

## PROGRAMME FOR THE FLASH PRESENTATIONS

Monday, 17 June 2024

- 16:15 **Arumugam Lakshman Sundar**  
*A highly stable BiVO<sub>4</sub>/Polycarbazole Heterojunction for Improved Photoelectrochemical Water splitting*
- 16:19 **Marzieh Bagheri**  
*Revolutionizing Water Electrolysis: Designing a Noble Metal Free Anode for Sustainable Hydrogen Production from Lignin Derivatives*
- 16:23 **Maria Giuseppina Bruno**  
*Electrochemical Sensor based on Prussian Blue for Hydrogen Peroxide Detection in Exhaled Breath*
- 16:27 **Alejandro Ariza-Pérez**  
*Solketal synthesis through glycerol photo-acetalization using a WO<sub>3</sub> catalyst*
- 16:31 **Janek Betting**  
*Understanding bimetallic SnPd catalysts for NO<sub>3</sub>-reduction through in-situ controlled surface deposition preparation*
- 16:35 **Tristan Cabanis**  
*Operando study of isopropanol dehydration to propylene: an energetical approach*
- 16:39 **Martim Chiquetto Policano**  
*Shape-dependent activity of Pd/CeO<sub>2</sub> nanorods, nanocubes, and nano-octahedrons on lean methane oxidation*
- 16:43 **Thomas Dimur**  
*Alkaline-earth metal hydrogenation catalysts: Experimental and Theoretical study*
- 16:47 **Perla H. García-Ríos**  
*Pd-complex catalyzed cyclocarbonylation of bio-based methyl vinyl glycolate*
- 16:51 **Marouane Bouremah**  
*InP/ZnS quantum dots for sustainable and efficient photocatalytic redox systems*
- 16:54 **Hector Moine**  
*Cascade of reactions in aqueous phase: study of synergies and antagonisms of hybrid catalytic systems*
- 16:58 **Edgardo Leal-Villarroel**  
*Pt Single atoms and/or Nanoparticles on Titania Nanotubes: What is Better for Catalysis?*
- 17:02 **Sonia Carbone**  
*Fabrication and Characterization of a ternary alloy of Ni-Fe-P for alkaline electrolyzer*
- 17:06 **Brent Daelemans**  
*Upscaling the reductive depolymerisation of lignin: optimising process conditions through catalyst characterisation*
- 17:10 **Aurelien Durupt**  
*Fischer-Tropsch synthesis by CO<sub>2</sub> hydrogenation on modified Co/TiO<sub>2</sub> catalysts*

- 17:14 **Jacques Gilbert**  
*Building Integrated Carbon Capture*
- 17:18 **A. Piccoli**  
*Electrochemical CO<sub>2</sub> reduction with metal-pincer catalysts*
- 17:22 **Ran Liu**  
*Catalytic Oxidation Desulfurization of Dibenzothiophene by Bronsted-Lewis Acid Ionic Liquids*
- 17:25 **LinLin Yang**  
*Brookite TiO<sub>2</sub> Nanorods as Promising Electrochromic and Energy Storage Materials for Smart Windows*
- 17:29 **Benjamin Louis**  
*Design of novel catalysts bearing s-heptazine-based ligand for electrocatalytic CO<sub>2</sub> reduction reaction*
- 17:33 **Maria Carmen Herrera-Beurnio**  
*Carbon nitride-based systems for the ecological transition*
- 17:37 **Pummarin Khamdahsag**  
*Quality improvement of arsenite-contaminated surface raw water for consumption using a household-size K-OMS<sub>2</sub> filter unit*
- 17:40 **Karol V. Mejia-Centeno**  
*Eelectrochemical oxidation of biomass for sustainable production of chemicals and hydrogen: glucose oxidation reaction (GOR)*
- 17:43 **Emut Sukma Sejati**  
*Development and optimisation thin film M-N-C-type Catalysts for the Oxygen Reduction Reaction*

**Tuesday, 18 June 2024**

- 16:00 **Naresh Killi**  
Gel-bounded Organocatalyst for Baylis-Hillman reaction in Continuously Driven Microfluidic Reactor
- 16:04 **Samantha Lemos**  
*DFT study on  $\text{In}_2\text{O}_3$  surface functionalization towards selective hydrogenation reactions*
- 16:08 Gen Li  
*Insights into the Hydrodeoxygenation (HDO) Reaction Mechanism of Guaiacol on  $\text{Ni}_2\text{P}$  Catalyst Surface*
- 16:12 **Yilin Luo**  
*Ni-based catalysts for the dry reforming of methane for the development of multi-fuel SOFC electrodes*
- 16:16 **Bao-Ngan Nguyen-Ha**  
*Formation of C1 Products in the  $\text{CO}_2$  Electroreduction by  $\text{Cu}_9\text{Pd}$  Cluster Catalyst: unravelling Reaction Mechanism Insights*
- 16:20 **Catarina Lopes**  
*Catalytic degradation of 4-fluorophenol for a greener future*
- 16:24 **Alessio Massaro,**  
*3D printing and integration of catalytic nanomaterials in flow cell reactors*
- 16:28 **Martijn Mekkering**  
*Kinetic testing of stable platinum dimers for hydrogen release*
- 16:32 **Dmytro Nikolaievskyi**  
*Direct Preparation of Palladium Catalysts by Extraction of E-waste Leachates*
- 16:35 **Ana Rita Querido**  
*Enhancing  $\text{CO}_2$  valorization in methanol with bimetallic catalysts supported on carbon materials*
- 16:39 **Abdul Halim Obeid**  
*Mechanistic Studies and Applications of Novel Iron(II)-Catalyzed Positional and Geometrical Transposition of Alkenes*
- 16:43 **Ngoc-Anh Thai**  
*Cu and ZnO nanoparticles supported on MWCNTs as nanocatalysts for selective N-formylation using  $\text{CO}_2$  and  $\text{H}_2$*
- 16:47 **William Mendes Godoy**  
*Estimating the Reactivities of Acidic Polymeric Resins Through Mathematical Modelling of Chain Sequences Distribution*
- 16:50 **Lok Nga Poon**  
*Probing of BDFEs of surface Pd-H across solvent environments and applications thereof*
- 16:54 **Ozge Selcuk**  
*Mechanistic Investigation of  $\text{H}_2$ -deNOX Over  $\text{Pt}/\text{W}/\text{ZrO}_2$  Catalysts*
- 17:58 **Alexander Stook**

*Stabilizing high oxidation state metals on hierarchical metal oxides for Deoxydehydration reaction*

17:02

**Sarttrawut Tulaphol**

*Development of heterogenous Lewis-Bronsted acid catalyst from rubber tire waste for biochemical production from biomass*

17:06

**Rodrigo Valderrama-Zapata**

*Kinetic analysis of hydrogen transfer processes during the catalytic hydrodesulfurization of dibenzothiophene*

17:10

**Lorena Šimunić**

*LPMO-inspired Artificial Metalloenzymes for waste valorization*

17:14

**Giang Tran**

*Synthesis and Photocatalytic Properties of Plasmonic Nanoparticles*

17:18

**Wilmer Esteban Vallejo Narváez**

*Catalytic reduction of carbon dioxide using N-Doped Graphene*

17:22

**Maria Helena Sá**

*CO<sub>2</sub> as feedstock for value-added chemicals: Highlights and challenges of catalysts*

17:25

**Ren He**

*A 3d-4d-5d high entropy alloy as a bifunctional oxygen catalyst for robust aqueous zinc-air batteries*

17:29

**Han Wang**

*Identifying benchmark catalysts for the deoxydehydration of biomass derived polyol molecules*

17:33

**Amrita Singh-Morgan**

*Tin dendrite electrocatalyst for carbon dioxide reduction to formic acid in acidic media with a 3D-printed hybrid flow-cell*

17:37

**Xiaotong Zhao**

*Enhanced CO<sub>2</sub> absorption and reverse water gas shift reaction using CaO in NaCl-CaCl<sub>2</sub> molten salt medium*

17:40

**Kikaru Tabata**

*Electrochemical valorization of HMF using Ni-based electrodes*

17:44

**Xuan Lu**

*Ga promotion of ZrCeO<sub>4</sub> doped with Cu for CO<sub>2</sub> hydrogenation to methanol*

17:47

**Seema Shafiq**

*Interfacial Ionic Liquid based Nanocatalysts for Sustainable Chemistry*

17:50

**Hooman Ghazi Zahedi**

*Synthesis of Transition Metal Phosphide Nanoparticles under Mild Conditions*