

## Post Description

Post	Research Assistant	Position no:	15696
College / Directorate / Research Institute	College of Engineering, Design and Physical Sciences Department of Mechanical and Aerospace Engineering		
Salary	Grade R1		
Contract type	Fixed-term contract for 12 months		
Full time/Part time	Full time		
Accountable to	Reader in Mechanical and Aerospace Engineering		
Reports	N/A		
Internal stakeholders	Mechanical and Aerospace Engineering		
External stakeholders	NA		
Date reviewed	April 2024		

### Main accountabilities:

This project is an externally funded grant. The Researcher will ensure that the project deliverables and milestones are delivered in a timely and acceptable manner.

- To work closely with external collaborators and report progress.
- To contribute to writing reports and producing deliverables as required.
- To disseminate outcomes and results of the project (international journals and conference publications etc.)

### Key duties and responsibilities:

The primary focus of the work of the successful applicant will be to:

- Develop a dynamic model for predicting sustainability of the newly developed solar thermal technology.
- Analyze and interpret data from environmental, economic and social assessments.
- Utilize expertise in Python, COMSOL or equivalent software to implement the dynamic model.
- Demonstrate an understanding of solar thermal technologies to contribute to model refinement.
- Experience in Life Cycle Assessment will be considered as an advantage.

### Effective Behaviours

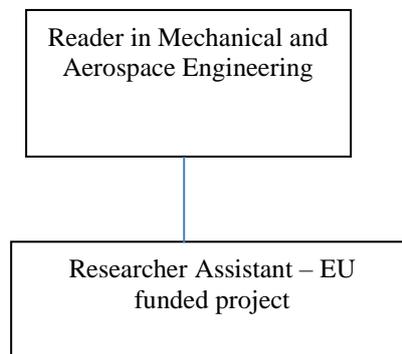
- Timeliness
- Meeting Deadlines
- Communication and Networking
- Networking group across colleges
- Ability to negotiate and influence
- Ability to plan and organise own workload
- Ability to adapt to a flexible approach to the demands of a busy college/department in order to accommodate changes in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

### Organisational Chart

The organisational chart comprises of the role, the manager of the role and any direct reports to the role.



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	A degree or equivalent.	E	Application form
Experience	Details of previous employment/research and/or academic achievements applicable to the post over the past 2 years	E	Application form, Interview
	Evidence of IT literacy including Python, COMSOL or equivalent software	E	Application form, Interview
Knowledge Skills & Abilities	Evidence of current knowledge in the subject area	E	Application form, Interview
	Demonstrate ability in acquiring and Interpreting research data and results	E	Application form, Interview
	Ability to compile reports and give/participate in academic presentations	E	Application form, Interview
	Ability to draft research papers for Publication in appropriate academic journals	E	Application form, Interview
Additional Requirements (not included above)			

### Job Hazard Assessment Form (JHF)

Job description attached (must incorporate identified hazards)			
Please tick all relevant workplace hazards identified with this position. Currently the University, as a minimum runs Health Surveillance programmes for staff working with skin and respiratory sensitizers, Biological Agents Class 2 and above and GMOs.			
<input checked="" type="checkbox"/> Display screen equipment	<input type="checkbox"/> Manual handling	<input type="checkbox"/> Prolonged standing e.g. 1 hour plus	<input type="checkbox"/> Prolonged sitting e.g. 1 hour plus
<input type="checkbox"/> Biological agents: Class 2 and above and GMO Class 1	<input type="checkbox"/> Human blood, tissue or fluids	<input type="checkbox"/> Respiratory sensitizers or laboratory allergens e.g. animals	<input type="checkbox"/> Skin Irritant/Chemicals
<input type="checkbox"/> Work in confined places	<input type="checkbox"/> Ionising radiation	<input type="checkbox"/> Noise (more than 80 dba- 8 hrs. law)	<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
Any other hazards (e.g. food handling) please specify and ensure that appropriate guidance has been received from the Health & Safety office:			
Physical demand of the job:	<input type="checkbox"/> Lifting	<input type="checkbox"/> Carrying	<input type="checkbox"/> Bending <input type="checkbox"/> Pushing
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: .....	<input checked="" type="checkbox"/> UK	<input type="checkbox"/> Overseas
Driving for work:	<input type="checkbox"/> None/Occasionally	<input type="checkbox"/> Daily	<input type="checkbox"/> Weekly
Management responsibility:	<input type="checkbox"/> Supervisor		<input type="checkbox"/> Non-supervisory
Hours of work:	<input checked="" type="checkbox"/> Full time		<input type="checkbox"/> Part time      17.5hours
<input type="checkbox"/> Non-standard contractual hours? (evenings/weekends)		<input type="checkbox"/> Night work	
Frequency, number of hours, type of work outside standard hours: .....			
Other – including occasional or possible work hazards (please specify nature and frequency):			

The hazards outlined in this form are all subject to prior departmental risk assessment and may also be subject to provision of health surveillance, immunisation or training organised initially by the manager by contacting the Health and Safety Department and/or Staff Development.