

# PhD Fellowship for Na-ion Research Line through Basque Government Grant

CIC energiGUNE is looking for a highly motivated candidate with a university degree on Chemistry, or Materials science-Engineering to apply for a Basque Government PhD Grant

The offer is aimed at students currently completing or who have already completed a master degree in related subjects: materials science, physics, chemistry, engineering, etc.

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 31<sup>st</sup> 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: Na-ion research line (EES)

Title: Polyanionic materials as positive electrode for Na-ion batteries

Supervisor: Dr. Montse Galceran

The research project will be focused on the investigation of polyanionic compounds as positive electrode materials for Na-ion batteries. The research work will be based on a dual approach involving first optimization of already identified systems and research on new phases.

Na-ion batteries have attracted more attention recently due to low cost, abundant supply and widespread terrestrial reserves of sodium mineral salts. On the basis of element abundance, **Na-ion technology is an ideal alternative to lithium ion batteries** and is especially appealing as it can use the same production technology as the LIB with lower cost.



In particular, we want to **assemble full Na-ion cells** with already identified materials which will be optimized for electrochemical performance at a laboratory scale while carrying out prospective research on new polyanionic materials which are potentially interesting as **positive electrode materials in sodium-ion batteries**. The research work will include synthesis using diverse methods, evaluation of the electrochemical performances in Na-ion batteries, characterization of the structural and redox processes occurring upon cycling.

### 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.