

## Company Description

CIC energiGUNE (CICe) [www.cicenergigune.com](http://www.cicenergigune.com), is a young energy research centre (inaugurated in June 2011) with headquarters in the Basque Country (Spain), whose mission is to do an excellence oriented research as well as the transfer of technology to the industry. CICe has a dynamic research team of more than 100 researchers, is extremely well equipped with a wide range of up-to-date facilities that are fully available for all its researchers.

## Information

 **Deadline:** 2021-01-08  
 **Category:** Business  
 **Province:** Araba / Alava

 **Country:** Spain  
 **City:** Vitoria-Gasteiz

## Company

CIC energiGUNE

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

## Main functions, requisites & benefits

### Main functions

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 behavior 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).

### 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

We are offering a 36 months contract and advantageous professional development opportunities and a rewarding and challenging job in an international environment. A prolongation of the contract for 24 additional months could be possible subjected to a positive performance assessment. Integration in an enthusiastic and multidisciplinary young group with great projection and commitments with sustainability and research quality. CIC energiGUNE 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. 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. CIC energiGUNE is committed to affirmative action, equal opportunity and the diversity of its workforce.