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# "R2 - Researcher on the development of Co-electrolyser SOEC system for synthetic fuels generation"

## Description:

The Nanoionics and Fuel Cell group is seeking for an experienced researcher (PostDoc or equivalent) in the field of innovative Solid Oxide Electrolysers (SOEL) to be operated under coelectrolysis mode. The generated syngas will be used for the generation of synthetic liquid fuels for maritime application.

Estimated starting date: October 2023.

Its main tasks will be leading the experimental and reporting of a national coordinated project (SUPPORT-LE) focused on the development of SOEC systems to be operated under coelectrolysis mode and coupled with catalytic reactors for FT. The tasks will require knowledge about materials engineering, electrochemistry, engineering and energy technologies such as fuel cells and electrolysers materials and devices.

This candidate must have high education qualifications and more than 3 years of experience in materials science for energy applications with specific proven knowledge on high temperature solid oxide fuel cells and ceramic processing by additive manufacturing technologies.

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, and related areas.
- Experience in the field of hydrogen technologies systems, preferable solid oxide fuel cells at materials, cell and system level.

Preferred:





- Knowledge and experience in projects in the energy sector, especially in Fuel Cells, advance materials for energy, energy storage systems.
- Knowledge in system integration and balance of plant for fuel cells
- Good communication skills; ability to communicate complex scientific information to individuals from other disciplines.
- Experience in collaborative research projects.
- High temperature fuel cells related scientific publications
- Language required: Fluent in English and Spanish

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 <u>irecjobs@irec.cat</u>; <u>atarancon@irec.cat</u> and <u>mtorrell@irec.cat</u>.

### **Reference:**

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

- Motivation letter.

### Offer of job position:

We offer a Postdoc position for 36 months on the frame of SUPPORT-LE national project.

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

### Dead line for application: August 31th, 2023

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