

PhD Fellowship for Computational Studies Research Line through Basque Government Grant

CIC energiGUNE is looking for a highly motivated candidate with a university degree on Chemistry, Physics, Materials Science or related areas to apply for a Basque Government PhD Grant. <u>Check</u> <u>eligibility section</u>.

The offer is aimed at students currently completing or who have already completed a master degree in related subjects: Materials Science, Physics, Chemistry or related topics.

Candidates must show initiative, independent thinking as well as capability to work in collaborative environments. He/she will be part of a multidisciplinary international research team. Good English level is highly recommended.

Eligibility

The position is subject to obtaining a Basque Government PhD Grant: <u>http://www.hezkuntza.ejgv.euskadi.eus/</u>

In order to be eligible the candidate must:

- Be **resident** in the Basque Country prior to 31st December 2015.
- Be **fluent** in Spanish or Basque language (for the interview process)
- Grade obtained in 2012 or after.
- Grade records (over 10) higher than: 7.5 in Engineering; .8.0 in Chemistry; 9.0 in Physics.

Note that those candidates not fulfilling all of the above criteria will be automatically discarded.

PhD project Description

Research Line: Computational Studies

Title: First-principles design of energy storage systems — when theory meets materials discovery

Supervisor: Dr. Javier Carrasco

Theme: The research project will be focused on the emerging area of computational materials design for energy storage applications.

Description: This project provides a unique opportunity to become skilled in theoretical materials modelling. You will be conducting exciting research into the functioning, design and control of battery and information materials at the molecular scale. The work will focus on using first-principles and semi-empirical approaches to address complex ion dynamics as well as



developing novel strategies to analyse and mine existing large-scale materials data repositories. You will receive training in advanced molecular modelling techniques, including density functional theory and molecular dynamics, with particular interest in how to efficiently integrate such techniques into automated high-throughput frameworks for effective materials discovery. The work will be done in close collaboration with several theoretical and experimental groups worldwide. You will be working towards key societal goals such as the penetration of renewable energy sources in the electric grid, the electrification of transportation, and delivering value for energy and information consumers.

How to apply

To apply for a CIC energiGUNE grant please enter your **CV** and **degree certificate record** through our website <u>http://www.cicenergigune.com/en/trabajar/</u>

The selection process ends once a candidate is selected.

CIC Energigune is committed to affirmative action, equal opportunity and the diversity of its workforce.