

Company Description

UnLOHCKed aims to develop a dehydrogenation plant, free of CO₂ emissions, efficient and scalable to be used commercially for the generation of renewable electricity and hydrogen. The project to be carried out is part of the group's lines of research that include innovative developments in the hydrogen value chain. Specifically, in the development of advanced systems in heterogeneous catalysis for the dehydrogenation process of liquid hydrogen carriers. Currently, once the H₂ transported has reached the distribution point, the LOHC releases the hydrogen gas, in reaction systems that use critical materials (critical raw materials: CRMs). This project focuses on the development of an innovative system that thermally integrates the dehydrogenation reactor with a fuel cell and catalytic systems free of CRMs, cheaper and more abundant, but with the same or greater performance.

Information

 **Deadline:** 2023-04-03
 **Category:** Academia
 **Province:** Bizkaia

 **Country:** Basque Country
 **City:** Bilbao

Company

UPV/EHU



Main functions, requisites & benefits

Main functions

We are looking for a candidate to carry out a doctoral thesis within the framework of the European Project related to the potential of LOHCs through the development of key sustainable and efficient systems for dehydrogenation (UnLOHCKed). The project is framed within the activities of the SuPrEn research group (<https://www.ehu.eus/es/web/supren>), Consolidated Group recognized by the Basque Government and SherLOHCK (<https://sherlohck.eu/>) and UnLOHCKed projects. Center: Bilbao School of Engineering, University of the Basque Country (UPV/EHU).

Requisites

We are looking for a highly motivated candidate for a PhD position with ability to work in a team and in a cooperative environment, with the opportunity to make an internship abroad in a research center or in a company. Previous experience on the research subject and techniques will be valued.

Benefits

Making you a specialist in H₂ technologies with evidenced credibility and qualification for an industry position.

