POSTDOCTORAL RESEARCHER IN SUSTAINABLE MATERIALS FOR SODIUM-ION CAPACITORS

Company Description

DESCRIPTION OF THE INSTITUTION: CIC energiGUNE is a research center specialized in energy, electrochemical 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 100 researchers and is extremely well equipped with a wide range of up-to-date facilities that are fully available for all its researchers. Also, the European Commission has recently (2019) awarded CIC energiGUNE 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. TO APPLY: All applicants are invited to submit detailed curriculum vitae, the contact information of at least two references and a cover letter detailing specific experience and scientific interests at this webpage: https://cicenergigune.com/en/em

Information

Deadline: 2023-01-31
Category: Business
Province: Araba / Álava
Country: Basque Country
City: Vitoria-Gasteiz

Company

CIC energiGUNE

Main functions, requisites & benefits

Main functions

The Supercapacitor Research Line at CIC energiGUNE is searching for a postdoctoral researcher to engage in the research and development of sustainable sodium ion capacitors within a recently granted Horizon EU project. The role of the selected candidate will be focused on the development of sustainable materials and electrodes for sodium ion capacitors. The position will cover the synthesis of nano-designed novel carbonaceous materials and their advanced physicochemical and electrochemical characterization as well as water-based formulation of electrodes and their characterization. Your main responsibilities will include: Synthesis of novel carbonaceous materials for the negative electrode Advanced physicochemical and electrochemical characterization of materials Water-based electrode formulations and electrode fabrication at laboratory scale Assembly of laboratory cells (coin, Swagelok) for the electrochemical characterization of electrodes Investigate the SEI formation during pre-sodiation

Requisites

PhD in Chemistry, Materials Science, Chemical Engineering or other related topics in which the selected candidate can work autonomously Strong background in synthesis of carbonaceous materials Hands-on experience in physicochemical characterization techniques such as XRD, SEM, XPS, Raman, NMR Hands-on experience with electrochemical testing methods such as galvanostatic charging, cyclic voltammetry, and EIS A good team player who can collaborate with other groups, academic and industrial partners The selected candidate must be able to communicate effectively in English in a multidisciplinary environment Good verbal and written communication skills in English (Spanish or Basque valuable but not compulsory)

Benefits

We are offering a 36-month contract and advantageous professional development opportunities with the possibility of renewal based upon satisfactory job performance, continuing availability of funds, and ongoing operational needs. Access to a complete set of existing laboratory infrastructure and equipment to ensure a fruitful stay and the fullfilment 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. CIC energiGUNE will also help smooth the transition for you and your family, providing a welcome program that offers help with accommodation and addresses other aspects to help you integrate into the local environment (such as free language courses, help with schools for children…). CIC energiGUNE is located close to the city of Vitoria-Gasteiz (Spain), in the heart 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. For more information: https://cicenergigune.com/en/work-with-us.