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**Ref. 50/2022**

**Code:**

**Project: VAUTOSIN**

**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 prototype development (R.1.3)**

IREC's Energy Storage and Catalysis Group offers a position as a Project Engineer for validation of autothermal reactors for the conversion of biogas to synthetic natural gas, in the context of an industrial project (VAUTOSIN).

#### **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 (20-30 km)

#### **Advantageous**

- Interested in bringing laboratory technologies to market through a new company, 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, knowledge of Catalan and Spanish.



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- 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**

18 months

### **Professional Category**

Project engineer (R.1.3)

### **Incorporation**

Immediately or by mutual agreement with the candidate

### **Application**

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

**Deadline for applications:** 15/07/2022