Publish date: 04/03/2024

Deadline for application: 07/04/2024

Ref. 2024/51

Project: BIOHIDROGAS

Group: Energy Storage and Catalysis

Group leader: Prof. Joan Ramon Morante

PI: Dr. Jordi Guilera

Innovation Engineer in Renewable Gas

Description: IREC's Energy Storage and Catalysis Group is currently seeking a qualified professional to join us as an Innovation Engineer in Renewable Gas. The primary focus of the position is on technology transfer to market. The technology is based on innovative catalytic reactor devices for biogas and hydrogen conversion into sustainable methane, known as biomethane or synthetic natural gas. Joining our dynamic interdisciplinary research group, you will leverage your engineering expertise and project management skills to lead innovations in the green energy sector.

Responsibilities:

- Technology Development: Incorporate technical improvements from the research team to the industrial devices.
- Cost identification: Calculate internal manufacturing costs of the innovative methanation device, identify auxiliary costs, and estimate generation costs for an industrial plant.
- Economic Analysis: Evaluate the economic feasibility of converting biogas and green hydrogen and injecting the resulting green methane into the natural gas network.
- Technology Validation: Identify, propose, and apply for actions to validate the market readiness of the technology, securing necessary funding, and gaining early adopter interest, including definition of mass energy balances and flow diagrams.
- Business Model Definition: Define the business model, from value proposition to commercialization strategy and business plan.
- Establish collaborations within the sector to demonstrate the technology's viability and foster industry partnerships.
- Intellectual property: follow-up the IPR strategy and activities.

Qualifications and experience required:

Essential:

- Master degree in Engineering or applied science, preferably with a focus on energy-related disciplines.
- Proficiency of English, Catalan and/or Spanish languages
- Professional interest in entrepreneurship and the generation of spin-offs
- Strong creative thinking, problem-solving skills, and ability to work with interdisciplinary teams.

Preferred:

- PhD in Engineering and Energy related fields and/or MBA
- Previous experience in experimental studies related to chemical reaction, catalysts and hydogen technologies
- Experience in project management, economic analysis, and innovative technology development.
- Expertise in gas production processes, chemical reaction, and catalysis technologies.
- Previous involvement in entrepreneurship, incubation, or business acceleration programs is highly valued.

Required documents:

Applicants must submit the following documents by email to irecjobs@irec.cat and jguilera@irec.cat indicate in the subject **Ref.2024/51.**

Reference:

- Curriculum Vitae.
- Motivation letter with relevant experience, qualifications and value proposition related to the vacancy.

Offer of job position:

We offer a R2 position for 18 months on the frame of BIOHIDROGAS national project. Salaries will be paid in accordance with the IREC's salary policy, depending on the candidate's qualification and professional experience. Orientatively within the Recognised Engineer Researcher (R2.1) / Tech Transfer Promotor (S2.1) category. Incorporation is scheduled for the period between April and June 2024, by mutual agreement with the candidate