

Publish date October 5th 2022

Ref. 77/2022

Code:

Project: RURALGAS

Area: Advanced Materials for Energy

Area leader: Prof. Joan Ramon Morante

Group: Energy Storage, Harvesting and Catalysis

Group leader: Prof. Joan Ramon Morante

Project Engineer in catalytic reactor development and validation

IREC's Energy Storage and Catalysis Group offers a position as a Project Engineer for a demonstration activity in a biogas plant. The technology is based on a novel catalytic reactors for the conversion of biogas and hydrogen to synthetic natural gas.

Tasks

The project engineer will be the responsible for design, implementation, experimentation and validation of a prototype reactor in a real environment. The prototype consists on a thermo-catalytic multi-channel reactor. In this aspect, the tasks include:

- Design, manufacture, assembly and integration of the different parts of the prototype in the biogas plant.
- Experimentation of the prototypes in the real environment (biogas plant)
- Incorporate technological improvements provided from the experimentation as well as the details related to the operating costs
- Report and discuss the experimentation results for the preparation of an exploitation plan to bring the technology to market

Essential

- Official master's degree with an outstanding academic qualification record. Candidates who are in the final phase of the official master's degree or equivalent will be taken into account.
- Academic background appropriate to the position (Renewable Energies, Chemical Engineering, Mechanical Engineering, Product Engineering, Manufacturing Processes, Industrial Engineering, Product Development Design or related)
- Availability to travel to the demo site for prototype validation in Terres de l'Ebre (150-200 km)

Advantageous

- Interested in bringing laboratory technologies to market, with high interest to work in the near future in the industrial sector
- Previous experience in experimental studies (BSc, MSc, practices) related to catalysis, chemical reaction or reactor prototyping
- Advanced level of English, Catalan and Spanish.

- Aimed at solving a problem related to IREC's R+D+i activity.
- Proficiency in technical drawing (AutoCAD, Inventor, Solidworks or related)
- Experience in graphical programming environment to develop automated research and testing systems (e.g. LabVIEW)

Contract duration

12 months

Professional Category

Project engineer (R.1.6)

Incorporation

16/12/2022

Application

Applicants must send a detailed Curriculum Vitae and a motivation letter by email directly to irecjobs@irec.cat (with copy to Dr. Jordi Guilera, jguilera@irec.cat) indicating "Project Engineer Ruralgas"

Deadline for applications

15/11/2022

Project information

Ruralgas (Validation of biogas recovery devices for rural areas)

Support for the Technology Transfer demonstration activities of the Rural Development Program of Catalonia 2014-2022. Financed by the Department of Climate Action, Food and Rural Agenda. Scope: Bioeconomy and Circular Economy. Category: Validation and prototyping of technologies.