



Shaping Energy for a Sustainable Future

Publish date: January 17th 2023

Ref. Code: 02/2023

Project: ADD-GRHID

Area leader: Prof. Joan Ramon Morante

Group: Nanoionics and Fuel Cells

Group leader: Prof. Albert Tarancón Rubio

Dead Line: 7th February 2023

Starting date: before May 2023

PhD student position on development of innovative SOEC stacks for hydrogen generation. 3DPrinting as as a breakthrough on functional ceramic manufacturing

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 SOEC stacks. New concepts will be implemented for full energy devices such as fuel cells and electrolyzers. The thesis will be developed in the frame of an industrial project with an electrolyser manufacturing company (ADD-GRHID).

We offer a three years pre-doctoral contract (possible extension to finalize the PhD). 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...

Selection criteria

- 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.



Shaping Energy for a Sustainable Future

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

- Fluent English is mandatory.

Category

Researcher R.1

Contract duration

36 months

Incorporation

The candidates should be available before May 2023

Province

Barcelona (IREC facilities)

Procedure

Applicants should send a detailed CV, a motivation letter and bachelor/master transcripts to irecjobs@irec.cat, mtorrell@irec.cat (Marc Torrell) and atarancon@irec.cat (Albert Tarancón).