

Company Description

CIC energiGUNE is a research center specialized in energy, electrochemical 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 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 batteries with lithium metal electrodes. Job Functions: To provide technical direction and execution for the electrochemical testing and analysis of lithium-metal pouch cells to understand factors limiting lifetime and performance. Lead implementation of solutions. To define, validate, and optimize testing protocols like formation and application specific cell testing To deliver feedback to R&D 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 dense applications based on Lithium metal anode cells. To ensure safety documents are in place for experimental work related to Lithium metal handling and processing To contribute to the development of intellectual property towards industrialization.

Requisites

PhD Chemistry or Master Degree in Chemistry, Electrochemistry, Chemical Engineering, Mechanical, Physics. At least 5 years of related engineering experience designing, fabricating, and testing electrochemical cells (pouch cell preferred). Deep understanding of electrochemistry, lithium-metal anodes, electrolytes (including salts and additives) and their SEI, protection layers 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: Lithium metal foil handling. Development and processing of lithium metal electrodes and cells. Roll to roll process / continuous processing. Experience with Design of Experiments (DOE) methodology and/or statistical methods. Experience in processing Li metal films from ingots will be valued.

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.