




Company Description

CIC energiGUNE is the research centre for the storage of electrochemical and thermal energy, and a member of the Basque Research & Technology Alliance BRTA and a strategic initiative of the Basque Government. CIC energiGUNE was created in 2011 to generate research excellence in materials and energy storage systems, maximising the impact on results for the Basque business fabric, through collaboration with universities, research centres and companies. Located in the Alava Technology Park, it is considered one of the 3 reference centres in Europe, thanks to the positioning of its research lines, its research team and its characterisation, testing and prototyping platforms that make it the reference laboratory in southern Europe. The centre works with an extensive network of collaborators, including clusters, initiatives, companies, universities and research institutes, all of which are benchmarks in the international field of energy storage. These collaborations aim to obtain valuable results for both electrochemical and thermal storage applications. The CIC energiGUNE has recently been awarded the "HR Excellence in Research" by the European Commission, which reflects its commitment to fair and transparent recruitment and evaluation procedures, and certifies the existence of a stimulating and favourable working environment for the institution's researchers.

Information

 Deadline: 2021-12-31
 Category: Academia
 Province: Araba / Álava

 Country: Basque Country
 City: VITORIA

Company

CIC energiGUNE



Main functions, requisites & benefits

Main functions

CIC energiGUNE is seeking an experienced person to work in an ambitious and novel project which main goal will be to develop by rational design new and suitable ionic liquids (ILs) and organic ionic crystal plastics (OICPs) to be employed in the field of energy storage. Feedstocks such as, amino acids, sugars will be used in the synthesis of both room temperature ILs and IOPs to gain in sustainability. The prepared ILs and OICPs will be tested as phase change materials (PCMs) in thermal energy storage at low temperature for both domestic and industrial applications. Furthermore, a full testing and characterization of the obtained ionic materials will be performed to understand in deep the relationship between their composition/structure and their performance in the selected applications. The full characterization expected to allow "a la carte" design of these materials for a specific application. Overall, this is a very challenging project since use of ILs as PCMs or OICPs as PCMs is still at very initial stage. Therefore, the selected person must show the commitment, dedication and passion in facing new challenges. Job Functions: To rationally design new ILs and IOPCs for specific applications. To synthesize the designed ILs and IOPCs. To full characterize the ionic materials prepared. To perform experimental validation of the ionic materials prepared. To disseminate his/her research in conferences and journal papers. To collaborate actively with other team members. To generate new ideas within the frame of the topic. To contribute to find out funding opportunities at EU level or related.

Requisites

PhD in Organic/inorganic Chemistry or related fields. Experience in ionic liquids design, synthesis and characterization. Experience in bio-based feedstocks and sustainable chemistry. Preferable, knowledge on phase change materials and batteries electrolytes. Experience in characterization techniques such as NMR, TGA, DSC and related. A team player who can collaborate with other groups, technical centers, and industries. Very good verbal and written communication skills in English.

Benefits

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 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.