

## POSTDOCTORAL RESEARCHER IN HIGH-THROUGHPUT BATTERY CATHODES

# 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 upto-date facilities that are fully available for all its researchers. Also, the European Commission has recently 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

## Information

Deadline: 2022-04-30
Category: Business
Province: Araba / Álava

Company

CIC energiGUNE



## Main functions, requisites & benefits

#### Main functions

CIC energiGUNE is seeking a Postdoctoral Researcher to work in the high throughput development of inorganic cathode materials for Li-ion batteries using automatized modules for their synthesis and characterisation with the final goal to accelerate the discovery of materials for the energy transition. This work will be performed in collaboration with Umicore. High throughput synthesis of inorganic cathode materials using our new automated laboratory platforms. Physical-chemical and structural characterization of the prepared materials (X-ray diffraction, electron microscopy, chemical analyses, thermogravimetric analyses, etc.). Preliminary electrochemical characterization using galvanostatic cycling of half-cells. Collaboration in the development and optimization of automatized solutions for high throughput characterization modules. Assessment of Supervised Learning (SL) algorithms in collaboration with the Atomistic Modelling and Computational research group. Writing of technical reports and scientific publications and participation to national and international conferences.

### Requisites

PhD Degree in Materials Science or Chemistry or related fields. Solid background in inorganic Li-ion electrode materials and their physico-chemical, structural and electrochemical characterization using various analytical techniques (XRD, SEM, DSC/TG, galvanostatic charge-discharge tests, etc.). Basic knowledge in computation and programming (e.g. Fortran, Python, C++) will be valued. Demonstrated self-motivation and ability to work independently. A good team player who can collaborate well with other scientists. A Highly motivated person with an interest in research. A good level of spoken and written English Spanish is not compulsory.

## Benefits

A 3 year contract and attractive professional development opportunities. Access to a complete set of existing laboratory infrastructure and equipment, as well as to the needs identified during the project development 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 storage and sustainability fields. 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 which leads the return per capita in the European H2020 programe.