



## Research Assistant

Reference: R210500

Salary: £29,614 - Grade 7

Contract Type: Fixed term

Basis: Full Time

# Job description

## Job Purpose:

To develop the simulation tools and model for organic Rankine cycle (ORC) for waste heat recovery from glass, steel, and cement industries.

## Main Duties/Responsibilities:

### Research

- ▶ To develop basic simulation tool for foundation industries which can be used to assess the waste heat potential
- ▶ To develop preliminary model of the waste heat recovery technology, especially, organic Rankine cycle, to assess the performance of ORC system under given conditions of the waste heat source.
- ▶ To identify the challenges and opportunities for implementation of waste heat recovery in the foundation industry
- ▶ To develop questionnaires and conduct survey regarding implementation of waste heat recovery technologies in foundation industries
- ▶ To develop techno economic model of the ORC system
- ▶ Conduct preliminary feasibility study of ORC implementation for waste heat recovery from the foundation industry
- ▶ To manage data to ensure data integrity and ease of access to data for the principal and co-investigators.
- ▶ To prepare study findings for presentation in study reports and publication in scientific journals.
- ▶ To ensure that all work is undertaken and analysed in a timely manner and in line with the milestones and deliverables outlined by the principal investigator.
- ▶ To present information on research progress and outcomes to research team and bodies supervising research, e.g. steering groups.
- ▶ To liaise with research colleagues and study participants as required.

### External Engagement

- ▶ To attend and participate in internal and external networks, workshops, and seminars as appropriate and related to the research project

### Citizenship

- ▶ To display and promote Aston values through own actions and behaviour.
- ▶ To undertake such other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

### Additional responsibilities

- ▶ Engage and coordinate with the project manager and principal investigator.
- ▶ Ensure and promote the personal health, safety and wellbeing of staff and students.
- ▶ 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
<b>Education and qualifications</b>	Minimum MSc / MEng in Mechanical Engineering or closely related field.	Application form
<b>Experience</b>	Experience in organic Rankine cycle or waste heat recovery technologies  Experience of writing reports and delivering presentations	Application form and interview
<b>Aptitude and skills</b>	Ability to work effectively in a team and with project partners.  Ability to contribute to the planning of research projects  Ability to deliver research objectives, deliverables and milestones in a timely manner.  Report writing and PowerPoint presentations	Application form and interview

	Desirable	Method of assessment
<b>Education and qualifications</b>	PhD in Mechanical Engineering or closely related field	Application form
<b>Experience</b>	Experience in conducting techno economic feasibility of energy systems	Application form and interview
<b>Aptitude and Skills</b>	Excellent verbal and written communication skills with the ability to liaise with partners.	Application form and interview



# Contact information

## Enquiries about the vacancy:

Name: Dr. Muhammad Imran

Job Title: Lecturer

Email: [m.imran12@aston.ac.uk](mailto:m.imran12@aston.ac.uk)

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

Recruitment Team via [jobs@aston.ac.uk](mailto:jobs@aston.ac.uk) or 0121 204 4500.

# Additional information

Visit our website <https://www2.aston.ac.uk/staff-public/hr> for full details of our salary scales and benefits Aston University staff enjoy

**Salary scales:** <https://www2.aston.ac.uk/staff-public/hr/payroll-and-pensions/salary-scales/index>

**Benefits:** <https://www2.aston.ac.uk/staff-public/hr/Benefits-and-Rewards/index>

**Working in Birmingham:** <https://www2.aston.ac.uk/birmingham>

**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:

New immigration system from 1 January 2021

A new immigration system has been introduced for people arriving in the UK from EEA countries with effect from 1 January 2021. In addition to those who have always required a visa, EU citizens who were not resident in the UK before 31 December 2021 will need to get a visa in advance.

You can find more information [here](#)

Candidates should check their eligibility to enter or remain in the UK in advance of making any job application via the [UKVI website](#). Before applying you should ensure that you meet the requirements, including meeting the English Language requirements. If you do not meet the eligibility criteria, any application for a work visa would be unsuccessful.

If you require a visa to work in the UK the most common types of visa are:

- Skilled Worker Visa <https://www.gov.uk/skilled-worker-visa>
- Global Talent Visa

If you are a leader or potential leader in one of the following fields you may be eligible to



apply for a Global Talent Visa:

- Academia or Research
- Arts and Culture
- Digital Technology

Please click the following link for further information and to check your eligibility for this visa. <https://www.gov.uk/global-talent>

**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 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.

**Data Protection:** Your personal data will be processed in compliance with the Data Protection Act 2018 and the General Data Protection Regulation ((EU) 2016/679) ("GDPR"). The University's Data Protection Policy and Privacy Notices, including the Job Applicant Privacy Notice can be found at <https://www2.aston.ac.uk/data-protection>. 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.

Full details of our terms and conditions of service and associated policies and procedures are available online at <https://www2.aston.ac.uk/staff-public/hr/policies>

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**Where change  
gets real.**