

PHD THESIS POSITION: DEVELOPMENT AND OPTIMIZATION OF PROTECTIVE LAYERS FOR HIGH-

Company [|] Descripti<u>on</u>

CIC energiGUNE is a research center specialized in energy, electrochemical energy storage (batteries and supercapacitors). thermal energy solutions and hydrogen, a member of the Basque Research and Technology Alliance-BRTA, and a strategic initiative of the Basque Government, CIC energiGUNE was created in 2011 to generate excellent knowledge and at the same time useful for the Basque business network, being a reference in knowledge transfer. CIC energiGUNE has a dynamic research team of more than 150 researchers and is extremely well equipped with a wide range of upto-date facilities that are fully available for all its researchers. Also, the European Commission has recently (2019) awarded CIC eneraiGUNE with the 'HR Excellence in Research' which reflects its commitment to achieving fair and transparent recruitment and appraisal procedures and certifies the existence of a stimulating and favorable work environment for researchers in the institution. For more details on CIC energiGUNE's research activities please visit our website at http://www.cicenergigune.com.

Information

■ Deadline: 2023-06-30
G Country: Spain
Category: Academia
Province: Araba / Alava

Company

CIC energiGUNE



Main functions, requisites & benefits

Main functions

CIC energiGUNE is seeking for a person interested in pursuing a PhD in solid-state battery-technology focused on the development of protective layers for inorganic solid electrolytes in order to stabilize the interface active material/electrolyte in solid state batteries. The research activity will involve synthesis, structural, physico-chemical and electrochemical characterization of the composite solid electrolytes. The candidate will develop new coatings for high voltage active materials to improve the electrochemical compatibility with the solid electrolyte. In addition, cell integration into lab-cell proof of concept will be carried out in order to perform electrochemical and chemical characterization of solid-solid interfaces under battery operation. The research activities will also involve dissemination of the results in scientific publications, participating in international conferences, patents, etc. Main functions: Performing high-quality research within the scope of the project. Reports/papers preparation for submission to peer reviewed journals. Presenting results in international conferences. Providing guidance to Master's and visiting students when required. This position is integrated in the IKUR Programme, whose commitment to position the Basque Country as an international science hub through its participation in cutting-edge projects and obtaining results with economic and social impact develops this mission and this prioritisation of areas; the strategy sets out the following objectives: to attract talent, promote the development of cutting-edge infrastructures, position the Basque Country in science at international level and generate a tractor effect on the excellent research carried out in our country.

Requisites

MSc in Physical, Chemical or Materials science. Excellent academic record. A good level of spoken and written English. A team player who can collaborate with other researchers, groups. Demonstrated self-motivation and autonomy.

Benefits

We are offering a 36-months predoctoral contract that covers the whole period of the thesis elaboration with a competitive salary within the category. Access to a complete set of cutting-edge infrastructures and laboratory equipment that guaranty a successful thesis and the fulfilment of the objectives in due time. Candidates will join an integrated, enthusiastic, and multidisciplinary institute making high quality research and impactful contributions to the energy and sustainability fields. We work with flexible working hours and operate with a hybrid distance/on-site work model. CIC energiGUNE is located close to the city of Vitoria-Gasteiz (Spain), the capital of the Basque Country. The Basque Country is the region with the highest R&D investment in Spain, with more than 20.000 researchers. The basque research ecosystem comprises a solid and collaborating community composed of universities, technology and cooperative research centers that lead the return per capita in the European H2020 programe. For more information: https://cicenergigune.com/en/work-with-us