

## Company Description

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/opportunities/91123611>. The selection process ends once a

## Information

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

## Company

CIC energiGUNE



MEMBER OF  
BASQUE RESEARCH  
& TECHNOLOGY ALLIANCE

## Main functions, requisites & benefits

### Main functions

The Atomistic Modelling and Computational Simulations group at CIC energiGUNE is searching for a Postdoctoral researcher to engage in the research and development of solid-state inorganic electrolyte for rechargeable batteries within a recently granted Horizon EU project. The role of the selected candidate will include applying state-of-the-art computational techniques combining interatomic potentials with quantum-mechanical calculations to model Li transport in inorganic solid electrolytes at the atomic level.

### Requisites

PhD in Physics, Chemistry, Materials Science, Applied Mathematics or other related topics in which the selected candidate can work autonomously; Strong background (at least two years of previous experience as demonstrated, for instance, by first author publications) in Solid-State Physics/Chemistry and Quantum Chemistry applied to inorganic solids; High expertise in density functional theory electronic structure calculations is required; Good expertise in molecular dynamics simulations will be an asset; Experience with machine learning algorithms and/or network science is strongly preferred; Aptitude in mathematical modelling of electrochemical cells using PDEs or systems of ODEs using COMSOL multi-physics, or equivalent software, will be an asset; The candidate should be able to work independently and as part of a team, as well as to have very good English skills; The selected candidate must be able to communicate effectively in a multidisciplinary environment.

### Benefits

We are offering a 24-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. The candidate will join a multidisciplinary and collaborative team of theorists and experimentalists from condensed matter, materials, and chemical sciences. Access to a complete set of existing laboratory infrastructure and equipment to ensure a fruitful stay and the fulfillment 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>.