

Call reference number	(2023-14)
Call name	Postdoctoral IKUR position - Composite Electrolytes for Next Generation Lithium Batteries
Application Deadline	2023/03/31

Introduction and main description

BCMaterials, Basque Center for Materials, Applications and Nanostructures, is an autonomous research center launched in June 2012 by Ikerbasque, the Basque Foundation for Science and the University of the Basque Country (UPV/EHU) as a research center for Materials, Applications and Nanostructures. The center is included in the BERC's (Basque Excellence Research Centers) network and its mission is to generate knowledge on the new generation of materials, turning this knowledge into (multi)functional solutions and devices for the benefit of society.

BCMaterials is looking for a motivated and experienced scientist to fill a two-year POST-DOCTORAL position in the scope of the IKUR project " Multiscale Modelling and in-Silico Screening of Composite Electrolytes for Next Generation Lithium Batteries ". The project aims at developing next generation lithium batteries by developing different types of solid electrolytes. The project is developed in collaboration with different partners, including BCAM, CICenergigune and Polymat, and will develop both theoretical simulation and experimental evaluation of solid electrolytes and battery systems. The present post-doctoral position is primarily concerned with the experimental development and evaluation of polymer solid electrolytes.

The solid electrolytes will be developed based on different polymer matrices and fillers and characterized at different levels, including thermal, mechanical, morphological, electrical and electrochemical properties. The battery performance of the different materials will be also evaluated. Correlation will be carried out with different theoretical models. This postdoctoral position is funded by the IKUR strategy. IKUR is the strategic program promoted by the Education Department of the Basque Government to boost Scientific Research in specific strategical areas.

For the successful candidate, the position represents an excellent opportunity to develop both collaborative and personal scientific research career, exploiting the right area of materials for energy storage. The postdoctoral position will be carried out in collaboration between BCMaterials and CICenergigune, and in cooperation with the other members of the project.

Skills and Requirements

PhD in Physics, Chemistry, Materials Science or related areas.
 Demonstrated experience in the field of polymer composites, materials for energy or related areas.
 Strong background in materials processing and characterization.
 A team player who can collaborate with other research groups and lines.

Skills and Requirements

Proficiency in speaking and writing in English.
Self-motivation and willingness to lead independent research.
Presentation skills and ability to meet the deadline are also required.

Work Program / Duties / Responsibilities

The main task of the job is devoted to the development and characterization of polymer composites for application as solid electrolytes for energy storage applications. Posdoctoral research fellow will be responsible for the processing and characterization of the materials as well as their evaluation for battery applications.

Application Procedure

Apply by submitting a motivation letter and a CV (in English) using the "Contact" button at the corresponding offer, at the "Join Us" area on BCMaterials' portal (<https://www.bcmaterials.net/join-us>).
Your name and email address will be required for further contact too.

Other Relevant Information

Interview will be conducted soon after the deadline. The starting date to join is as soon as possible.