

## **Postdoctoral Scientist Position at IMDEA Energy to work on “Development of Solar Rechargeable Redox Flow Batteries”**

The IMDEA Energy Institute is a Maria de Maeztu Center of Excellence with the mission of developing world-class R&D in the field of clean and renewable energy technologies. The Institute aims at contributing to the establishment of a sustainable energy system with a high degree of decarbonisation, economically competitive and securing energy supply ([www.energy.imdea.org](http://www.energy.imdea.org)).

IMDEA Energía is opening a **Postdoctoral Scientist Position** for the Electrochemical Processes Unit associated to a European project (Call: H2020-FETPROACT-2020-2) lead by Dr. Rebeca Marcilla. This project, entitled “*Multi-Electron Processes for Light Driven Electrodes and Electrolytes in Conversion and Storage of Solar Energy*”, merges solar-powered energy storage with multi-charge transfer capability. This open Postdoctoral Position will be dedicated to the Development of Solar Rechargeable Redox Flow Batteries, a new type of devices that integrate solar energy conversion and electrochemical storage.

### **Your Tasks:**

- The candidates will conduct independent research as well as in collaboration with other members of the group and/or the project.
- R&D on Photoelectrochemistry and Electrochemical Energy Storage.
- Development of photoelectrodes and redox electrolytes and their characterization.
- Design of photoelectrochemical cells for solar redox flow batteries.
- Establishing a suitable characterization procedure and experimental setup for the complete characterization of solar batteries under illumination conditions.
- Understand the main aspects of interfaces between the photoelectrode and the redox electrolyte under illumination.
- Dissemination and publication of research results in scientific journals.
- Supervision of PhD, Master and undergraduate students.

### **Required qualification, experience and skills:**

- Ph.D. degree in Electrochemistry, Materials, Chemistry, Physics, Chemical Engineering or similar.
- At least 1 year of experience as postdoctoral researcher.
- R&D experience on Electrochemistry and/or Photoelectrochemistry.
- Hands-on experience on batteries or photoelectrochemical cells.
- Knowledge on redox flow batteries is desired.
- Fluent oral and written communication skills in English.

**Location:** Móstoles, Madrid, Spain.

**Remuneration:** Between 35,000-38,000 annual gross salary per year, depending upon qualification and expertise.

**Duration:** The position is available immediately and is a one-year appointment with annual renewals depending on performance.

**Reference: 20.45 EQ7 POD**

**We are looking forward to your application.**

For further information contact Dr. Rebeca Marcilla, E-Mail: [rebeca.marcilla@imdea.org](mailto:rebeca.marcilla@imdea.org)

Applicants should send their Curriculum Vitae (publications list included) by **December 15<sup>st</sup> 2020** before **15:00h** to the following address:

**email:** [rebeca.marcilla@imdea.org](mailto:rebeca.marcilla@imdea.org)

**Subject:** Reference **20.45 EQ7 POD**