

Publish date January 18th 2022

Ref. 1/2022

Code:

Project: REGENERA

Area leader: Prof. Joan Ramon Morante

Group: Nanoionics and Fuel Cells

Group leader: ICREA Prof. Albert Tarancón Rubio

IREC PhD grant in the frame of REGENERA Project (2022-2024): New generation of enhanced Solid Oxide Electrolysis Cells manufactured by ceramic 3D printing.

TITLE: New generation of enhanced Solid Oxide Electrolysis Cells manufactured by ceramic 3D printing.

JOB DESCRIPTION

Nanoionics and Fuel Cell group announces a new opening position to develop a PhD thesis in the field of the Solid Oxide Electrolysis Cells. The researcher will work on the fabrication, characterization and testing of electrochemical devices such as solid oxide cells, fabricated by advanced fabrication techniques such as ceramic 3D printing technologies. The aim is to develop new energy devices for sustainable and clean energy storage and hydrogen generation and the candidate will deal from the fundamentals of material science and electrochemistry to the advanced manufacturing technologies.

The PhD project will be part of a wider multipartner industrial oriented project (REGENERA: Research into hybrid storage technologies and predictive models to transform industries into offshore renewable energy management points)

Qualifications and experience required:

Essential:

- Bachelor or Master in Physics, Chemistry, Materials Engineering, Nanotechnology or other related fields with especial interest in renewable energy sources.

Valuable:

- Knowledge on hydrogen technologies (Fuel Cells and electrolysis)

- Knowledge on advanced materials for energy devices application and advanced manufacturing technologies (PLD, Additive manufacturing, etc..)

The candidate has to:

- Be enrolled or admitted to the doctoral program for the 21/22 academic year or be in a position to be enrolled in the formalization of the contract.



Shaping Energy for a Sustainable Future

Language required:

Fluent in English, Catalan and Spanish is positively evaluated.

Personal Skills:

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

What we offer:

We offer 4 year-fellowship under an IREC grant at the NiSOFC group (www.atlab.es).

Salaries will be paid in accordance with the IREC's salary tables.

To apply:

Send an e-mail with your CV and motivation letter to Albert Tarancón (atarancon@irec.cat) and Marc Torrell (mtorrell@irec.cat) with the subject "REGENERA-PhD" **before 7/02/2022**.

A personal (on-line) interview will be required to the selected candidates.