

**4th Scientific Annual Meeting of the Eudime Doctorate School
University of Calabria
October 1-2, 2015**



Congress Center of the University of Calabria
"Sala Stampa"
Rende (CS), Italy

Workshop Chairperson

Prof. Enrico DRIOLI

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Program

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Book of Abstracts

Program

Thursday, 1 October 2015 – Morning

09:00 – 10:00	Welcome and opening remarks Gino Mirocle CRISCI (Rector of UNICAL), Girolamo GIORDANO (Director of DIATIC), Gianpiero BARBUTO (Responsible of the UNICAL International Relationship Office), Lidietta Giorno (Director of ITM-CNR), Representatives of the other Eudime Partner Universities, Enrico DRIOLI (Eudime Coordinator)	
10:00 – 11:00	Session I Chairpersons: Enrico DRIOLI and André AYRAL	Plenary Lecture on “Fluorinated Membranes for Energy production and Storage” <u>Vincenzo ARCELLA</u>
11:00 – 11:30		Coffee break
11:30 – 12:00		Sweep gas membrane distillation and Pervaporation with stainless-steel hollow-fiber membranes <u>Sushumna SHUKLA</u>
12:00 – 12:30		Effect of membrane conductivity on performance of direct contact membrane distillation process <u>Aamer ALI</u>
12:30 – 13:00		Nanoscale interactions in a cation exchange membrane: influence of the cation on the transfer of sugar <u>Alessio FUOCO</u>
13:00 – 13:15		Eudime Photo
13:15 – 14:45		

Program

Thursday, 1 October 2015 – Afternoon

14:15 - 14:45	Session II Chairpersons: Isabel COELHO and Reyes MALLADA	Effect of operational parameters on the efficiency of magnetic responsive biocatalytic membrane reactor <u>Abaynesh Yihdego GEBREYOHANNES</u>
14:45 – 15:15		Effect of Mg ²⁺ on energy generation by reverse electrodialysis <u>Ahmet Halil AVCI</u>
15:15 – 15:45		Monitoring of membrane processes using molecular probes <u>Sergio SANTORO</u>
15:45 – 16:15		Gas transport in metal organic framework polyetherimide mixed matrix membranes: The role of polyetherimide backbone structure. <u>Salman SHAHID</u>
16:15 – 16:45		Theoretical and experimental study on vanadium based alloys and crystalline porous materials for gas separation membrane applications <u>Jenny EVTIMOVA</u>
16:45 – 17:15		Design by Modelling of Multifunctional Membrane Materials <u>Henok Getachew GIRMA</u>
17:15 – 17:45		Mathematical modelling of membrane distillation <u>Viacheslav PERFILOV</u>
17:45 – 18:15		Comparison of supported ionic liquid membranes immobilized with two carbonic anhydrase enzymes for CO ₂ capture <u>Mohamed Yahia Marei ABDELRAHIM</u>
18:15 – 18:45		The Dynamics of Particle Deposition in Microfluidic Filters <u>Zenamarkos Bantie SENDEKIE</u>
18:45 – 19:45		EM3 Meeting
20:00	Social Dinner	

Program

Friday, 2 October 2015 – Morning

09:00 – 09:30	Session III Chairpersons: João CRESPO and Pierre AIMAR	Study of different titanium silicates (TS-1 and ETS-10) as fillers for Mixed Matrix Membranes for CO ₂ /CH ₄ gas separation applications <u>Violeta MARTIN-GIL</u>
09:30 – 10:00		Gas Transport Properties of a Novel Polyimide and Its Enhanced Polyimide – Zeolitic Imidazolate Framework: ZIF-8 Mixed Matrix Membrane <u>Mohd Zamidi AHMAD</u>
10:00 – 10:30		Production of polymeric nanoparticles under continuous flow, using microdevices and membrane emulsification: Application in encapsulation of biomolecules and drug delivery <u>Airama Albisa NOVO</u>
10:30 – 11:00		Development of Hydrogel Composites for Membrane Contactors <u>Shabnam MAJIDI SALEHI</u>
11:00 - 11:30		Coffee break
11:30 - 12:00		A novel ion exchange membrane device for protein crystallization <u>Mariella POLINO</u>
12:00 – 12:30		Sacrificial polyelectrolyte multilayers for membrane cleaning <u>Shazia ILYAS</u>
12:30 - 13:00		Poly(ionic liquid)s-based thin film composite membranes to enhance process stability in CO ₂ capture applications <u>Daria NIKOLAEVA</u>
13:00 – 13:30	Coupling Reverses Electrodialysis (RED) with Alkaline Polymer Electrolyte Membrane Electrolysis (APEME) system for Indirect Hydrogen Production from Concentrated Brine <u>Ramato Ashu TUFA</u>	
13:30 – 14:30	Lunch	

Friday, 2 October 2015 – Afternoon

14:30 – 15:00	Session IV Chairpersons: Maria-Elena VALLEJO and Lidietta GIORNO	Membrane separation and extraction of lanthanides with constitutional dynamic networks <u>Mohamed Yahia Marei ABDELRAHIM</u>
15:00 – 15:30		UV Cross-linked Membranes for SRNF Applications <u>Veysi ALTUN</u>
15:30 – 16:00		Membrane filtration of soft and permeable objects: the quest for general rules and guidelines <u>Izabella BOUHID DE AGUIAR</u>
16:00 – 16:30		Membrane integration in biomedical microdevices <u>Magdalena MALANKOWSKA</u>
16:30 – 17:30	Session V Chairperson: Enrico DRIOLI	Round table: research project in progress, future developments, Eudime future, etc.
17:30 – 18:30		Final discussion and closing remarks
18:30	Transfer to the Airports or Hotels	