

## Company Description

CIC energiGUNE is the research center for electrochemical and thermal energy storage, 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 research in materials and systems for energy storage, maximizing the impact on results to the Basque Business Network, through collaboration with universities, research centers, and companies. CIC energiGUNE has a dynamic research team of more than 100 researchers (technicians, PhD, post-doc and associate 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 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:** 2021-06-27  
 **Category:** Business  
 **Province:** Araba / Álava

 **Country:** Basque Country  
 **City:** VITORIA-GASTEIZ

## Company

CIC energiGUNE

**CIC  
energi  
GUNE**  
 MEMBER OF  
 BASQUE RESEARCH  
 & TECHNOLOGY ALLIANCE

## Main functions, requisites & benefits

### Main functions

The Thermal Energy Storage area at CIC energiGUNE is seeking for a Postdoctoral Researcher to join the group of solid-state chemical reactions. The project will focus on the development of chemical reactions for thermal energy storage. The storage of heat through reversible chemical reactions is a very promising research field due to the possibility to store great amount of thermal energy in form of chemical energy. This project will explore selected chemical reactions (simple and complex) in a range of temperature few explored so far (100 - 250 °C). The materials used as possible reactants can be oxides, metals and metal alloys with water, hydrogen and carbon dioxide as reacting gases. The research work will follow different approaches to achieve the most efficient reacting behaviour improving the thermodynamic (atomic substitution), kinetic (catalyst addition) and heat transfer properties (hybrid materials). The systems studied will also be tested in specially designed laboratory scale prototypes (CIC energiGUNE facilities) to determine the reactivity at a more relevant scale (grams). The candidate will have the chance to work in a multidisciplinary environment composed by Chemists, Physicists and Engineers having the possibility to extend his/her knowledge approaching the research under different points of view.

### Requisites

PhD in Chemistry, Physics or related fields. Experience in materials synthesis, modification and characterization. Experience on heterogeneous gas-solid reactions will be valuable. A team player who can collaborate with other groups, technological centres, and industries. Excellent verbal and written communication skills in English.

### Benefits

A 3-year contract and advantageous professional development opportunities and a rewarding and challenging job in an international environment. A competitive basic salary augmented by important benefits such as special conditions for a private health insurance that compare favorably with the best global private and public institutions. Integration in an enthusiastic and multidisciplinary young group with great projection and commitments with sustainability and research quality. The Fundación will also help smooth the transition for you and your family, providing a welcome program that offers accommodation and addresses other aspects to help you integrate into the local environment.