

Hybrid Energy Storage - Generation Engineer – KTP Associate

Job Ref: REQ171172

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

A KTP (Knowledge Transfer Partnership) is a collaboration between a university and a company, jointly funded by the Company and Innovate UK.

KTP positions offer the following opportunities:

- To lead on a commercially focused industry project with support from academia
- Academic and Industry mentoring
- Training opportunities, including potential for management qualifications

School Summary

The Wolfson School of Mechanical, Electronic and Manufacturing Engineering is one of the largest engineering Schools in the UK. The school is home to the Centre for Renewable Energy Systems Technology (CREST), which is one of the largest and leading UK sustainable energy research centre. CREST's research is innovative, excellent and relevant, influencing industry, policy makers, researchers and educators across the world. This project will be run from within CREST by Dr Strickland and Dr Rowley and will encompass many different aspects from energy markets through to generation and including storage.

Company Summary: Green Frog Power

Green Frog Power's mission is to make the UK's energy supplies more secure. Their fraternity of Green Frog companies handles every aspect of power generation including site development, project management, infrastructure connections, O&M and power trading. The company is a fast moving dynamic company which has been rapidly expanding its energy portfolio and is looking to innovate in the area of hybrid energy systems including storage.

Job Description

Job Grade: Other (KTP Associate)

Job Purpose

The associate will work on a KTP project funded by Innovate UK to support Green Frog Power (GFP) to develop and implement a strategy to allow GFP to determine what energy storage technology it should deploy, when and for which electricity market applications in conjunction with their existing assets.

Job Duties

- Develop an in-depth understanding of the power electricity market and the position and role of Green Frog Power within it;
- Collect and analyse datasets from a range of sources to support development of a model which will benchmark and evaluate different energy storage scenarios;
- Collate techno-economic data for various energy storage systems in order to develop a high level battery integration model;
- Develop an energy storage strategy for integration into Green Frog Power's business portfolio;
- Design and implement field trials and test programmes to validate system modelling outputs;
- Produce high quality technical documentation, reports and training materials for use within GFP.

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 Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

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

Organisational Responsibility

Reports to the KTP Lead Academic (Dr 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	Engineering background with experience in some or all of: energy generation; energy storage; electrical grid systems and electricity markets	1,3
Skills and abilities	Highly numerate, with the ability to undertake data handling, coding, modelling, analysis, and manipulation.	1,3
	Self-motivated and able to document and communicate work effectively	2
	Proactive and a competent communicator.	2
Training	Willingness to undertake necessary training, including two KTP Associate residential modules	1,3
Qualifications	Minimum 2.1 degree in Electrical Engineering or other relevant scientific or technical subject	1,3
Other	Willing and able to take full ownership of the project, including finances, project management, embedding of knowledge, delivery of the business case	1,3

Desirable Criteria

Area	Criteria	Stage
Experience	Practical engineering system control experience, including instrumentation, control and monitoring	1,3
	Practical and/or industrial experience with real equipment and systems	1,3
Qualifications	PhD covering research into battery energy storage systems	1,3

Conditions of Service

The position is full time and fixed term for 24 months. Salary will be between £27,000 and £32,000 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 Academic and Related staff/Operational and Administrative staff, details of which can be found [here](#).

We strive to create a culture that supports equality 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 see <http://www.lboro.ac.uk/services/hr/athena-swan/>

Informal Enquiries

Informal enquiries should be made to Dr Dani Strickland (Lead Academic) by email at D.Strickland@lboro.ac.uk or by telephone on 01509 227121

Applications

The closing date for receipt of applications is **2 January 2018**. Interviews will be held **w/c 15 January 2018**.