INDUSTRIAL PHD OPPORTUNITY AT CIC ENERGIGUNE AND CEGASA

Company Description

CIC energiGUNE is an excellence research center based in the Basque Country (Spain) and dedicated to the research and development of materials for energy storage. It offers the opportunity to work in an interdisciplinary and international environment. It is committed to affirmative action, equal opportunity and the diversity of its workforce. CICe is well equipped with a wide range of up-to-date facilities that are fully available for all its researchers. It also has a strong commitment to the long-term high-level training of its young researchers, and as proof of its training capacities, it indeed participates in numerous formative activities of national and international students through several programs at undergraduate, Master and PhD levels. Since 2011, CICe has been training more than 30 PhD students. CEGASA is a Basque company, founded in 1934, which has worked in the area of electrochemical energy storage from its start. They are manufacturers of Batteries materials (electrolytic manganese dioxide), Industrials Batteries, Lithium-Ion Batteries and solutions for energy storage. Their products are developed and manufactured entirely in Europe. Their facilities have a useful area of more than 24,000 m2, divided among laboratories, offices and production areas. CEGASA has its own design laboratories, for testing and safety approval, with a dedicated R&D&i team, in addition to a team of professionals with more than 20 years of experience.

Main functions, requisites & benefits

Main functions

CIC energiGUNE (CICe) offers the opportunity to complete an industrial PhD in the field of Electrochemical Energy Storage in partnership with the Basque company CEGASA. The offer is aimed at motivated students who have good academic records and are ready to carry out a challenging and exciting 3-year applied research project in the field of materials science and electrochemistry.

The PhD project offered consists in understanding the different steps of the production process of an inorganic material employed in commercial batteries. The work will involve (i) the identification and rationalization of the different parameter of the synthesis process at the industrial scale; (ii) the thorough characterization of the materials produced at the production plant from both structural and electrochemical point of views; and (iii) the demonstration at lab scale of possible improvements that could be implemented in the production process.

To carry out his/her PhD project, the trainee will count on the complementary experience of two experienced teams: on the one hand, he/she will incorporate CICe’s Solid-State Electroactive Materials group gathering talented and dynamic researchers, who have expertise in synthesis of inorganic materials, electrochemical characterizations and advanced structural characterizations, and on the other hand, he/she will join the R&D team of CEGASA, which works in close collaboration with the production plant.

Requisites

The candidate will preferably have a degree or be finishing a Master degree (or equivalent) with major in Materials Engineering, Materials Sciences, Inorganic Chemistry, Electrochemistry or other scientific discipline in a related field. Good academic records are required.

He/she should be a good team player who can collaborate with other scientists but also with the operators of the production plant. This highly motivated person, interested in investigation and innovation applied to an industrial challenge, will be incorporated to a multidisciplinary team. Therefore, he/she should demonstrate strong capabilities to organize and be able to work independently in order to move the project forwards, achieve deadlines and project targets by himself/herself.

Good knowledge (reading, speaking and writing) of English and Spanish is required. He/she should be able to commute within the Basque Country between CIC energiGUNE (Miñano) and CEGASA (Oñati).

Other relevant information:

This PhD offer is linked to the achievement of a PhD grant call funded by the Ministry of Science, Innovation and Universities of the Government of Spain. Further information can be found in the link below:

http://www.ciencia.gob.es/portal/site/MICINN/menuitem.dbc68b34d11ccbd5d5f2fe8b01432ea0/?vgnextoid=2e6be8ade1e01510VgnVCM1000001d04140aRCRDklang_choosen-en

Candidates are invited to submit their applications including a cover letter, a detailed curriculum vitae and their academic records at: