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**Code:**

**Project: 3D-STORE**

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

**Group: Nanoionics and Fuel Cells**

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

## “R2 - Post-doc researcher on development of solid-state battery”

### **Description:**

The [Nanoionics and Fuel Cells team](#) is a very dynamic group focusing of the development of solid-state energy conversion devices. Now we are seeking for a post-doc in the field of solid-state batteries. The main tasks will be leading the experimental work having as a goal the fabrication of a full solid-state battery through advanced ceramic manufacturing techniques such as 3D printing. The work is enclosed in the 3D-STORE project, funded by the Spanish Government to fulfill the goals of the [strategic lines](#) (New Generation of Batteries). 3D-STORE is a pioneering project that contributes to the digitalization of the battery manufacturing by demonstrating 3D printing as a scalable and sustainable manufacturing technique. The main aim is developing a new generation of all-solid-state Li-ion batteries (ASSB) digitally manufactured-by-design. The shape and architectures of components and cells will be optimized on the basis of novel materials and 3D printing manufacturing techniques, collaborating with some of the most prominent research groups in the field and important ceramic manufacturing companies.

The implementation of the tasks will require knowledge about materials engineering, electrochemistry, and energy technologies such as batteries.

The candidate must have high education qualifications and more than 4 years of experience in materials science for energy applications with specific proven knowledge on batteries or ceramic processing. Experience in additive manufacturing technologies and CAD design is desirable.

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, Material Engineering & Science, Chemical engineering, or related areas.
- Experience in the field of batteries, preferable solid-state batteries.
- Knowledge in additive manufacturing technologies, preferable ceramic processing.

**Preferred:**

- Knowledge and experience in projects in the energy sector, especially in batteries, advance materials for energy, energy storage systems.
- Knowledge of CASD design.
- 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
- Results-oriented
- Analytical and synthesis capabilities

Required documents:

Applicants must submit the following documents by email to [irecjobs@irec.cat](mailto:irecjobs@irec.cat).

**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 3D-STORE National project.

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

**Deadline:** February 9<sup>th</sup> 2023

**Starting date:** February 23<sup>th</sup> 2023