PhD Fellowship for Ceramic Electrolytes 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. Check eligibility section.

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: http://www.hezkuntza.ejgv.euskadi.eus/

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: Ceramic Electrolytes (EES)

Title: CERAMIC-POLYMERIC COMPOSITE ELECTROLYTES FOR APPLICATION IN N SOLID STATE BATTERIES

Supervisor: *Dr. Anna Llordés*

The research project will be focused on the development of **ceramic-polymeric electrolytes** for application in next generation **solid state Li and Na batteries**.

Solid state electrolytes are a promising alternative to replace flammable organic liquid electrolytes in Li ion batteries, improving safety as well as bosting battery performances. However, existing solid electrolytes (i.e. ceramics and polymers) do not yet fulfil the requirements for practical applications.

In this project, ceramic and polymer composites will be combined to yield composite membranes with fast ion conductivity and good mechanical properties. The student will synthesize the ceramic materials and will develop the experimental approach to combine them with polymers in solution phase. The structure, ion conductivity and mechanical properties of the resultant composite membranes will be also characterized. Finally, the student will integrate selected membranes into solid state Li and Na batteries and perform electrochemical testing.

How to apply

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

The selection process ends once a candidate is selected.

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