

## Company Description

CIC Energigune is a Cooperative Research Centre founded in 2007 with its headquarters in the Basque Country. Created thanks to the investments of the Basque Government and several leading companies in the energy sector, it aspires to become a true international leader in the field of energy and contribute to the industrial competitiveness of Basque companies.

## Information

 Deadline: 2019-09-21    
  Country: Basque Country  
 Category: Business  
 Province: Alava

## Company

CIC Energigune



## Main functions, requisites & benefits

### Main functions

CIC energigUNE is looking for an experienced Post-doctoral Researcher to incorporate in the group of Solid state chemical reactions in the thermal energy storage (TES) area. The research will be focused on the study of existing and novel chemical reactions and thermochemical cycles for thermal energy storage and fuel production (initial focus on hydrogen production). The final objective of the research is the development of advanced materials and systems that can be implemented in a real application (TES and fuel production in solar power plants and Industrial environment). The research work will include the identification and selection of promising materials and thermochemical cycles (two-steps and multi-steps), the synthesis of tailor made materials (e.g. mixed oxides), the study of the performances when subjected to repetitive cycles involving different reactions steps (reduction, hydration) and the full thermophysical characterization. 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. Job functions:

Development and identification of materials (e.g. tailor made metal oxides) and thermochemical cycles for thermal energy storage and fuel production.

In depth experimental characterization and behavioural understanding of such materials.

Contribution to the demonstration and piloting activities as well as to scaling up of developed systems.

Collaboration in project proposal writing to obtain funding from institutions and industrial sources.

Supervise graduate/master students.

### Requisites

Qualification requirements

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

All applicants are invited to submit detailed curriculum vitae and 2 reference letters at [www.cicenergigune.com](http://www.cicenergigune.com). The selection process ends once the candidate is selected. CIC energigUNE is committed to affirmative action, equal opportunity and the diversity of its workforce.