

# MEMBRANE EXPERT FOR HYDROGEN SEPARATION

# Company Description

Hydrogen Onsite (H2SITE) is a newly created company (in 2020) shareholded by Tecnalia (SP) and Engie (FR). We are committed to provide fully integrated systems to produce on-site high-purity hydogen, helping our customers to save money money and paving the way to a greener future and mobility.

### Information

Deadline: 2022-06-30
Category: Business

Province: Bizkaja

Company

H2SITE On-site



# Main functions, requisites & benefits

#### Main functions

The applicants will be responsible for the palladium membrane performance as well as process development. Focus will surround the development of hydrogen separation membranes both in Membrane reactors and separation applications tackling food, steel and petrochemical industries as well as mobility sector. The applicants will be involved in R&D projects in a laboratory (growing company) environment. Job scope: To design and develop palladium supported membrane on different substrate materials Fabrication of palladium supported membranes. Candidates having experience with deposition techniques such as PVD, electroplating and electroless plating. Physico-chemical characterizations of membranes (XRD, SEM, TEM, etc.) and permeation tests under different gas streams. Interpretation of the results to develop novel membranes and materials adaptable to industrial processes linked to real and existing applications Deal with technical developments within ongoing EU projects and write proposals and find funding opportunities (local, state and Europe level) Design of permeation test equipment and modelling permeation is a plus

## Requisites

A Ph.D. in Chemical Engineering, Material, Chemistry, Environmental Engineering or a related technical field. Research experience in hydrogen separation membranes (either polymeric of metallic based membranes) and their membrane fabrication procedure and process design. Experience in ultrafiltration (water filtration) is a plus. Ability to carry independent research and work closely with other team members to achieve group goals. Experience in writing proposals for the different European calls (Seventh European Marco program, FCH-JU, Horizon 2020, etc...) and carrying out technical developments within these projects. Membrane modelling and simulation techniques expertise Excellent English communication skills (oral and writing). Self-motivated and willing to embrace the challenges of a growing startup shareholded and backed up by business developer companies and academic profile.

### **Benefits**

Work in a scientific environment surrounded by qualified people. Opportunity to develop a research career strongly connected to industrial applications. Growing business Good working conditions