tailored Phase-Inversion Membranes from a Single Casting Solution	Hybrid process for treating textile dyeing wastewater by coupling Coagulation-Flocculation, Adsorption and Fenton oxidation
Characterising dynamic filter removal efficiency of volatiles in real-time	Electrokinetic measurements as a new tool to characterize membrane wetting	Fabrication of a Cost-Effective Crosslinked and Intercalated rGO-Based Membrane for Efficient Dye Removal	Using raw and modified chitosan as an alternative of petrosourced flocculents for digested sludges thickening and dewatering
Integration of monitoring system onto air particle filter	Optimization of concentration- fractionation via membrane filtration: equations vs. reality	Comparative Study of Activation Methods to Enhance the Stability and Efficiency of Graphene Oxide Membranes on Low-Cost Silica-Rich Supports	Towards nature-based solutions in waste water treatment: role of biopolymer properties in coagulation- flocculation and removal of suspended mineral matter
Coffee Break - Exhibition - Poster			
COMPARISON METHODS	MEMBRANE FOULING / REGENERATION	MEMBRANE FORMATION / STRUCTURE	BIOPOLYMER
Comparison of performance evaluation methods for air cleaners	Qualifying membrane cleaning efficiency by the zeta potential	3D Printed TPMS-Structured Ceramic Membranes for High-Temperature Industrial Exhaust Filtration	Utilization of jenitri as a biosorbent for produced-water in oil fields
Effect of the competitive gases in the performance evaluation for Gas-phase air cleaning devices (GPACD)	Probing the fouling induced by biomolecules of a polymer microfiltration membrane using 3D cryo-FIB/SEM	Auxetic highly stretchable all-ceramic nanofibrous membranes for high- temperature industrial emission filtration	Enhanced treatment of olive mill wastewater using infiltration-percolation with low-cost adsorbents
Influence of test parameters to the comparability of test results of air filter elements	Enzymatic detergents vs alkaline detergents: which are better for cleaning PES/PVP ultrafiltration membranes fouled by skim milk?	Development and selective adsorption characteristics of molecular imprinted Chitosan composite membrane	Enhancing the reuse of a low-cost composite adsorbent for water purification



Poster session
SF2P meeting (by invitation)
GALA DINNER

	ROOM H	АМРНІ А	ROOM F
8:00 - 12:30			
9:00 - 10:00	AMPHI A	A look at the techr	nology-drivers and projects today, including
10:00 - 10:30			
	FILTRATION/SEPARATION APPLICATIONS 2	MEMBRANE MATERIALS	NANOFIBERS
10:30 - 10:50	Particle filtration long-term research experience in water reuse	Keynote: Sang Yong NAM	Filtering Sars-CoV-2 virus aerosols with electret nanofiber filter
10:50 - 11:10	Methodology for the selection and qualification of a solid-liquid separation process for high-level radioactive sludge	Novel Preparation of Enhanced Organic Solvent Nanofiltration Membranes	High Performance Nanofiber Media for HVAC and Clean Room Application
11:10 - 11:30	VPA (Vertical Plate Airblow) Optimization for Filter Press of Copper Concentrate into Greener and Sustainable Industry	Study of Membrane Gradostate Reactors	Nanofiber composites for high efficiency air filtration
11:30 - 11:50	New trends in biopharmaceutical filtration technologies - What's in it for Africa?	Advanced fouling prevention in self-cleaning piezoelectric PVDF- Graphene membranes for sustainable water purification and resource recovery	Electrospinning of cellulose acetate for the production of efficient air-filtering systems
11:50 - 12:10	CFD technology assisted hydrocyclone design optimization and engineering application	Enhanced Pollutant Removal and Antifouling in AeCMBR Using Bentonite for Pharmaceutical Wastewater	Development of High-Efficiency Air Filters from Recycled PET Nanofibers Embedded with Single-Walled Carbon Nanotubes for Nanoparticle Filtration
12:10 - 12:30	АМРНІ А		
14:00 - 18:00			

FRIDAY, 4 JULY 2025

■ Liquid filtration ■ Gas filtration ■ Membrane ■ Sustainable development

АМРНІ В	АМРНІ С	ROOM E
Carbon Dioxide to Green and Renewable	Fuels & Chemicals	
CASE STUDY	MODULE / PROCESS DESIGN	MICROPOLLUTANT
Bio-inspired Zwitterionic Membrane Filters for Leukodepletion	Tangential Flow Filtration Using Reverse Asymmetric Membranes for Virus Harvesting	Nano/Microplastics: Small Particles Big Problems
Electrodialysis for groundwater defluoridation: Insights into membrane selection and anion competition	Cascades with internal recycling: a tool to enhance membrane separation performances in different industrial sectors	Optimization of GAC filtration to remove micropollutants in wastewater treatment
Mitigating membrane fouling in anaerobic membrane bioreactors through minimal-mixing: A sustainable approach for energy efficiency and performance stability	Greener nanofiber membranes from electrospinning	Microplastics from tire wear - Filtration in the field
Membrane distillation crystallization towards recovery of fresh water and minerals from acid mine drainage	Highly water permeable ultrafiltration (UF) membrane using an eco-friendly material	Cork as a new sustainable solution for micropollutants adsorption in water treatment
Separation and purification of high- quality alfalfa white protein using novel membrane technology with variable pore sizes and diafiltration	Optimization of Forward Osmosis (FO) Modules arrangement for High- Efficiency Feed concentration in Single- Pass Operation	The Impact of Fiber Length and Concentration on Ultrafiltration Membrane Performance: Insights from Microplastic Fiber Filtration Experiment
	CASE STUDY Bio-inspired Zwitterionic Membrane Filters for Leukodepletion Electrodialysis for groundwater defluoridation: Insights into membrane selection and anion competition Mitigating membrane fouling in anaerobic membrane bioreactors through minimal-mixing: A sustainable approach for energy efficiency and performance stability Membrane distillation crystallization towards recovery of fresh water and minerals from acid mine drainage Separation and purification of high-quality alfalfa white protein using novel membrane technology with variable	CASE STUDY MODULE / PROCESS DESIGN Bio-inspired Zwitterionic Membrane Filters for Leukodepletion Electrodialysis for groundwater defluoridation: Insights into membrane selection and anion competition Mitigating membrane fouling in anaerobic membrane bioreactors through minimal-mixing: A sustainable approach for energy efficiency and performance stability Membrane distillation crystallization towards recovery of fresh water and minerals from acid mine drainage Separation and purification of high-quality alfalfa white protein using novel membrane technology with variable Separation and purification of high-quality alfalfa white protein using novel membrane technology with variable Optimization of Forward Osmosis (FO) Modules arrangement for High-Efficiency Feed concentration in Single-

Closing Ceremony

TECHNICAL TOURS



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POSTERS

TOPIC 1 SOLID/LIQUID

P-01 Produce drinking water wherever you need it with the ANDRITZ mobile filtration unit (AMFU)

Etienne FROGER, Scorbé Clairvaux, FRANCE

P-02 Enhancing Automotive Cabin Air Filtration Efficiency Using Short Cellulose Acetate Nanofibers Mônica L. AGUIAR, São Carlos - SP, BRAZIL

P-03 Recycling of polymeric substances from sewage via membrane technologies

Da-Qi CAO, Beijing, CHINA

P-04 How to Select the Right Liquid-Solid Filltration System Kalyan ROY, Navi Mumbai, INDIA

P-05 Influences and Characteristics of Back-washing for Double-layer Filter Materials in Filtration Treatment of Polymer Flooding Produced Water

Zhihua WANG, Daqing, CHINA

P-06 Effect of Different Filter Materials on Filtration Process of Polymer Flooding Produced Water: A Numerical Simulation Study

Zhihua WANG, Daging, CHINA

P-07 Filtration technologies for nuclear waste water treatment

Aurélie SOUCASSE, Bagnols-sur-Cèze, FRANCE

P-08 Analysis on the development and Standardization System Construction of Separation Machinery Industry in the Context of Dual Carbon Goals

Cuilona CHEN, Hefei, CHINA

P-09 Hydrophilic and Porous Granular Adsorbent for Lithium Recovery in Low-Concentration Brine

Tomi ERFANDO, Aberdeen, UNITED KINGDOM

P-10 CFD-DEM simulation of micro-mechanisms between particles and filter medium by solid-liquid separation Nikolai BENZ, Kaiserslautern, GERMANY

TOPIC 2 GAS

P-11 A microwave sensor for droplet contents measurement in high-pressure natural gas pipelines Junxian CHEN, Beijing, CHINA

P-12 Evaluation of the efficiency of bag filters with different filter media

Mônica Lopes AGUIAR, São Carlos, SP, BRAZIL

P-13 Production of triple-layer filter media from recycled polyethylene terephthalate (rPET) and polystyrene (rPS) using the electrospinning technique: Evaluation of air nanoparticle filtration and permeability

Mônica Lopes AGUIAR, São Carlos, BRAZIL

P-14 Application of graphene oxide on nonwoven microfibres as a promising air purification nanocomposite for removal of particulate matter

Simone POZZA, Limeira, BRAZIL

P-15 Study of the particle loading behavior and dendrite growth characteristics on a single fiber Tianle YOU, guangzhou, CHINA

P-16 Modeling nonwoven filters and application to airflow study and pressure drop prediction Yongchun ZENG, Shanghai, CHINA

P-17 Approach for dimensioning a lab-scale wet scrubber for analysis of gas-particle-droplet interactions God JEAN. Nantes. FRANCE

P-18 Integrated application of cyclone separation and deep filtration in natural gas defoaming Deli LIU, Shanghai, CHINA

TOPIC 3 MEMBRANE

P-19 Enhanced separation of C-phycocyanin and allophycocyanin using a coupled filtration and precipitation methods

Soobin JANG, Incheon, REPUBLIC OF KOREA

P-20 Hybrid modeling approach for the prediction of potential fouling in filtration based on viscosity Jimin KANG, Incheon, REPUBLIC OF KOREA

P-21 Boosting the gas permeance of ceramic membranes for high-temperature dust laden gas filtration Shiying NI, Nanjing, Jiangsu, CHINA

P-22 Preparation and Hydrogen Permeation performance of Pd-Ag-Cu composite membrane with alpha-Al2O3 support Sung Woo HAN, Seoul, REPUBLIC OF KOREA

P-23 Development of Antifouling gamma-Al2O3/alpha-Al2O3 Nanofiltration Membranes for Enhanced Wastewater Treatment Efficiency

Xuelong ZHUANG, Seoul, REPUBLIC OF KOREA

P-24 A study on the feasibility of hemodialysis application through lab-scale hemodialyzer made of ceramic hollow fiber membranes by removing uremic toxins Jae Yeon HWANG, Seoul, REPUBLIC OF KOREA

P-25 Next level optimization of your Dynamic Crossflow Filter (DCF) performance with digital twins Maximilian AMTHOR-STAHL, Vierkirchen, GERMANY

P-26 Evaluating ultrafiltration membrane against 2-20 nm nanoparticles in harsh chemicals: HCl, H2SO4 and NH4OH Wilson POON, Elkton, UNITED STATES

P-27 Sandfilter Backwash Water Treatment - Piloting at a municipal German freshwater producer Timo ROTHAUSEN, Kerpen, GERMANY

P-28 Mamb'Eaux Project Assessment of the life span of membranes in an MBR for the treatment of urban and industrial wastewater

Christel CAUSSERAND, Toulouse, FRANCE

P-29 Evaluation of chemical and mechanical resistance of FO and RO dense membranes for improved lifetime and recycling Gaetan BLANDIN, Girona, SPAIN

P-30 Understanding the effect of organic load on aerobic ceramic membrane bioreactor: performance, fouling propensity and machine learning algorithm Mohamed TAKY, Kenitra, MOROCCO



POSTERS

P-31 Forward osmosis to concentrate blood platelets: optimising process conditions
Aka DOCHE, Toulouse, FRANCE

P-32 Preparation and characterization of more sustainable porous supports for thin film composite membranes for CO2 capture and conversion

Martina VACCARO, Rende (CS), ITALY

P-33 High temperature ceramic membrane separations for carbon circularity: From re-refining of used lubricant oil to chemical recycling of plastics

Pieter VANDEZANDE, Mol, BELGIUM

P-34 Reverse Osmosis and Scientific Issues for Seawater Desalination in West Africa - Osmose Inverse et Enjeux Scientifiques pour le Dessalement de l'Eau de Mer en Afrique de l'Ouest

Courfia DIAWARA, Ziguinchor, SENEGAL

P-35 Membrane bioreactor in aerobic and anoxic conditions for advanced treatment of secondary effluents for potential reuse

Haby Mamadou DIALLO, Kenitra, MOROCCO

P-37 Protein concentration from microalgae using stirred-cell ultrafiltration

Hussein RIDA, Toulouse, FRANCE

P-38 Are membrane cascades an efficient tool for the enhancement of RO desalination performances either for brackish or seawaters?

Youness KOUZI, Rennes, FRANCE

P-39 Contribution to the study of fluoride ion transfer in nanofiltration and reverse osmosis membranes
Mohamed IDRISSE, Kenitra, MOROCCO

P-40 Contribution to the Surface Water Quality Assessment: A Case Study of the Microfiltration and Reverse Osmosis Systems applied to the Kivu Lake Water In The Province Of South Kivu In DR Congo.

Soumana GAGARA, Mogadishu, SOMALIA

P-41 High-purity water recovery from industrial effluents using membrane distillation
Aamer ALI, Aalborg, DENMARK

P-42 Preparation of low-cost kaolinite/perlite membrane for microfiltration of dairy wastewaters

Doha EL MACHTANI, Casablanca, MOROCCO

P-42bis Preparation of polymeric membranes containing doped mesoporous carbon and their application in the removal of heavy metals from a real electroplating effluent Patricia PREDIGER, Campinas, BRAZIL

TOPIC 4 SUSTAINABLE

P-43 Removal of active pharmaceuticals ingredients from water using modified halloysite particles
Michal STOR, Warsaw, POLAND

P-44 Performances comparison of two membranes processes: Electrodialysis and Nanofiltration in defluoridation of a Moroccan groundwater

El Attar ABDELLAH, Meknes, MOROCCO

P-45 Modification of polypropylene filters with amphiphilic cyclodextrins by dip coating for PFAS removal Kasper Skovbølling Hedegaard (Aalborg, DENMARK)



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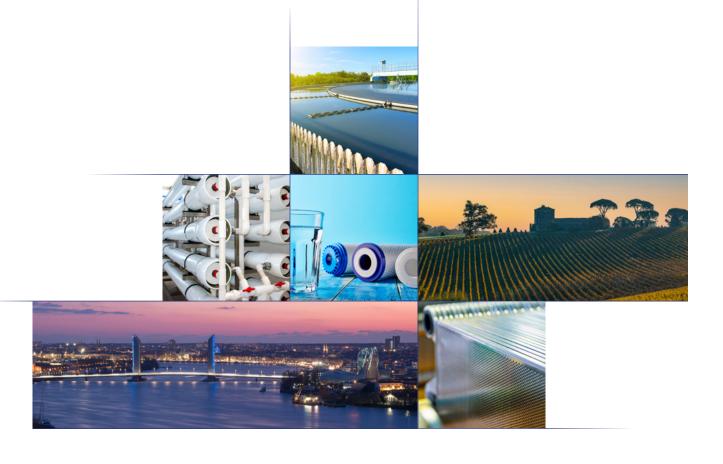
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