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Deadline for application: February 14th 2024

Ref. 023/48

Project: EPISTORE/EFISOEC

Area: Advanced Materials for Energy applications

Group: Nanoionics & Fuel Cells

Group leader: Albert Tarancon

PI: Marc Torrell

R1.1 – “Pre-doctoral researcher for the development of oxygen ion- and proton-conducting cells (O-SOE and P-SOE) by the use of thin film techniques and Ultra Fast High temperature Sintering (UHS)”

Description:

The Nanoionics and Fuel Cell Group announces a first stage researcher position (R1) in the field of energy devices based on solid oxide cells technology. The candidate will work on developing breakthrough concepts for novel materials and processing very focused on the development of SOEL cells. New concepts will be implemented for full energy devices such as fuel cells and electrolyzers in the field of thin films and ultra fast high temperature sintering. We offer a three years pre-doctoral contract. Joining a team of highly qualified and motivated researchers working in the frontiers of knowledge in science and technology. International collaboration with top-leading European research groups in the field.

Tasks

We are interested in a researcher highly motivated to develop novel reversible Solid Oxide Cells concepts. She/he will get experience in hands on development of innovative SOC stacks based on additive manufacturing technologies and state of the art technologies, as well as a deep knowledge on electrochemical and structural characterization of energy technologies such as fuel cells and electrolyzers. Among the characterization techniques employed will be XRD, SEM, TEM, Raman, etc...

Qualifications and experience required:

Essential:

- A person who is highly motivated to learn, work in a team, showing high flexibility and initiative and ability to innovate.
- Bachelor and master of Physics / Engineering / Chemistry /Materials Science or similar is required.

- Interest on energy technologies, materials, electrochemistry and Solid Oxide Fuel Cells will be positively evaluated.
- - Fluent English is mandatory.

Preferred:

- Interest and knowledge on energy technologies, materials, electrochemistry, catalysis, batteries and Solid Oxide Fuel Cells will be positively evaluated.

Personal skills:

- A person who is highly motivated to learn, work in a team, showing high flexibility and initiative and ability to innovate.

Required documents:

Applicants must submit the following documents by email to irecjobs@irec.cat; [\[mail Group leader\]](#) and [\[mail PI\]](#).

Reference:

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

Offer of job position:

We offer a pre-doctoral (R1.1) position for 36 months on the frame of an European project.

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