

## **Candidate Brief**

# Research Associate in Vehicle-to-Grid **Technologies**

Reference: R180197

Salary: Grade 8, £32,548 to £34,520

per annum

Contract Type: Fixed Term (12 months, potential for extension to 18

months)

Basis: Full Time

Closing Date: 23.59 hours BST on







# **Job description**

### Job Purpose:

InnovateUK-funded research project "Vehlcle-to-Grid Intelligent control (VIGIL)".

To join the Aston PEMPS/EBRI and work at the cutting edge of V2G technologies and their industrial applications. To undertake independent and collaborative research and will be expected to write up research findings for publications. The RA will be expected to develop an Electric Vehicle battery life-performance prediction model considering V2G application scenarios and analyse grid impacts such as power quality issues. It is also required to produce deliverables ensuring that the project objectives and deadlines are met.

## Main Duties/Responsibilities:

- ▶ Undertake independent and collaborative research and write up research findings for publications: provide short written reports on the research progress for internal auditing, write up and publish the outcomes of research in good quality publications, and present at appropriate internal and external meetings and conferences.
- ▶ Develop an Electric Vehicle battery life-performance prediction model considering V2G application scenarios and analyse grid impacts such as power quality issues.
- Managerial responsibilities within the project "Vehlcle-to-Grid Intelligent control (VIGIL)", and produce deliverables ensuring that the project objectives and deadlines are met.
- Liaise and collaborate with other members of the consortium and colleagues within and beyond the School as appropriate.
- Attention to all relevant Health and Safety procedures and their application at all times as appropriate.

#### Additional responsibilities

- ▶ Engage in continuous personal and professional development in line with the demands of the role, including undertaking relevant training and development activities to develop themselves and support the development of others.
- ▶ Ensure and promote the personal health, safety and wellbeing of staff and students.
- ▶ Carry out duties in a way which promotes fairness in all matters and which engenders trust.
- Promote equality of opportunity and support diversity and inclusion as well as working to support the University's environmental sustainability agenda and practices.

# **Person specification**

	Essential	Method of assessment
Education and qualifications	PhD (or expected to be awarded the PhD shortly) in Electric Vehicles, battery life and performance management, analysis and testing, Smart Grid, Power Quality or relevant fields.	Application form
Experience	Experience of initiating and conducting research up to doctoral level.  Experience of writing up/contributing to the write up of research for high-quality publications.  Experience of producing papers, posters, reports presenting at seminars etc.  Experience of positive collaboration within and outside of candidate's immediate research team.	Application form and interview
Aptitude and skills	Proven ability to multitask effectively and meet deadlines.  Proven ability to work as part of a team, with good interpersonal and communication skills.  Proven ability to problem-solve in a scientific context.  Ability to present data in both a clear and concise manner that is visually appealing.  Ability to prepare written communications to a high standard, and excellent organisational skills.	Application form and interview
Others	A willingness to undertake further training as appropriate and to adopt new procedures as and when required.	Interview

	Desirable	Method of assessment
Experience	Practical/research experience of electric vehicle battery life and performance modelling, testing and analysis.	Application form and interview
	Practical experience of professional software package simulations for electric vehicle and V2G applications.	
	Experience of working with the Electricity Industry, e.g. TSO, DNO, and power/energy related	

	Desirable	Method of assessment
	companies for grid impacts analysis such as power quality.	
	Experience of contributing to and writing research grant proposals and applications.	
Aptitude and skills	An ability to engage in interdisciplinary engineering research.	Application form and interview

## How to apply

You can apply for this role online via our website <a href="www.aston.ac.uk/jobs">www.aston.ac.uk/jobs</a>. Applications should be submitted by 23.59pm on the advertised closing date. All applicants must complete an application form, along with your CV.

Any CV sent direct to the Recruitment Team and Recruiting Manager will not be accepted. If you require a manual application form then please contact the Recruitment Team via <a href="mailto:recruitment@aston.ac.uk">recruitment@aston.ac.uk</a>.

## **Contact Information**

### **Enquiries about the vacancy:**

Name: Dr Jin Yang

Job Title: Lecturer in Power Engineering

Tel: 0121 204 3539

Email: j.yang8@aston.ac.uk

## Enquiries about the application process, shortlisting or interviews:

Recruitment Team via recruitment@aston.ac.uk or 0121 204 4500.

## **Additional Information**

Visit our website <u>www.aston.ac.uk/hr</u> for full details of our salary scales and benefits Aston University staff enjoy

Salary Scales: http://www.aston.ac.uk/staff/hr/payroll-pensions-and-benefits/salary-scales/

Benefits: http://www.aston.ac.uk/staff/hr/payroll-pensions-and-benefits/

Working in Birmingham: <a href="http://www.aston.ac.uk/birmingham/city-living/">http://www.aston.ac.uk/birmingham/city-living/</a>

**Employment of Ex-Offenders:** Under the Rehabilitation of Offenders Act 1974, a person with a criminal record is not required to disclose any spent convictions unless the positions they applying for is listed an exception under the act.

**Eligibility to work in the UK**: Candidates who are not citizens of the United Kingdom, or another EEA member country, should check their eligibility to enter or remain the UK in advance of making any job application via the UKVI website <a href="https://www.gov.uk/browse/visas-immigration/work-visas">https://www.gov.uk/browse/visas-immigration/work-visas</a>. Before applying you should ensure that you meet the requirements, including meeting the English language standards. If you do not meet the eligibility criteria, any application for a work visa would be unsuccessful

**Equal Opportunities:** Aston University promotes equality and diversity in all aspects of its work. We aim to ensure, through our admissions policies for students, and our staff recruitment and selection processes that we encourage applications from all groups represented in the wider community at a local, national and international level.

The University will endeavour not to discriminate unfairly or illegally, directly or indirectly, against student or potential students, staff or potential staff. This commitment applies to all functions of the University and to any stage of an individual's career.

An Equal Opportunities Monitoring Form is included within the application form.

**Data Protection Act 1998:** Your application will only be used to inform the selection process, unless you are successful, in which case it will form the basis of your personal record with the University which will be stored in manual and/or electronic files. Information in statistical form on present and former employees is given to appropriate outside bodies.

Data you provide on the Equal Opportunities Monitoring Form will be included in a general database, for statistical monitoring purposes, enabling the University to monitor the effectiveness of its Policy, Codes of Practice and Guidelines on Equal Opportunities in Employment. Individuals will not be identified by name



Full details of our terms and conditions of service and associated policies and procedures are available online at www.aston.ac.uk/hr