## XII ENCMP 2024, 6-7 June 2024

## PROGRAM OVERVIEW

Thursday, 6 June 2024		
10.00 - 10.45	Reception desk	
10.45 – 11.00	Welcome & Introduction	
Auditorium		
Session 1	Chair (Auditorium): José L. Figueiredo/Luísa M. Martins	
11.00 - 11.40	PL1: "Exploring the pore space of transition metal- and Ln-silicates, and MOFs" João Rocha – Univ. Aveiro	
11.40 – 12.00	KN1: "Interfacing photosynthetic biomolecules with electrodes for light-driven H <sub>2</sub> production" Felipe Conzuelo – ITQB Univ. Nova Lisboa	
12.00 - 12.20	KN2: "Harnessing visible light for cleaner water and sustainable chemical and fuels" Maria Sampaio – Univ. Porto	
12.20 - 14.00	LUNCH BREAK	
Session 2	Chair (Auditorium): Joaquim Faria/Marta Piñeiro	
14.00 – 14.40	PL2: "Activation of molecular oxygen and selective oxidation" Janliang Xiao – Univ. Liverpool, UK	
14.40 – 15.00	KN3: "Empowering biomass wastes through catalysis: Sustainable synthesis of high-value chemicals and fuels" Lucília Ribeiro – Univ. Porto	
15.00 – 15.20	OP1: Prémio melhor tese de Doutoramento em Catálise e Materiais Porosos – André Torres Pinto – Univ. Porto	
15.20 – 15.30	OC1: "Depolymerization of plastic waste catalyzed by homogeneous and heterogeneous catalysts" Ana Fernandes – IST Univ. Lisboa	
15.30 – 15.40	OC2: "Transformation of biomass model compounds using Pt-Ni/Y catalyst prepared by mechanochemistry" Mariana Matos –, ISEL – Inst. Politécnico de Lisboa	
15.40 – 15.50	OC3: "Cork-derived activated carbon for environmentally friendly supercapacitors" Raquel Rocha – Univ. Porto	
15.50 – 16.00	OC4: "From Combustion Residues to magnetic catalysts: Innovative tool for water pollutant valorization" Iwona Kuźniarska-Biernacka – Univ. Porto	
16.00 – 16.10	Q&A	
16.00 – 17.00	Coffee break & Poster Session	
Session 3	Chair (Auditorium): Ana Paula Carvalho/Isabel Correia Neves	
17.00 – 17.20	KN4: "Catalytic valorization of biomass-derived synthons" Rafael Gomes – Univ. Lisboa, Portugal	
17.20 – 17.30	OC5: "Ethylene photocatalytic oxidation for fruit ripening mitigation using TiO2-based zeolite materials" Ricardo Ferreira – IST Univ. Lisboa	
17.30 – 17.40	OC6: "Crude glycerol: using acid zeolites to obtain fuel additives" Isabel Santos-Vieira – Univ. Aveiro	
17.40 – 17.45	Q&A	
17.45 – 18.45	Catalysis and Porous Materials Division (DCMP) Meeting – open to all members (in Classroom C16)	
19:00 – 19:30	Experimental workshop 1 : Biocatalysis – Producing liquids that you can drink!	
19:30 – 20:00	Experimental workshop 2 : Biocatalysis – Producing liquids that you can drink!	
20:00 – 20:30	Experimental workshop 3: Biocatalysis – Producing liquids that you can drink!	
20.30	Galla Dinner - at PRAXIS (Coimbra)	

Friday Morning, 7 June 2024			
Session 4	Chair (Auditorium): Cristina Freire/Beatriz Royo		
9.00 - 9.40	PL3: "Synergistic approaches to catalyst design: from benchmark to elusive substrates" Montserrat Diéguez – Univ Rovira I Virgili, Spain		
9.40 – 10.00	KN5: "Functionalized metal—organic frameworks as platforms for gas adsorption and catalysis" Anirban Karmakar – IST Univ. Lisboa		
	Chair (Auditorium): Cristina Freire/Beatriz Royo	Chair (Classroom): Andreia Peixoto/Sara M. Pinto	
10.00 – 10.10	OC7: "Mechanochemistry and catalysis, a powerful alliance for the development of sustainable processes" Marta Piñeiro – Univ. Coimbra	OC23: "Optimizing drug combinations for melanoma therapy by machine learning in zeolite delivery systems" Ana Raquel Bertão – Univ. Minho	
10.10 – 10.20	OC8: "Biodiesel additives synthesis using metal(IV) phosphates catalysts: Esterification of levulinic acid" Graça Rocha – Univ. Aveiro	OC24: "Biomass-derived catalysts: heteroatom doping and metal incorporation towards high performance oxygen reduction" Renata Matos – Univ. Porto	
10.20 – 10.30	OC9: "Sustainable fuel desulfurization using advanced porous catalytic membranes" Rui Faria – Univ. Porto	OC25: "Development of waste-based carbon dots as photo-nanocatalysts" Luís Silva – Univ. Porto	
10.30 – 10.40	OC10: "Chlorophyll as a natural photocatalyst to obtain antimicrobial compounds from rosin oxidation" Cláudia Neves – Inst. Politécnico de Viseu	OC26: "Pd-catalyzed aminocarbonylation continuous-flow process: Multigram synthesis of carboxamides" Fabio Rodrigues – Univ. Coimbra	
10.40 - 10.50	Q&A	Q&A	
10.50- 11:15	Coffee break & Poster Session		
Session 5	Chair (Auditorium): M. Graça Neves/Helder Gomes		
11.15 – 11.35	KN6: "Sustainable Catalytic Processes for CO <sub>2</sub> Valorization" Rui Carrilho – Univ. Coimbra		
11.35 – 11.55	KN7: "C-N bonding formation mediated by transition metals: a useful tool to modify the porphyrin core" Nuno Moura – Univ. Aveiro		
	Chair (Auditorium): M. Graça Neves/Helder Gomes	Chair (Classroom): Fábio Rodrigues/Rafael Aroso	
11.55 – 12.05	OC11: "Rapid formation of vinylene linked phenanthroline covalent organic frameworks for photocatalysis" Clara Ponte – International Iberian Nanotechnology Laboratory, Braga	OC27: "Highly selective phthalocyanine-based catalysts for CO2 addition reactions to epoxides" Andreia Gonzalez – Univ. Coimbra	
12.05 – 12.15	OC12: "Green aromatic epoxidation with an iron porphyrin catalyst for functionalization of renewable xylene, quinoline, and acridine" Gabriela Corrêa – Univ. Porto	OC28: "Tröger's base–linked POPs as heterogeneous catalysts for the nitroaldol condensation" Tiago Machado – Univ. Coimbra	
12.15 – 12.25	OC13: "Sustainable approaches for CO2 catalytic conversion into fuels and valuable products" Luís Branco – Univ. Nova Lisboa	OC29: "Upgrading of biomass derivatives to biobased products for drop-in- fuels and chemicals over Niobium-based catalysts" Margarida Antunes – Univ. Aveiro	
12.25 – 12.35	Q&A	Q&A	

Friday Afternoo	on, 7 June 2024		
Session 6	Chair (Auditorium): José Cavaleiro/Filipa Ribeiro		
14.00 - 14.40	PL4: "Photocatalyzed and electrochemical reactions in both batch and continuous flow conditions: recent applications for fine chemicals and API's		
	synthesis" Kleber T. Oliveira, Univ. S. Carlos, Brasil		
14.40 – 15.00	KN8: "Carbon nanotubes derived from plastic solid waste: catalytic applications" Helder Gomes – Inst. Politécnico de Bragança		
15.00 – 15.25	OP2: Prémio Ramôa Ribeiro investigador jovem – Mirtha Lourenço – Univ. Aveiro		
	Chair (Auditorium): José Cavaleiro/Filipa Ribeiro	Chair (Classroom): Rui Carrilho/Andreia Peixoto	
	OC14: "Synthesis of functional polymers for selective adsorption of	OC30: "Fruit ripening mitigation – Ag-based-ZSM-5 materials for ethylene	
15.25 – 15.35	bioactive compounds from olive leaf extracts" Ayssata Almeida – Inst.	removal under competitive adsorption" Lívia Valle, – IST Univ. Lisboa	
	Politécnico de Bragança		
	OC15: "Advanced smart textiles: Electrochromic supercapacitors	OC31: "Advanced heterogeneous degradation strategies for trimethoprim	
15.35 – 15.45	boosted by glucose-derived carbon and PEDOT:PSS" Gabriela Queiroz –	using porphyrin catalysts: From H2O2 treatment to photocatalysis and flow	
	Univ. Porto	chemistry processes" Giusi Piccirillo – Univ. Coimbra	
	OC16: "Polyoxotungstates@MIL-100(Fe) to achieve sustainable	OC32: "Getting Insights about zeolite desilication through machine Learning"	
15.45 – 15.55	oxidative desulfurization and denitrogenation of fuels" Diniz Silva –	Daniel Costa – IST Univ. Lisboa	
	Univ. Porto		
15.55 – 16.05		OC33: "Improved ethylene production over Calcium doped LaInO3 perovskite	
46.05 46.45	00.4	nanofibers" Joana Martinho – IST Univ. Lisboa	
16.05 – 16.15	Q&A	Q&A	
16.15 – 16.30	Coffee break		
Session 7	Chair (Auditorium): Mariette Pereira/Mário Calvete		
16.30 – 16.50	KN9: "Functional porous materials for energy and biomedical applications" Sandra Gago – Univ. Nova Lisboa		
16.50 – 17.00	OC18: "Synthesis of 2-methylresorcinol-based cavitands by means of homogeneous catalytic reactions" László Kollar – Univ. Pécs, Hungria		
17.00 – 17.10	OC19: "Porous MOF-based materials with high potential to sustainable catalytic processes" Luís Cunha-Silva – Univ. Porto		
17.10 – 17.20	OC20: "Nanostructured binuclear catalysts and nanozymes by ionic self-assembly of first-row transition metalloporphyrins" Susana Rebelo – Univ. Porto,		
17.20 – 17.30	OC21: "CO oxidation on single-atom catalysts based on the molybdenum carbide (Mo2CO2) MXene" José Gouveia – Univ. Aveiro		
17.30 – 17.40	OC22: "Catalytic system for conversion of sugarcane molasses waste to 5-hydroxymethylfurfural" Katarzyna Eblagon – Univ. Porto		
17.40 – 17.50	Q&A		
17.50 – 18.15	Closing session and Best Poster Award		