
Post-doctoral position in electrochemical systems including anodic valorization

ICFO is offering a postdoctoral position to a well-qualified, highly motivated and dynamic young scientist who wishes to enhance his/her scientific career in a friendly and stimulating environment.

The successful candidate will be joining the **CO₂ Mitigation Accelerated by Photons group led by Prof. Dr. Pelayo García de Arquer.**

This project focuses on the development of electrochemical anodic valorization reactions such as ethylene and propylene oxidation.

The candidate will:

- Identify different possible reaction mechanisms and compared their potential performance
- Design and implement catalysts, electrolytes, and reactors that maximize the selectivity and productivity towards the desired product
- Conduct measurements and analysis to quantify the different performance metrics of the anodic valorization reaction
- Characterize the catalysts and reaction mechanisms using ex situ, in situ, and operando spectroscopies
- Use this information to guide in catalysts design who is searching for exceptional researchers with an excellent track record, who excel in the general area of electrochemistry, physicochemistry and materials science.

Eligibility and Conditions

The candidate should hold a PhD and degree(s) [and/or proven expertise, e.g. patents and high-quality publications] in areas such as chemical engineering, chemistry or physical chemistry.

The candidate should have a proven track record of:

- Design of materials including, but not limited to, perovskites, low dimensional materials, ceramics, sol-gels, MOFs, COFs and zeolites;
- Strong background in electrochemistry;
- Flow cell and MEA reactors;
- CO₂ electroreduction;
- Water splitting;
- N₂ reduction;
- Analytical characterization;
- Spectroscopies including operando (e.g. Raman)

ICFO is an equal opportunity employer. Candidates are selected exclusively on merit and potential on the basis of submitted application material. No restrictions related to disabilities, citizenship or gender apply to ICFO positions. ICFO abides by the principles of openness, efficiency, transparency, supportiveness, and international comparability as stated in the European Charter for Researchers and the European Code of Conduct for the Recruitment of Researchers.

Salary is offered according to the institutional salary scales.

The contract is offered for a period of 1 year.

Additionally, a family allowance is also available on request and after corresponding approval for people with family charges in the terms described in the corresponding policy.

Application procedure

The formal application should be submitted online via <https://jobs.icfo.eu/?detail=708>

Suitable candidates are requested to submit:

- Presentation letter with a declaration of interest,
- Curriculum Vitae, including contact details,
- The contact e-mail of two potential referees.

Candidates will be assessed as they apply and the call will remain open until the suitable candidate is identified.

Candidates may contact jobs@icfo.eu for formal enquiries regarding the application, as well as address scientific enquiries to pelayo.garciadearquer@icfo.eu.

For update information about the hosting group, please visit <https://www.icfo.eu/research-group/30/co2map/home/> .

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Deadlines

The call will remain open until **09/10/2022**