

## Post Description

Post	Research Assistant	Position no:	15742
College / Directorate / Institute	College of Engineering, Design and Physical Sciences (CEDPS) / Department of Electronic and Electrical Engineering / Brunel Interdisciplinary Power Systems (BIPS) Research Centre		
Salary	Grade R1		
Contract type	Fixed-term / 12 months		
Full time/Part time	Full time		
Accountable to	Dr Marko Aunedi		
Reports	N/A		
Internal stakeholders	Dr Marko Aunedi (Brunel Col), Prof Gareth Taylor (BIPS Director)		
External stakeholders	EPSRC, DIGEST consortium members (Oxford University and Imperial College London)		
Date reviewed	July 2024		

### Main accountabilities:

Accountable to: Dr Marko Aunedi (Brunel Co-I, DIGEST Lead Investigator at Brunel), Prof Gareth Taylor (BIPS Research Centre Director)

### Key duties and responsibilities:

We are looking to recruit a Research Assistant to work on an EPSRC-funded project based at Brunel University London entitled “Data-driven exploration of the carbon emissions impact of grid energy storage deployment and dispatch (DIGEST)”. The project involves 3 UK academic research partners and is coordinated by Dr Marko Aunedi on behalf of Brunel University London in the UK.

This fixed-term research position is based at Brunel University London and will investigate the role of energy storage in decarbonising electricity supply, as specified in the agreed DIGEST research plan. The objective of the role is to support research activities at Brunel University London aimed at studying various aspects of energy storage and its contribution to energy system decarbonisation.

Specific duties of the post include:

- To perform the research and technical duties associated with the EPSRC-funded research project DIGEST
- To analyse input and output data associated with modelling energy systems with energy storage
- To contribute to writing reports and producing deliverables as required for the duration of the project
- To disseminate outcomes and results of the project in international journals and conference publications etc.
- To carry out basic project management tasks, prepare reports and liaise with consortium partners and funders as necessary.

- To perform other additional research and scholarly duties in line with Brunel University guidelines.

Applicants are expected to hold a PhD or be in near completion of PhD in an appropriate area and have expertise in one or more of the following areas: energy system modelling and optimisation, power system analysis, transmission and distribution system operation, energy storage, low-carbon energy technologies or other closely related areas. You will be a self-motivated, but highly collaborative researcher. Strong communication and interpersonal skills, fluency in English and an ability to work independently are essential. Candidates will be expected to demonstrate a good track record in basic project management, presenting their work, report writing and research publications. Outstanding candidates without a PhD, but having directly relevant research or practical experience are also welcome to apply.

### **Post Profile**

Postholders will be expected to independently carry out research activities as part of DIGEST project, produce independent original research relating to the DIGEST project, take initiative in the planning of research relating to the DIGEST project and acquiring and interpret research data and results.

### **Communication; Liaison & Networking:**

- Publication of research in refereed journal publications and presentations at conferences.
- Dissemination and exploitation of research output as appropriate for the project work packages.

### **Teamwork and Motivation/Team Development:**

- To support and develop related collaborative research activities and events internally and externally.
- To provide guidance and support to the DIGEST research project staff.

### **Service Delivery and Planning & Organising Resources:**

- Other administrative duties that may include organisation of research meetings, conferences and seminars in relation to the DIGEST research project.

### **Decision Making Processes & Outcomes and Initiative & Problem Solving:**

- To contribute to a balanced research profile for EEE and CEDPS by providing particular skills or techniques.

### **Analysis & Research:**

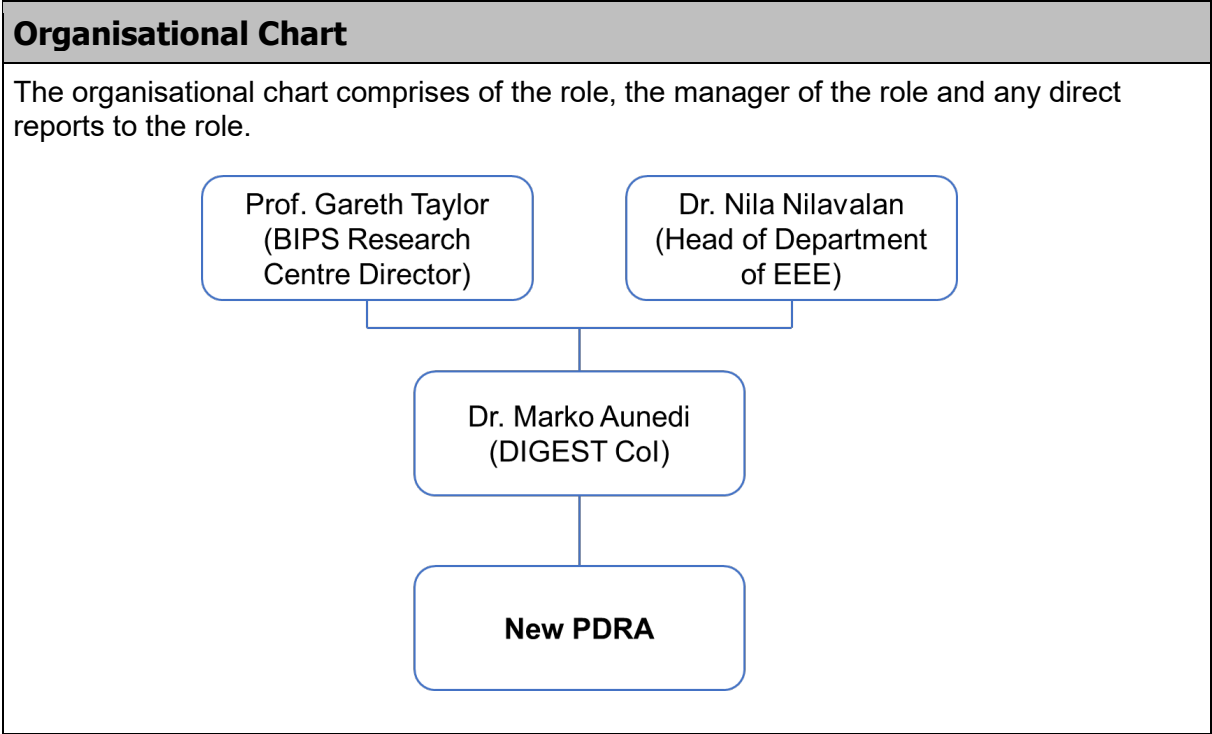
- To participate in all aspects of project research as designated by the research project coordinator and Principal Investigator including such additional duties such as research presentations and demonstrations
- Production of independent original research
- Take initiative in the planning of research

### **Effective Behaviours**

- Timeliness
- Meeting deadlines
- Communication and networking
- Networking group across colleges
- Ability to negotiate and influence
- Ability to plan and organise own workload
- Ability to adapt to a flexible approach to the demands of a busy college/department in order to accommodate changes in priorities when required

**University Employment Policy:**

- 1. Undertake any other reasonable duties as required and commensurate with the grade of post.
- 2. Adhere to and comply with the provisions of the Data Protection Act and the Health and Safety at Work Act in accordance with University policies.
- 3. Undertake all duties and responsibilities in compliance with the rules and regulations encompassing equal opportunities to help foster a diverse workforce.
- 4. Adhere, comply and work in accordance with University and Departmental policies, procedures and codes of conduct.
- 5. Promote the University’s Environmental Policy and demonstrate commitment to it through actions and decision making.
- 6. Actively participate in on-going professional development activities as requested



Disabled applicants meeting the Essential criterion will be guaranteed an interview as part of the University’s commitment to the Disability Confident Scheme.



## Person Specification

Attributes	Criteria	Essential /Desirable	How measured
Education, qualifications & training	<p>A degree or equivalent – (appropriate for PhD registration)</p> <p>Relevant work experience with MSc level or equivalent qualification in relevant disciplines (energy, economics, power systems, engineering)</p>	E	Application form
Experience	<p>Evidence of relevant research or work experience relevant to energy system modelling and optimisation.</p> <p>Evidence of research attainments including examples of written contributions in academic publications/journals.</p> <p>Experience of independently participating in collaborative research projects with minimum supervision.</p>	<p>E</p> <p>E</p> <p>E</p>	<p>Application form, Interview</p> <p>Application form, Interview</p> <p>Application form, Interview</p>
Knowledge Skills & Abilities	<p>Evidence of experience and current knowledge in the relevant area of research activity.</p> <p>Knowledge/experience of computer-based research tools for optimisation and simulation and development of open-source research materials.</p> <p>Evidence of successful participation in collaborative research projects</p> <p>Evidence of collaborative research report or article writing</p> <p>Well-developed communication and interpersonal skills</p> <p>Ability to acquire and interpret research data and results</p> <p>Ability to juggle priorities in the face of competing demands and tight deadlines</p> <p>Ability to draft research papers for publication in appropriate academic journals</p>	<p>E</p> <p>D</p> <p>E</p> <p>E</p> <p>E</p> <p>E</p> <p>E</p> <p>E</p>	<p>Application form, Interview</p> <p>Application form, Interview</p> <p>Application form, Interview</p> <p>Application form, Interview</p> <p>Application form, Interview</p> <p>Application form, Interview</p> <p>Application form, Interview</p> <p>Application form, Interview</p>

Additional Requirements (not included above)			

## Job Hazard Assessment

Any identified hazards have undergone appropriate Risk Assessments.

Please tick all relevant workplace hazards identified with this post.				
Currently the University, as a minimum runs Health Surveillance programmes for staff working with skin and respiratory sensitisers, Biological Agents Class 2 and above and GMOs.				
Display screen <input checked="" type="checkbox"/> equipment	Manual handling <input type="checkbox"/>	Prolonged standing e.g. 1 hour plus <input checked="" type="checkbox"/>	Prolonged sitting e.g. 1 hour plus <input checked="" type="checkbox"/>	
Biological agents: Class 2 and above and GMO Class 1 <input type="checkbox"/>	Human blood, tissue or fluids <input type="checkbox"/>	Respiratory sensitisers or laboratory allergens e.g. animals <input type="checkbox"/>	Skin Irritants/Chemicals <input type="checkbox"/>	
Work in confined Places <input type="checkbox"/>	Ionising radiation <input type="checkbox"/>	Noise (more than 80 dba-8 hrs. taw) <input type="checkbox"/>	Lone working <input type="checkbox"/>	
Use of dangerous machinery <input type="checkbox"/>	Electrical hazards <input type="checkbox"/>	Shift work/night work <input type="checkbox"/>	Work outdoors <input type="checkbox"/>	
Neck & arm vibrating equipment <input type="checkbox"/>	Fork lift truck driving <input type="checkbox"/>	Work at heights <input type="checkbox"/>	Lasers <input type="checkbox"/>	
Any other hazards (e.g. food handling) please specify and ensure that appropriate guidance has been received from the Health & Safety office:				
Physical demands of the job	Lifting <input type="checkbox"/>	Carrying <input type="checkbox"/>	Bending <input type="checkbox"/>	Pushing <input type="checkbox"/>
If lifting/carrying duties expected, please give details of heights/weight load(s) the individual is expected to lift/carry and frequency:				
Travel/Off-site working:	% of time	UK <input type="checkbox"/>	Overseas <input type="checkbox"/>	
Driving for work:	None <input checked="" type="checkbox"/>	Occasionally <input type="checkbox"/>	Weekly <input type="checkbox"/>	Daily <input type="checkbox"/>
Management responsibility:	Supervisor <input type="checkbox"/>		Non-supervisory <input type="checkbox"/>	
Hours of work:	Full time <input checked="" type="checkbox"/>		Part time <input type="checkbox"/> hours	
Non-standard contractual hours? (evenings/weekends) Night work Frequency, number of hours, type of work outside standard hours:				
Other – including occasional or possible work hazards (please specify nature and frequency):				