

Company Description

DESCRIPTION OF THE INSTITUTION: CIC energiGUNE is a research center specialized in energy, electrochemical energy 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 150 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>.

Information

 **Deadline:** 2023-07-26
 **Category:** Business
 **Province:** Araba / Álava

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

Company

CIC energiGUNE



Main functions, requisites & benefits

Main functions

JOB DESCRIPTION: CIC energiGUNE is currently offering a Postdoctoral researcher position in the Thermal Energy Storage and Conversion scientific area. One of the main objectives of this area is the development of innovative and efficient heat storage solutions through the development of new materials, storage system designs and prototyping. In this frame, we are looking for a Postdoctoral researcher in the field of Phase Change Materials (PCM) for latent heat storage at high temperature (600-900°C). The selected candidate will be involved in a European project that aims at developing new ceramic-PCM composites for waste heat recovery and storage in energy intensive industry. Two kinds of PCMs will be investigated, namely metal alloys and solid-solid PCMs. Specific functions: Design, development and synthesis of new PCMs for thermal energy storage at high temperature. Characterization of developed materials with XRD, SEM, TEM, DSC, LFA, etc. Ceramic-PCM composites design, testing and evaluation of their performances. Characterization of developed ceramic-PCM composites, including the study of the interactions between metal alloys and ceramic structures. Collaborate in pilot storage system design, testing campaign and performance evaluation. Present obtained results in high-quality scientific articles and related conferences.

Requisites

Ph.D. in Chemistry, Physics, Material science or related fields. Hands-on experience in metal alloys as phase change materials, familiar with their design through computational thermodynamics, synthesis methods and characterization will be highly valued. Experience in common characterization techniques (XRD, SEM, DSC, LFA, STA, etc.). Well-demonstrated scientific record. A team player who can collaborate with other groups, technological centers and industries. Good verbal and written communication skills in English is a must.

Benefits

We are offering a 36 months postdoctoral researcher position within interesting National and International projects in the field of thermal energy storage and important opportunities for professional development. In addition to the appeal of the entire project, CIC energiGUNE offers a competitive salary and integration in an enthusiastic and multidisciplinary international group with great projection and commitments with sustainability and research quality. The candidate will have full access to a complete set of existing laboratory infrastructure and equipment to ensure a fruitful stay and the fulfillment of the objectives. 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...). We allow schedule flexibility and we operate under a hybrid remote/in-person work model. 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