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**Ref. 34/2022**

**Code:**

**Project: ADVAGEN**

**Area leader: Prof. Joan Ramon Morante**

**Group: Nanoionics and Fuel Cells**

**Group leader: ICREA Prof. Albert Tarancón Rubio**

**“R2 - Post-doc researcher on advanced characterization and materials development for solid-state batteries”**

**Description:**

The Nanoionics and Fuel Cells team is a very dynamic group focusing on the development of solid-state energy conversion devices ([see link](#)). Now we are seeking for a post-doc in the field of **new battery generations such as Solid-State Batteries** (SSBs). The work will be done in the frame of a European project with a consortium containing key EU actors in the battery sector, from industrial materials producers (SCHOTT, CERPOTEC, ABEE), battery manufacturer (ABEE) to reputed R&D centers (CEA, CIC energigune, IKERLAND, Politecnico di Torino, etc.) and the automotive industry (Toyota Motors Europe), covering the complete knowledge and value chain. The project will develop a new lithium metal (LiM) battery cell technology based on a safe, reliable, and high performing hybrid solid-state electrolyte (Lithium Lanthanum Zirconium Oxide (LLZO)/Lithium Phosphorous Sulfide (LPS)-based).

The main tasks will consist in the **electrochemical and structural characterization** of ad-hoc fabricated samples. **Innovative operando techniques** will be implemented to detect the evolution of the interfaces, the appearance of dendrites and other processes related with performance bottlenecks and degradation phenomena.

This candidate must have high education qualifications, and experience in materials science, with specific proven knowledge on electrochemistry focused to the battery field.

Capability to work in a team, flexible, innovative, with initiative and problem solving skills.

**Qualifications and experience required:**

Essential:

The call is open to professionals from any nationalities that fulfil the following eligibility criteria:

- Hold a PhD in the areas of Chemistry, Physics and related.
- Experience in the field of battery technologies, preferable but not limited to solid batteries at the materials level.

Preferred:

- Knowledge and experience in projects in the energy sector, especially batteries, advance materials for energy or other energy storage systems.
- Good communication skills; ability to communicate complex scientific information to individuals from other disciplines.
- Experience in collaborative research projects.
- Battery-related scientific publications
- Language required: Fluent in English

Personal Skills:

- Team Worker
- Initiative in Research and Innovation
- Flexibility
- Analytical and synthesis capabilities

Required documents:

Applicants must submit the following documents by email to [irecjobs@irec.cat](mailto:irecjobs@irec.cat). Please indicate the reference “**Ref. 34/2022**” in your mail.

**Reference:**

- Curriculum Vitae, specifying the completed degree and any relevant professional experience.
- Motivation letter.

**Offer of job position:**

We offer a Postdoc position for 18 months on the frame of ADVAGEN project (HORIZON-CL5-2021-D2-01-05).

Salaries will be paid in accordance with the IREC’s salary policy, depending on the candidate’s qualification and professional experience.

**Deadline:** June 15<sup>th</sup> 2022

**Starting date:** October 1<sup>st</sup> 2022