Wolfson School of Mechanical, Electrical and Manufacturing Engineering

Loughborough University

Research Associate
LoCEL H2 Project: Integration Lead Battery Electrolyser

Job Ref: REQ250094

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

We are seeking a highly motivated and skilled technical person with a research and development background to work on the LoCEL-H2 project at Loughborough University. The project is halfway through a 4-year initiative funded by the EU Horizon program, aimed at developing prosumer micro-grids in Africa including green hydrogen. The successful candidate will be responsible leading the integration of battery-electrolyser cells and the balance of plant. Based in the Wolfson School of Mechanical, Electrical and Manufacturing Engineering (Wolfson), the post-holder will work closely with the full project team.
Suitable for: A Pre or Post Doctoral researcher with practical experience OR an experienced technician looking to expand their job role into research.

Job Description

Job Grade: Specialist and Supporting Academic Grade 6

Job Purpose: To lead the integration of the battery-electrolyser cells with the balance of plant components. To extend our knowledge and understanding of how all the related systems interact together. The job is focused on practical prototyping and testing.

Job Duties:

Specific and Technical

- Lead system integration activities of battery-electrolyser cells and balance of plant needed to make these operate within a system.
- Work to design drawings to build and commission hardware for hydrogen production and storage
- Rapid prototype development as required
- Develop and evaluate test results to expand knowledge of sub-system interaction and stability
- Work with partners in Pakistan, Zambia and the Ivory Coast to design and implement hydrogen delivery and storage systems that meet the specific needs of each site
- Analyse and interpret data generated from commissioning and make recommendations for further improvements
- Assist with the preparation of technical reports and publications

General Technical

- To manage the container build activities to time.
- To work closely with colleagues and collaborating partners from academia and industry
- To provide a professional point of contact for suppliers and external partners and to liaise effectively with colleagues throughout the School and collaborators from the partners
- To produce and present technical reports at project meetings as required
- To control the container build area including preparing risk assessments and managing researchers and PhD students working in the area.

Other

- To ensure that a safe working environment is maintained at all times through compliance with Health and Safety at Work Regulation and the University's Operational Procedures.
- To take responsibility as requested for the sourcing and procurement of stock and specialist items to support LoCEL H2 work.
- To assist in writing conference and journal papers. To actively participate in appropriate conferences.
- To participate in outreach projects relating to the LoCEL H2 project.
- To participate in training as required.
- To carry out specific duties as may be reasonably requested by the project leader and that are commensurate with the nature and grade of the post.

Points to Note

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

Special Conditions

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equity, Diversity & Inclusion policy and procedures at all times. Duties must be carried out in accordance with relevant Equity, Diversity & Inclusion legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Belonging and Inclusion and, where appropriate, Recruitment and Selection.

Organisational Responsibility

Reports to Jonathan Wilson/ Dani Strickland

Person Specification

Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application. Stages of assessment are as follows:

1 – Application
2 – Test/Assessment Centre/Presentation
3 – Interview

Essential Criteria

Area	Criteria	Stage
Experience	Knowledge of batteries and battery testing	1, 3
	Design, integration, implementation and evaluation of hydrogen related hardware, for example fuel cell systems applications	1, 3
	Experience of HAZOPS and other hydrogen safety related activity such as safety system development	1,3
Skills and abilities	Ability to work accurately and precisely and to record information gathered	3
	Ability to produce written research reports and academic papers	1, 3
	Demonstrable ability to work with efficiency and accuracy to deadlines	3
	Self-motivated and able to work without close supervision	3
	Ability to show initiative and work independently but also make a full contribution as a team player	3
	Development of project requirements through to validation plans	
Training	Be prepared to undertake further training both internally and externally	3
Qualifications	Degree in relevant subject eg Chemistry and extensive industrial experience	1
Other	To observe the University's Equal Opportunities policy at all times	3
	To comply with Health and Safety regulations	3
	Commitment to maintain confidentiality at all times	3

Desirable Criteria

Area	Criteria	Stage
Experience	Experience of techniques that deal with supervised and un-supervised data analysis	1, 3
Skills and abilities	Experience of test rig development	1, 3
	Willingness to travel	3

Conditions of Service

We have one full time position with a fixed term of 22 months. Please note, funding for this position cannot extend beyond 30th Dec 2026. The applicant must start at Loughborough in 2025. Salary will be on Specialist and Supporting Academic Grade 6, £34,866 to £41,421 per annum, at a starting salary to be confirmed on offer of appointment.

The appointment will be subject to the University's normal Terms and Conditions of Employment for Technical staff, details of which can be found http://www.lboro.ac.uk/services/hr/a-z/conditions-of-service.html.

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which are available at http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html.

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available at: http://www.lboro.ac.uk/services/hr/a-z/childcare-information---page.html

In addition, the University is supportive, wherever possible, of flexible working arrangements.
We also strive to create a culture that supports equity and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career. For further information on Athena SWAN http://www.lboro.ac.uk/services/hr/athena-swan/.