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Area Advanced Materials for Energy

Area leader: Prof. Joan Ramon Morante

Group: Nanoionics and Fuel Cells

Head of Group: ICREA Prof. Albert Tarancón Rubio

Position: Leading Researcher (R4) – Energy Storage

Description

The Catalonia Institute of Energy Research announces a position of Leading Researcher (R4) in the field of Nanoionics and Fuel Cells. The research will be embedded in the Advanced Materials for Energy department for the development and testing of energy technologies based on solid oxide electrochemical devices (Solid Oxide Fuel and Electrolysis Cells and All-Solid Oxide Batteries). The department is looking for a leading researcher to investigate in new ion transport phenomena (at the nanoscale), materials and architectures as well as in new solutions and strategies for the fabrication of energy conversion and storage technologies based on solid electrochemistry. The researcher will be in charge of leading a consolidated group of researchers and will coordinate top-level EU projects on the field, in close collaboration with other research and industrial actors.

The candidate will lead a multi-disciplinary team, coordinating research activities as part of international projects or projects with industrial partners, including multi-partners project. Likewise, the candidate will be also involved in tasks such as managing, writing, supervising and leading projects as well as in performing research in projects related to Nanoionics and Fuel Cells. The candidate should be used to plan resources and ensure deadlines as well of reporting and communication of technical / research results and supervise a team of PhDs and PostDoc researchers involved on different research projects on the field.

The main specific research lines targeted by the candidate will have to cover are:

- Nanoionics and Iontronics
- Solid Oxide Fuel and Electrolysis Cells
- Solid State Batteries
- Groundbreaking solid state electrochemical concepts

Requirements

We are looking for a leader with proven independent research experience, high creativity and remarkable communication skills.

Essential:

-The candidate has to fulfill the minimum requirements for the R4 researchers at IREC under scientific career:

- Have a high number of publications in indexed scientific journals and / or books indexed with ISBN (as corresponding or first author)
- As a result of the work developed in the previous stage, it must have participated as a researcher, in R & D projects that total an amount of, at least, 2,200,000 euros
- As a result of the work carried out during the previous stage, it must have led R + D + i projects as the principal investigator of an aggregate budget of projects of 1,800,000 euros.
- Have participated, at least as a member of the research team, in 5 projects to provide value-added services to companies
- Hold, at least, 3 patent applications in the last five years
- Have participated in R + D + i projects in cooperation with other international institutions with funding obtained from the European Commission.

- Have conducted at least 6 doctoral theses.
- Proven services to the Scientific Community including editorial boards in indexed journals or participation in evaluation committees in competitive international calls.

- PhD degree with specific focus on the energy applications.
- Broad research view and proven capability for funding attraction (at regional, national and international level)
- More than 10 years of experience as a leading (independent) researcher in the field of Solid State Ionics and Solid State Energy Devices.
- More than 20 years of experience on scientific research focused on materials and devices for energy applications.
- Strong and broad international collaboration network on the field of energy (academy and industry)
- Strong and long track record on scientific journals with high impact factor and consolidated citation attraction.
- Strong international dimension in the field of Solid State Ionics: long track record on invited/keynote talks in international congresses, participation in editorial boards of indexed journals, organization of international congresses, representative in international associations, international evaluator, etc.
- Consolidated participation in EU and international research projects in the last ten years, with proven experience as a coordinator.
- Proven experience in funding attraction (as Principal Investigator). At least 10M€ in the last 10 years both from competitive calls and private companies.
- Experience on supervising Researchers, Postdoctoral researcher and PhD students (supervisor of, at least, 10 postdoctoral and 6 pre-doctoral researchers, in the last ten years).
- Author of more than 5 patents or other Intellectual property rights related with the energy technology sector.
- Proven activity on dissemination and outreach activities in the energy field.
- Fluent English, Catalan and Spanish are essential

Valuable:

- PhD in the field of Nanoionics and Fuel Cells
- Proven experience as a group leader (management of people)
- Proven experience in management of budgets above 1M€/year
- Grantee of the European Research Council Programme (or other similar groundbreaking research programs)
- Proven experience in transferring research results to industry.
- Awards due to scientific or professional activity.
- Proven mentoring of highly qualified researchers.

Proposed Jury:

President	Titular	Joan Ramon Morante
Vocal 1	Titular	Pere Lluís Cabot
Vocal 2	Titular	A.Pérez-Rodríguez

More information about the selection process in:

CALL AND REGULATORY BASES OF THE SELECTION PROCESS BY COMPETITION FOR THE RECRUITMENT OF LABOR PERSONNEL 2021/ CONVOCATÒRIA I BASES REGULADORES DEL PROCÉS DE SELECCIÓ PER A LA CONTRACTACIÓ DE PERSONAL LABORAL 2021