

CALL REQUIREMENTS

Call Title: Structural integrity evaluation of the natural gas grid materials for a safe hydrogen transport- SAFE H2

Contact person: Jesus Manuel Alegre

Department: Civil Engineering

Category: Researcher

Others

Workday: Full time

Part time

Aim:

The repurposing of the existing natural gas infrastructure for hydrogen transport emerges as a cost-effective decarbonization solution. Hydrogen can be blended with natural gas or directly transported through the repurposed pipelines. The SafeH2 project aims to assess and predict hydrogen embrittlement susceptibility of gas grid steels, using experimental and computational methods. The available singular equipment facilitates a realistic testing in a high-pressure hydrogen atmosphere, enabling more reliable prediction of failures and the delimitation of working conditions. The project also explores optimal coating techniques for mitigating embrittlement in pipelines carrying pure gaseous H₂. Therefore, SafeH2 contributes to a safer and more efficient hydrogen transport, fostering sustainable technologies and decarbonization goals.

Requirements of the candidate: Master and Doctorate in Materials Science or similar related to the scope of the project

Duration: 24 months

Gross monthly remuneration: 2537 euros

Application submission deadline: 04/01/2024

Documents to be provided:

- Copy of the NIF or Passport, the latter only in case of foreign citizens not resident in Spain.
- Curriculum vitae including detailed research activities.
- Doctorate certificate, issued by the university of origin.
- Degree and master certificates and academic transcripts.