

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 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: 2021-09-30  Country: Basque Country
 Category: Business  City: Vitoria-Gasteiz
 Province: Araba / Alava

Company

CIC energiGUNE



Main functions, requisites & benefits

Main functions

CIC energiGUNE is seeking an Experienced/Senior engineer to work on the development and assembly of advanced Li-ion batteries with silicon-based anodes. Job Functions: To define and develop novel methods for the formulation and assembly of state-of-the-art electrode material. To provide technical direction and execution for the electrochemical testing and analysis of advanced Li-ion pouch cells to understand factors limiting lifetime and performance. Lead implementation of solutions. To define, validate, and optimize testing protocols like formation cycles and application of specific cell testing. To deliver feedback to R&D and industrialization team to guide material optimization which is aligned with customer specifications or final use requirements. To investigate battery or cells failure mechanisms and perform root cause analysis to create mitigation plans To contribute to cell engineering efforts informed by commercial specifications for high energy density applications based on advanced Li-ion cells. To transfer existing R&D processes from lab scale to pilot line. To interact with suppliers, participate in materials selection and technological solutions. To contribute to the development of intellectual property towards industrialization.

Requisites

Mechanical, Physics. At least 5 years of related engineering experience designing, fabricating, and testing electrochemical cells (pouch cell preferred). Deep understanding of electrochemistry, silicon and graphite-silicon composite anodes, electrolytes (including salts and additives) and their SEI and cathode materials. Familiar with advanced analytical techniques to support material optimization studies. Good verbal and written communication skills in English (Spanish or Basque valuable but not compulsory). Demonstrated self-motivation and ability to work independently. A good team player who can collaborate with other groups, academic and industrial partners. Highly motivated to transfer technology to the industry. Knowledge of Safety Awareness. Experience in next fields is required: Development and processing of graphite-silicon based Li-ion anodes and cells. In-depth understanding of composition-process-structure-property relationships. Experience in next fields is valuable: Roll to roll process / continuous processing. Experience with Design of Experiments (DOE) methodology and/or statistical methods.

Benefits

Great development opportunities and integration in an enthusiastic and multidisciplinary young group with great projection. Access to a complete set of existing laboratory infrastructure and equipment, as well as to the needs identified during the project development to ensure a fruitful stay and the fulfillment of the objectives in due time.