

## XI ENCMP/ II RGC 2021

Virtual meeting, 9-10 December 2021

### PROGRAM OVERVIEW

Thursday, 9 December 2021 (morning)	
Time (Lisbon, GMT)	Online Session
9:15-9:30 ROOM A	<b>Welcome &amp; Introduction</b> Artur Silva - Vice-Rector of the University of Aveiro and President of SPQ Armando Silvestre - Head of the Department of Chemistry, University of Aveiro Anabela Valente (Carbon Group, SPQ) - Department of Chemistry, University of Aveiro - Chair of the XI ENCMP/ II RGC 2021 Mário Simões (Catalysis and Porous Materials Division, SPQ) - Department of Chemistry, University of Aveiro - Chair of the XI ENCMP/ II RGC 2021
9:30-9:40	Solo piano concert - Mariana Miguel
CHAIRS:	M. Fernando Pereira and João Pires
9:40-10:25 ROOM A	<b>PL1 - Dirk De Vos</b> <i>Microporous catalysts for the selective functionalisation of C-H bonds in arenes</i>
10:25-10:55 ROOM A	<b>KN1 - Adrián Silva</b> <i>Catalytic Treatment of Environmental Contaminants of European Union Concern</i>
	10 min Break
SESSION 1/4	CHAIRS: Mário Calvete and Helder Gomes
11:05-12:35 ROOM A	11:05-11:20 OC1 - José Richard B. Gomes <i>The potential of MXenes for catalyzing dissociation reactions</i>
	11:20-11:35 OC2 - Laura M. Salonen <i>Covalent Organic Frameworks for the Capture of Water Pollutants</i>
	11:35-11:50 OC3 – Salete S. Balula <i>Building a Bridge from Bulk Materials to Catalytic Membranes for Desulfurization Processes</i>
	11:50-12:05 OC4 - Diana M.M.S. Fernandes <i>POMs, MOFs &amp; Carbon materials: the quest for efficient O<sub>2</sub> electrocatalysts</i>
	12:05-12:20 OC5- Maria del Carmen Bacariza Rey <i>Ni-based catalysts supported over activated carbon for CO<sub>2</sub> hydrogenation to CH<sub>4</sub>: The use of cork waste as precursor</i>
	12:20-12:35 Q&A
12:35-14:00	LUNCH BREAK

<b>Thursday, 9 December 2021 (afternoon)</b>			
<b>Time (Lisbon, GMT)</b>	Online Session		
CHAIR:	José Luís Figueiredo		
14:00-14:15 ROOM A	Memories (Peter Carrott Session)		
CHAIRS:	José Luís Figueiredo and Ana Cristina Freire		
14:15-15:00 ROOM A	<b>PL2 - J. Ángel Menéndez Díaz</b> <i>Custom 3D porous carbon structures from whey</i>		
	10 min Break		
15:10-15:40 ROOM A	<b>KN2 - Luísa M.D.R. de Sousa Martins</b> <i>The role of porous materials as supports for transition metal-scorpionate catalysts</i>		
	10 min Break		
SESSION 2/4	CHAIRS: Anthony Burke and Luís Cunha Silva	CG SESSION 1/2	CHAIRS: Conceição Paiva and Anabela Valente
15:50-17:20 ROOM A	15:50-16:05 OC6 - Valentina Guimarães da Silva <i>TiO<sub>2</sub>/carbon quantum dots composites: a tool for the removal of antibiotics from aquaculture effluents through photodegradation</i> 16:05-16:20 OC7 - Daniel Pereira Costa <i>Hierarchical zeolites for one step catalytic production of liquid hydrocarbons from syngas</i> 16:20-16:35 OC8 - Anirban Karmakar <i>Development of Amide functionalized Coordination Polymers for heterogeneous catalytic applications</i> 16:35-16:50 OC9 - Vasco Figueiredo Batista <i>Iron tris(pyrazolyl)methane catalysts in diazo amination reactions</i> 16:50-17:05 OC10 - Ricardo Jorge F. Ferreira <i>Climateric fruits ripening mitigation - Ag-based zeolites as efficient sorbents for the removal of ethylene</i> 17:05-17:20 Q&A	15:50-17:20 ROOM B	15:50-16:05 OC-CG1 – Paula C. da Silva Ferreira <i>Barium titanate piezoelectric flexible materials enabled by hierarchically porous graphite for application as mechanical energy harvesters and sensors</i> 16:05-16:20 OC-CG2 - Pedro Miguel F.J. da Costa <i>Nanorange thickness graphite films: growth, transfer and applications</i> 16:20-16:35 OC-CG3 - Lucília G. de Sousa Ribeiro <i>Valorization of agro-forestry biomass residues into ethylene glycol</i> 16:35-16:50 OC-CG4 - Ana Paula Ferreira da Silva <i>Development of porous carbon materials from agro-industrial waste derived from olive oil production</i> 16:50-17:05 OC-CG5 - Rafael Gomes Morais <i>Cobalt and Iron Phthalocyanine-doped Carbon Nanotubes as Bifunctional Oxygen Electrocatalysts</i> 17:05-17:20 Q&A
	10 min Break		
17:30-18:30	Posters Sessions Posters P1-P43 Posters P44-P86	17:30-18:30	Sponsors Session CHAIR: Paula C. da Silva Ferreira
18:30-19:00	<b>Catalysis and Porous Materials Division (DCMP) Meeting – open to all members</b>		
19:00-19:30	<b>Carbon Group (CG) Meeting – open to all members</b>		

<b>Friday, 10 December 2021 (morning)</b>	
<b>Time</b> (Lisbon, GMT)	Online Session
CHAIR:	João Rocha
9:10-9:25 ROOM A	Memories (Ana Cavaleiro Session)
9:25-9:40	The University of Aveiro Jazz Orchestra - artistic direction by João Martins
CHAIRS:	João Rocha and José Richard Gomes
9:40-10:25 ROOM A	PL3 – Rafael Luque <i>Benign-by-design Porous (carbonaceous) materials for catalysis: present and future</i>
10:25-10:55 ROOM A	KN3 - Rui Pedro F. Ferreira da Silva <i>Graphene and its outstanding applications</i>
	10 min Break
SESSION 3/4	CHAIRS: Maria Miguéns Pereira and Joaquim Faria
11:05-12:35 ROOM A	11:05-11:20 OC11 - Ramôa Ribeiro Best PhD Thesis Award winner: Rui Sérgio da Silva Ribeiro <i>Hybrid magnetic carbon nanocomposites for environmental catalytic applications</i>
	11:20-11:35 OC12 - Raquel Pinto Rocha <i>Characterization of the surface chemistry of carbon materials by TPD: An assessment</i>
	11:35-11:50 OC13 – Carlos Bornes <i>Atomic-level description of <sup>31</sup>P-bearing NMR probe molecules adsorbed on zeolites</i>
	11:50-12:05 OC14 - Dânia Sofia M. Constantino <i>Immobilized carbon-based semiconductor materials for organic synthesis using an innovative photoreactor: the NETmix</i>
	12:05-12:20 OC15 - Pablo Arévalo-Cid <i>Electrodeposited metal foams: on the quest of improved catalysts for CO<sub>2</sub> electroreduction</i>
	12:20-12:35 Q&A
12:35-14:30	LUNCH BREAK

<b>Friday, 10 December 2021 (afternoon)</b>			
<b>Time (Lisbon, GMT)</b>	Online Session		
<b>CHAIRS:</b>	Filipa Ribeiro and Mário Simões		
14:30-15:00 ROOM A	<b>KN4 – Ramôa Ribeiro Young Investigator Prize winner: Vânia M.A. Calisto</b> <i>Advances in biomass-derived microporous carbons: development and applications</i>		
	10 min Break		
15:10-15:40 ROOM A	<b>KN5 - Maria da Conceição Paiva</b> <i>Polymer Biocomposites with Functionalized Graphene for Biomedical Applications</i>		
	10 min Break		
SESSION 4/4	CHAIRS: Armando Pombeiro and João Lourenço	CG SESSION 2/2	CHAIRS: Isabel Neves and Ana Paula Carvalho
15:50-17:20 ROOM A	15:50-16:05 OC16 - Andreia F.R. de Oliveira Peixoto <i>Biochar based catalysts for sustainable biomass valorisation</i> 16:05-16:20 OC17 - Andreia Gonzalez <i>Sustainable Catalytic Processes for the Development of Photosensitive Polymeric Materials</i> 16:20-16:35 OC18 – Luís Alexandre A.F.C. Branco <i>Silica and Metal Nanoparticles for heterogeneous catalysis in alternative media</i> 16:35-16:50 OC19 - Gonçalo Jorge S. Catalão <i>Carbon dots-Composite Materials: Synthesis, Characterization, and Photocatalytic Activity</i> 16:50-17:05 OC20 - Filipe C. Teixeira Gil <i>Tuning the Catalytic Reduction of Nitro-arenes Using Artificial Intelligence</i> 17:05-17:20 Q&A	15:50-17:20 ROOM B	15:50-16:05 OC-CG6 - Liliana P. Lima Gonçalves <i>Ni on Carbon Electrocatalysts for Gas-phase CO<sub>2</sub> Methanation</i> 16:05-16:20 OC-CG7 - Ana Sofia Mestre <i>Influence of activated carbon surface chemistry on the removal of pharmaceutical compounds from water</i> 16:20-16:35 OC-CG8 - Marta Filipa F. Pedrosa <i>Metal-free graphene oxide for the photocatalytic degradation of organic contaminants in aqueous phase</i> 16:35-16:50 OC-CG9 - Carla I. Madeira dos Santos Novel hybrids based on graphene quantum dots covalently linked to amino porphyrins for bioimaging 16:50-17:05 OC-CG10 - Ana Rita Correia e Sousa <i>Functional textiles based on MWCNTs and PEDOT:PSS composites for EMI shielding applications</i> 17:05-17:20 Q&A
	5 min Break		
<b>CHAIRS:</b>	Anabela Valente and Mário Simões		
17:25-17:55 ROOM A	<b>KN6 - José Luís Figueiredo</b> <i>50 years of Catalysis in Portugal</i>		
17:55-18:10 ROOM A	Closing Session & Best Poster prizes		