Postdoctoral Researcher (Ref: Postdoc 2022-11 JLL)

The Institute of Chemical Research of Catalonia (ICIQ) is seeking a postdoctoral researcher. This position will be funded through the PDC2021-121185-I00 project, financed by MCIN/AEI/10.13039/501100011033 and by the European Union “NextGenerationEU”/PRTR.

ICIQ is committed to performing excellent research at the frontier of knowledge in the broad area of chemistry (Catalysis, Artificial Photosynthesis, Activation of Small Molecules, Photovoltaics, Functional Molecular Assemblies and Chemical Biology, from either theoretical or experimental perspectives). The institute also aims at training the future generation of scientists by offering high-quality educational programmes to master, PhD students and postdoctoral researchers (Full details on http://www.iciq.org/).

Our mission is to lead, from the vantage point of molecular science, cross-strategies for solving major social and economic challenges, such as climate change and sustainable supply of energetic and raw materials, thereby contributing to the establishment of a knowledge-based economy and improving citizens’ quality of life in our influence area.

ICIQ is looking for a postdoctoral researcher with a PhD in Chemistry or Chemical Engineer, to carry out a research project in the laboratories of Prof. Julio Lloret Fillol. The selected candidate is going to develop highly efficient electrodes for hydrogen production under industrial relevant conditions in Anionic Membrane Exchange Electrolysers.

Responsibilities

- Anode and Cathode catalysts development based-on earth-abundant elements.
- Perform electrochemical and morphological tests (single cell electrolyzer, EIS, RDE, SEM, TEM).
- Design and conduct studies for the develop of a MEA.
- Interact with fellow scientists to evaluate results and write reports.
- Writing scientific article for publication in international journals and research projects; thus, a high level of English communication skills (oral and writing) is required.
- Maintenance of laboratory equipment.
- Complete documentation of research results.
- Participate in R&D Chemistry group meetings and special projects.

Requirements

- PhD or Doctorate in Chemistry
- Knowledge of electrochemical reactions and understanding of water electrolysis
- Understanding of non-noble metal catalysts
- Knowledge of electrochemical methods for electrocatalyst characterization (RDE, half-cell, cyclic voltammetry, etc.)
Good knowledge of scientific English
- Knowledge on common laboratory techniques and analytic tools.

Valued qualities:
- Highly motivated, ambitious and enthusiastic for the role of green hydrogen in the future.
- High oral and written communication skills in English.

We offer:

- 1-year contract that can potentially be renewed 1 year.
- Lots of responsibility and creative freedom.
- A full-time employment contract.
- Remuneration according to individual’s qualification/experience
- Annual salary split into twelve monthly payments.
- Incorporation: May-June 2022