

# **CELL DESIGN ENGINEER**

# Company Description

DESCRIPTION OF THE INSTITUTION: 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 is a reference in knowledge transfer and was created in 2011 to generate fundamental excellence knowledge useful for the Basque business network. 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 to all the research community. In 2019, the European Commission has awarded CIC energiGUNE with the 'HR Excellence in Research' label, which reflects the center's commitment to implement fair and transparent recruitment and appraisal practices, and certifies its salutary work environment. For more details on CIC energiGUNE's research activities please visit our website at http://www.cicenergigune.com

### Information

Deadline: 2024-01-08

Category: Business
Province: Araba / Álava

 Company

CIC energiGUNE



## Main functions, requisites & benefits

#### Main functions

JOB DESCRIPTION: In CIC energiGUNE we are looking for a Cell Design Engineer for the Cell Prototyping Group to collaborate in different projects. Functions to be performed: Perform advanced CAE simulations to evaluate and enhance understanding the behaviour of the cell, pack, and vehicle sub-systems around battery pack under both static and dynamic events. Design of new cell concepts in their different geometries taking into account concepts as: battery pack definition, new cell to chassis concepts or design for recycling guidelines. Support the design validation process with multi-disciplinary engineering teams based on your analyses. Sensor integration for smart cell concepts. Cell modelling, considering, electrochemical, mechanical and thermal inputs by performing finite element analysis. Definition of electrochemical, thermal, mechanical tests, etc, for validation of cell concepts. Cell cost analysis. Tooling design. Pressure control considering swelling level of different technologies Analysis and extrapolation of cell parameters to battery pack

### Requisites

Skills: Technical training, mechanical engineering or similar.Knowledge in other engineering fields (simulation, automation, etc) will be of interest. Good knowledge of Finite Element Analysis, Applied Solid Mechanics, Material Science and Numerical Methods in a product development environment. Experience of at least 3 years in the required functions. Necessary to proof knowledge in the field of cell and/or battery pack design. Less experience will be valued depending on the quality of the same. Experience in stand-alone or coupled analysis of battery system for structural, thermal, fluid mechanics and electro-magnetic behaviour. Languages: English (spoken and written) is a must. Other: Proactive person, with high capacity for commitment and teamwork. Resolute person, with high level of autonomy and orientation to objectives.

#### **Benefits**

WHAT WE OFFER: We are offering the incorporation to a first-level research centre with an outstanding team and professional development opportunities with a competitive salary within the category. The person who will be selected will join an innovative and cutting-edge project, focused on sustainability, value creation and the generation of collaborative ecosystems where the development of people and diversity is promoted. Access to a complete set of existing laboratory infrastructure and equipment to ensure a fruitful stay and the fulfillment of the objectives in due time. 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