

# 1<sup>ST</sup> INTERNATIONAL WORKSHOP ON PHOTOELECTROCHEMICAL APPROACHES TO SUSTAINABLE CHEMICALS: (PECS-25)

## INVITED LECTURES



Núria López  
ICIQ, Spain



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HZ Berlin, Germany



Sara Barja  
U. Basque Country Spain



Ernest Pastor  
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Carolina Gimbert  
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## ORGANIZING COMMITTEE

Sixto Giménez Juliá, Universitat Jaume I, Spain  
Iván Mora Seró, Universitat Jaume I, Spain  
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## SCIENTIFIC COMMITTEE

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Csaba Janaky, eCHEMICLES, Hungary,  
Menny Shalom, Ben Gurion University of the Negev, Israel  
Idan Hod, Ben Gurion University of the Negev, Israel

## SCIENTIFIC PROGRAM

| Wednesday November 26 2025 |                                                                                                                                                     |                                                                                                                       |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 8:00 - 9:00                | Registration                                                                                                                                        |                                                                                                                       |
| 9:00 - 9:30                | Welcome                                                                                                                                             |                                                                                                                       |
| Chair: Iván Mora           |                                                                                                                                                     |                                                                                                                       |
| 9:30 – 10:30<br><i>IL1</i> | <b>Prof. Nuria López</b><br>Institut Català d'Investigació Química (ICIQ)                                                                           | Simulations in photoelectrochemistry                                                                                  |
| 10:30 -11:00               | Coffee Break                                                                                                                                        |                                                                                                                       |
| 11:00 -12:00<br><i>IL2</i> | <b>Prof. Marco Favaro</b><br>Helmholtz-Zentrum Berlin (HZB)                                                                                         | The role of interface engineering in photoelectrochemistry and common XPS/UPS pitfalls in oxide semiconductors        |
| 12:00 -12:15<br><i>OC1</i> | <b>Hind Benzidi</b><br>Institut Català d'Investigació Química (ICIQ)                                                                                | Atomistic insights for the rational design of photoelectrochemical materials                                          |
| 12:15 -12:30<br><i>OC2</i> | <b>Eva Ng</b><br>INAM/Universitat Jaume I (UJI)                                                                                                     | The importance of catalyst choice in photoelectrochemical glycerol oxidation                                          |
| 12:30 -13:00               | FP1 Rivin George (UJI)<br>FP2 José Manuel González Acosta (ICIQ)<br>FP3 Gopika Gopakumar (UJI)<br>FP4 Maria Luiza Guimaraes Dias dos Santos (UFILA) |                                                                                                                       |
| 13:00 -15:00               | Lunch                                                                                                                                               |                                                                                                                       |
| Chair: Marco Favaro        |                                                                                                                                                     |                                                                                                                       |
| 15:00 -16:00<br><i>IL3</i> | <b>Prof. Ernest Pastor</b><br>Centre national de la recherche scientifique (CNRS)                                                                   | Ways to control the excited state in transition metal oxide photo-electrocatalyst                                     |
| 16:00 -17:00<br><i>IL4</i> | <b>Prof. Sara Barja</b><br>Universidad del País Vasco (UPV/EHU)                                                                                     | Bridging surface science and (photo)electrochemistry for sustainable chemicals                                        |
| 17:00 -17:30               | Coffee Break                                                                                                                                        |                                                                                                                       |
| 17:30 -17:45<br><i>OC3</i> | <b>Radeya Vasquez</b><br>INAM/Universitat Jaume I (UJI)                                                                                             | Improved stability of BiVO <sub>4</sub> photoanodes for glycerol oxidation                                            |
| 17:45 -18:00<br><i>OC4</i> | <b>Jessica L. Smith-Osorio</b><br>University of Limerick (UL)                                                                                       | Non-linear regression of dynamic photochemical responses of self-assembled porphyrins at the liquid-liquid interfaces |

| Thursday November 27 2025 |                                                                                                                                                                    |                                                                                                                                       |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Chair: Ana Gutiérrez      |                                                                                                                                                                    |                                                                                                                                       |
| 9:00 - 10:00<br>IL5       | <b>Prof. Néstor Guijarro</b><br>Universitat d'Alacant (UA)                                                                                                         | Unlocking the Full Potential of BiVO <sub>4</sub> for Photoelectrochemical Devices: From Surface Engineering to Emerging Applications |
| 10:00 -10:15<br>OC5       | <b>Anna Ianello</b><br>Università degli Studi di Ferrara (UF)                                                                                                      | Hydrothermal $\alpha$ -Fe <sub>2</sub> O <sub>3</sub> photoanodes on titanium for hydrogen production via water splitting             |
| 10:15 -10:30<br>OC6       | <b>Christian Robles</b><br>INAM/Universitat Jaume I (UJI)                                                                                                          | Continuous-flow synthesis of BiVO <sub>4</sub> nanoparticles for photoelectrochemical applications                                    |
| 10:30 -11:00              | Coffee Break                                                                                                                                                       |                                                                                                                                       |
| 11:00 -12:00<br>IL6       | <b>Prof. Carolina Gimbert</b><br>Universitat Autònoma de Barcelona (UAB)                                                                                           | A close look at water splitting catalysts and their interaction with inorganic and organic semiconductors                             |
| 12:00 -12:15<br>OC7       | <b>Lakshman S. Arumugam</b><br>INAM/Universitat Jaume I (UJI)                                                                                                      | Polycarbazole-NiOOH interfacial engineering of BiVO <sub>4</sub> photoanodes for efficient and stable solar water splitting           |
| 12:15 -12:30<br>OC8       | <b>Jose Solera</b><br>INAM/Universitat Jaume I (UJI)                                                                                                               | Electrocatalytic Hydrogenation and Dehydrogenation of Nitriles and Amines: Progress in Liquid Organic Hydrogen Carriers               |
| 12:30 -13:00              | FP5 Namratha Wooluvarana Naveenkumar (UP)<br>FP6 Luis David Lisintuña (UJI)<br>FP7 Michael Suarez (UNSM)<br>FP8 Dzenna Zukova (HZB)<br>FP9 Lorenzo Forzanini (UJI) |                                                                                                                                       |
| 13:00 -14:45              | Lunch                                                                                                                                                              |                                                                                                                                       |
| Chair: Sixto Giménez      |                                                                                                                                                                    |                                                                                                                                       |
| 14:45 – 15:00             | <b>Antonios Fysekidis</b><br>Programme Coordination Manager at the European Innovation Council (EIC)                                                               | Turning Pathfinder research results into impact”                                                                                      |
| 15:00 -16:00<br>IL7       | <b>Prof. Pau Farràs</b><br>University of Galway (UG)                                                                                                               | Innovative anion exchange membrane water electrolyzers for operation in low alkaline and saline water electrolytes                    |
| 16:00 -16:15<br>OC9       | <b>Soumia EL Boumlasy</b><br>University of Limerick (UL)                                                                                                           | Highly active NiFe Oxide Electrocatalysts for OER in Surrogate seawater                                                               |
| 16:15 -16:30<br>OC10      | <b>Jan Vosejpka</b><br>University of West Bohemia in Pilsen (UWB)                                                                                                  | Advancing Cu <sub>2</sub> O Films for PEC Water Splitting Using Reactive HiPIMS: Enhanced Crystallinity and Photocurrent Performance  |
| 16:30 -16:45<br>OC11      | <b>Alessia Fischetti</b><br>Università de Catania (UC)                                                                                                             | Preparation and optimization of photoactiveZnO/ZnS nanostructures as supercapacitors                                                  |
| 16:45 -17:00<br>OC12      | <b>Cristopher Tinajero</b><br>INAM/Universitat Jaume I (UJI)                                                                                                       | The Future of Experimental Science: Autonomous Labs and ML-Assisted Discovery                                                         |
| 20:00 - 22:00             | Social dinner                                                                                                                                                      |                                                                                                                                       |

| Friday November 28 2025     |                                                                   |                                                                                                                      |
|-----------------------------|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Chair: Marta Vallés         |                                                                   |                                                                                                                      |
| 9:00 – 10:00<br><i>IL8</i>  | <b>Prof. Francisco Fabregat</b><br>INAM/Universitat Jaume I (UJI) | Combining reactions to make green H <sub>2</sub> sustainable                                                         |
| 10:00 -10:15<br><i>OC12</i> | <b>Daniella Russo</b><br>Università de Catania (UC)               | Tuning ZnO nanostructures for energy storage applications                                                            |
| 10:15 -10:30<br><i>OC13</i> | <b>Ramón Arcas</b><br>AIDIMME                                     | Additive manufacturing and photoelectrochemistry: Synergies for the design of functional chemical conversion systems |
| 10:30 -11:00                | <b>Coffee Break</b>                                               |                                                                                                                      |
| 11:00 -12:00<br><i>IL9</i>  | <b>Dr. Isaac Herraiz</b><br>LOMARTOV SL (LOM)                     | A close look at water splitting catalysts and their interaction with inorganic and organic semiconductors            |
| 12:00 - 13:00               | <b>Final discussion &amp; closing remarks</b>                     |                                                                                                                      |

## VENUE, LOGISTICS & ACCOMMODATION INFO

The meeting will be held at the Universitat Jaume I (UJI) in Castelló, at the Conference room of Research Building II. Below a picture of the building.



Here is a guide on how to reach the UJI campus:

### 1. Traveling to Castelló

#### By Plane

The nearest airports are:

- [Valencia Airport](#)
- [Aeroport Castelló](#)

#### By Train

The Castellón train station is located very close to the UJI campus. You can find more information and purchase tickets from:

- [RENFE](#)
- [Trainline](#)

### 2. Getting to the UJI Campus

The UJI campus is close to the city of Castelló and the bus/train station, making it accessible by public transport, bike, or on foot.

#### By TRAM (Reserved Road Transport)

- The TRAM (Line 1: UJI-GRAO) connects downtown Castelló with the campus, running every five minutes.

- It is an electric, comfortable, efficient, and sustainable transport option.
- Tickets can be purchased directly on the TRAM.
- For more information on the route: TRAM Line 1 (UJI-GRAO) Timetable/Map

### **On Foot**

- The train and bus station is a very pleasant 15-minute walk from the UJI campus.
- Walking from the city center will take approximately 25 minutes.
- The main avenue connecting the University with the city features wide sidewalks and an independent bike lane.

### **By Bike**

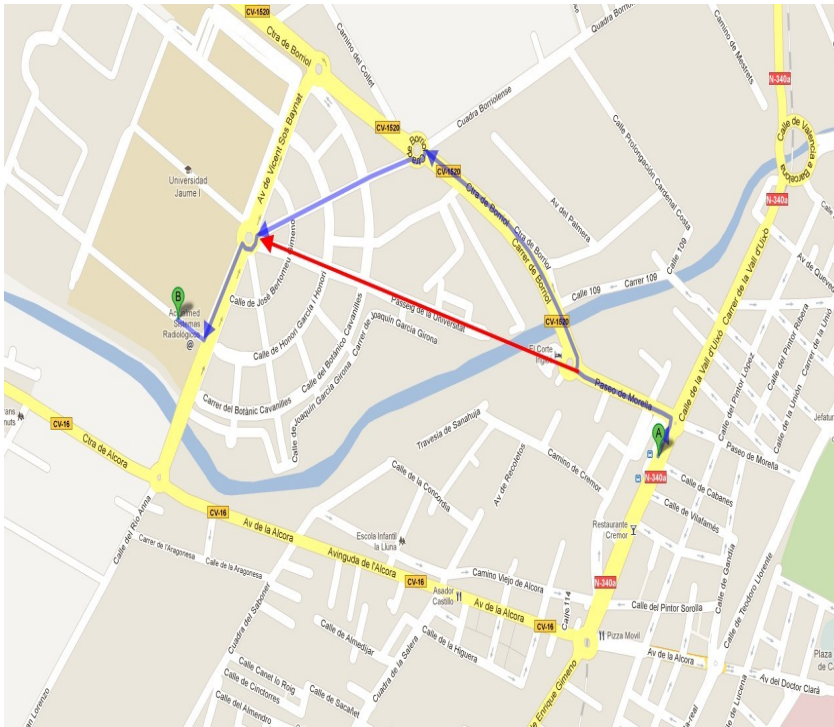
- The city's bike lane network connects downtown Castelló directly to the campus.
- A recommended option is BICICAS, the city's automated bicycle loan service managed by Castelló City Council. You can check bicycle availability online.
- [BICICAS Website](#)

### **Additional Information:**

- For a virtual look at the UJI campus: [Virtual visit of the UJI campus](#)
- You can find general tourist information on getting to Castellón here: [Castellón Tourism - How to Arrive](#)

### **Map of the University of Jaume I**

Please, find attached a map which shows you how to arrive from the Hotel Luz to University Jaume I



### 3. Accommodation

We recommend Hotel Luz, very close to the train station.

<https://www.hotelluz.com>

You can make reservations via email to [reservas@hotelluz.com](mailto:reservas@hotelluz.com)

Other options include:

<https://www.hoteljaimei.com/es>

<https://www.hoteldonalola.com/>

Please let us know if you need any assistance.

