## PROGRAMME FOR THE FLASH PRESENTATIONS

**Monday, 17 June 2024**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:15</td>
<td>Arumugam Lakshman Sundar</td>
<td>A highly stable BiVO₄/Polycarbazole Heterojunction for Improved Photoelectrochemical Water splitting</td>
</tr>
<tr>
<td>16:19</td>
<td>Marzieh Bagheri</td>
<td>Revolutionizing Water Electrolysis: Designing a Noble Metal Free Anode for Sustainable Hydrogen Production from Lignin Derivatives</td>
</tr>
<tr>
<td>16:23</td>
<td>Maria Giuseppina Bruno</td>
<td>Electrochemical Sensor based on Prussian Blue for Hydrogen Peroxide Detection in Exhaled Breath</td>
</tr>
<tr>
<td>16:27</td>
<td>Alejandro Ariza-Pérez</td>
<td>Solketal synthesis through glycerol photo-acetalization using a WO₃ catalyst</td>
</tr>
<tr>
<td>16:31</td>
<td>Janek Betting</td>
<td>Understanding bimetallic SnPd catalysts for NO₃-reduction through in-situ controlled surface deposition preparation</td>
</tr>
<tr>
<td>16:35</td>
<td>Tristan Cabanis</td>
<td>Operando study of isopropanol dehydration to propylene: an energetical approach</td>
</tr>
<tr>
<td>16:39</td>
<td>Martim Chiquetto Policano</td>
<td>Shape-dependent activity of Pd/CeO₂ nanorods, nanocubes, and nano-octahedrons on lean methane oxidation</td>
</tr>
<tr>
<td>16:43</td>
<td>Thomas Dimur</td>
<td>Alkaline-earth metal hydrogenation catalysts: Experimental and Theoretical study</td>
</tr>
<tr>
<td>16:47</td>
<td>Perla H. García-Ríos</td>
<td>Pd-complex catalyzed cyclocarbonylation of bio-based methyl vinyl glycolate</td>
</tr>
<tr>
<td>16:51</td>
<td>Marouane Bouremah</td>
<td>InP/ZnS quantum dots for sustainable and efficient photocatalytic redox systems</td>
</tr>
<tr>
<td>16:54</td>
<td>Hector Moine</td>
<td>Cascade of reactions in aqueous phase: study of synergies and antagonisms of hybrid catalytic systems</td>
</tr>
<tr>
<td>16:58</td>
<td>Edgardo Leal-Villarroel</td>
<td>Pt Single atoms and/or Nanoparticles on Titania Nanotubes: What is Better for Catalysis?</td>
</tr>
<tr>
<td>17:02</td>
<td>Sonia Carbone</td>
<td>Fabrication and Characterization of a ternary alloy of Ni-Fe-P for alkaline electrolyzer</td>
</tr>
<tr>
<td>17:06</td>
<td>Brent Daelemans</td>
<td>Upscaling the reductive depolymerisation of lignin: optimising process conditions through catalyst characterisation</td>
</tr>
<tr>
<td>17:10</td>
<td>Aurelien Durupt</td>
<td>Fischer-Tropsch synthesis by CO₂ hydrogenation on modified Ca/TiO₂ catalysts</td>
</tr>
</tbody>
</table>
17:14  Jacques Gilbert  
*Building Integrated Carbon Capture*

17:18  A. Piccoli  
*Electrochemical CO₂ 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 TiO₂ 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 CO₂ 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-OMS2 filter unit*

17:40  Karol V. Mejia-Centeno  
*Electrochemical 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 In$_2$O$_3$ surface functionalization towards selective hydrogenation reactions

16:08
Gen Li
Insights into the Hydrodeoxygenation (HDO) Reaction Mechanism of Guaiacol on Ni: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 CO$_2$ Electroreduction by Cu$_x$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 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 CO$_2$ and 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 H$_2$-deNOX Over Pt/W/ZrO$_2$ Catalysts

17:58
Alexander Stook
Stabilizing high oxidation state metals on hierarchical metal oxides for Deoxydehydration reaction

17:02 Sartrawut 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
CO₂ 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 CO₂ absorption and reverse water gas shift reaction using CaO in NaCl-CaCl₂ molten salt medium

17:40 Kikaru Tabata
Electrochemical valorization of HMF using Ni-based electrodes

17:44 Xuan Lu
Ga promotion of ZrCeO₄ doped with Cu for CO₂ 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