

| SEPTEMBER 10, WEDNESDAY | | | |
|-------------------------|------------|--|--|
| 08:00 | 09:30 | Registration | |
| 09:30 | 10:15 | Welcome Session (FEUP AUDITORIUM) | |
| 10:15 | 11:15 | PL1: Professor Andrzej Stankiewicz, Delft University of Technology, The Netherlands Recent Advances in Energy-Based Intensification of Chemical Reactions: Can We Control Molecules Better? | Auditorium |
| 11:15 | 11:45 | Coffee Break | |
| Room | AUDITORIUM | | B002 |
| 11:45 | 12:00 | KN1-CM: L.Sousa Lobo The Two Alternative Mechanisms of Catalytic Carbon Formation – Relevance of Kinetic Linearity, Surface Duality and Nano-geometry | O-FP1: Gallium-Substituted and Promoted Hydrotalcites for CO ₂ Capture at High Temperatures: Sorption Equilibrium and Kinetics |
| 12:00 | 12:15 | | O-FP2: Adsorption Equilibria of CO ₂ and N ₂ on MIL-53(AI): Experimental Measurements and Adsorption Potential Theory Analysis |
| 12:15 | 12:30 | O-CM1: Effect of Finishing Methods on Fragrance Release of Functional Wool/Polyester Fabrics | O-FP3: Carbon dioxide removal from anaesthetic gas circuits using carbonic anhydrase and ionic liquid membranes |
| 12:30 | 12:45 | O-CM2: Correlating Adsorption and Flocculation Kinetics of Polyelectrolytes with Different Architectures | O-FP4: Thermodynamic Analysis of Glycerol Steam Reforming for Hydrogen Production With In Situ Hydrogen and Carbon Dioxide Separation |
| 12:45 | 14:00 | Lunch Break | |
| 14:00 | 14:15 | KN2-MS: Miguel Jorge Molecular Simulation as a Prediction and Design Tool in Chemical Engineering | O-FP5: Implementation of a Simulated Moving Bed Reactor process for the synthesis of acetals: The Glycerol Ethyl Acetal case study |
| 14:15 | 14:30 | | O-FP6: Purification of the Polyphenolic Fraction from <i>E. globulus</i> Bark Extract by Membrane and Adsorption Processes |
| 14:30 | 14:45 | O-MS5: MOF Based PSA Processes For Gas Separation | O-FP7: Optimization of the Adsorption Process for the Analytical and Preparative Separation of Naldolol Stereoisomers |
| 14:45 | 15:00 | O-MS6: Nanoscale Confinement of B-DNA into Hydrophobic Pores | O-FP8: Hydrogenation of Nitrobenzene over Pd/Al ₂ O ₃ catalyst – Mechanism and effect of the main operating conditions |
| 15:00 | 15:15 | O-MS7: Cyclone Optimization Using Particle Agglomeration | O-FP9: Heterogeneous Photocatalytic Synthesis of p-Anisaldehyde from p-Methoxytoluene in a Small Batch Reactor under UV-LED Irradiation |
| 15:15 | 15:30 | O-MS8: Study of Mass Transfer Limitations in a Multiphase Stirred Tank Reactor for the Screening of Shaped Catalysts | O-FP10: An Analysis of Ceramic Catalysts Comprised by Iron and Cobalt Oxides for the Heterogeneous Fenton's Reaction |
| 15:30 | 16:00 | Coffee Break | |
| 16:00 | 17:00 | PL2: Roger-Marc Nicoud, founder and former CEO of Novasep, Pompy, France | Entrepreneurship and Innovation |
| 17:00 | 18:00 | Round Table | |
| 18:00 | 19:30 | Posters & Porto d' Honra | |
| | | | B003 |
| | | | O-MS1: Modelling the Hydrodynamics of Cooling Channels Inside Shell-Type Power Transformers with CFD |
| | | | O-MS2: Dynamic Modelling Framework with Automatic Differentiation Index Reduction |
| | | | O-MS3: Stochastic modeling of the thermal and catalytic degradation of polyethylene |
| | | | O-MS4: Kinetic Modelling for Enzymatic Hydrolysis of Pre-treated Sugarcane Straw |
| | | | O-BE1: Membrane reactors in process intensification of mannosylerythritol lipids production from sugars |
| | | | O-BE2: Effect of Biopolymer Purification Process on the Properties of Exopolysaccharides Membranes for Pervaporation |
| | | | O-BE3: Packed bed enzyme microreactor: application in sucrose hydrolysis as proof-of-concept |
| | | | O-BE4: Development of Biofiller to Permeable Reactive Barriers for Treatment of Groundwater Polluted with Polycyclic Aromatic Hydrocarbons |
| | | | O-BE5: Development of New Disinfection Solutions Including the Use of Chemical Combinations |
| | | | O-BE6: Synthesis and Assessment of a Graphene-based Composite Photocatalyst |

Poster Session 1 - CM & MS & SE

Chemicals and Materials - CM
Multi-scale Modeling and Simulation - MS
Sustainability and Environment - SE
Special Topic: Education and Society - ST

Biological Engineering - BE
Chemical Eng.Fundamentals and Practice - FP
Energy - EN