



IMPACT

Knowledge Exchange Associate

Reference: 0415-23

Grade: 8

Salary: £36,333 per annum

Contract Type: Fixed Term (up to 14 months)

Basis: Full Time

Job description

Job Purpose:

The purpose of the role is to provide technical and scientific support for the Biochar Innovation Accelerator project. The post will be required to work closely with academics in the Energy and Bio-products Research Institute (EBRI), Mechanical Engineering, and Aston Business School, as well as with industrial partners. The work will focus on creation of viable products from the materials produced from pyrolysis processes.

The Biochar Innovation Accelerator project will require you to provide support to academic and industrial partners with analysis and blending of materials produced by pyrolysis equipment and recommendations for design modifications to improve opportunities for the creation of marketable products. This will include use of the EBRI, Mech Engg as well as commercial labs, the production of analytical reports and work on industrial applications. You will be required to support setting specification and process parameters relating to required product characteristics as well preparation of trials for the marketplace.

You will be required to support the delivery of feasibility studies, standardization and certification of materials and products.

Experience with working with fuel blending, applications such as boilers and engines as well as pyrolysis equipment to near industrial scale is essential. Practical experience working with laboratory analysis, industrial partners and safety systems is also essential along with a pragmatic and grounded approach to scientific methodology and plant operation.

Duration of the post is until the end of March 2025.

Main duties and responsibilities

- ▶ To provide mechanical engineering support to the Innovation Accelerator project
- ▶ To support businesses in the biochar cluster
- ▶ Assistance with design optimisation of equipment for potential commercial application
- ▶ Support for plant safety systems and safe operation
- ▶ Fuel blending and upgrade for market trials
- ▶ Production of analytical reports
- ▶ Assistance with specification of process parameters relating to the require products
- ▶ Contribution to feasibility studies
- ▶ Contribution to standardisation and certification of products
- ▶ To create and deliver effective presentations to business audiences
- ▶ To support the development, writing and preparation of bids for collaborative research and development projects.
- ▶ To develop collaborative projects with businesses located in the West Midlands area supported by the Biochar Innovation Accelerator project ideally leading to future funded or commercially beneficial activities.

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.
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Person specification

	Essential	Method of assessment
Education and qualifications	Post graduate level qualification in mechanical or chemical engineering	Application form
Experience	<p>Experience of a multi-disciplinary approach to fuel characterisation including use of analytical equipment associated with both chemical and mechanical engineering.</p> <p>Experience of producing analytical reports and presentations suitable for a wide audience.</p> <p>Experience upgrading pyrolysis liquids using other materials to create viable fuels.</p> <p>Experience of engine testing including performance and emission analysis.</p> <p>Experience of modelling, component specification and modification for practical application</p> <p>Experience of supporting companies with pyrolysis products including liquids and biochar</p> <p>Experience of working with industrial scale or near industrial scale pyrolysis plant</p>	Application form and interview
Aptitude and skills	<p>Analytical skills with modelling and data interpretation.</p> <p>Excellent team working, communication and interpersonal skills.</p> <p>Ability to work with a range of disciplines to develop practical solutions.</p>	<p>Application form, interview and presentation</p> <p>Application form and interview</p>

	Essential	Method of assessment
	<p>Understanding of Health and Safety requirements and rules in different laboratory settings (analytical and industrial labs).</p> <p>Willingness to undertake training and development relating to the project if/when required</p>	

	Desirable	Method of assessment
Experience	<p>Knowledge and experiences of working with engines and boiler applications.</p> <p>Experience of working with renewable energy and energy systems.</p> <p>Previous experience of working in industry.</p>	Application form and interview

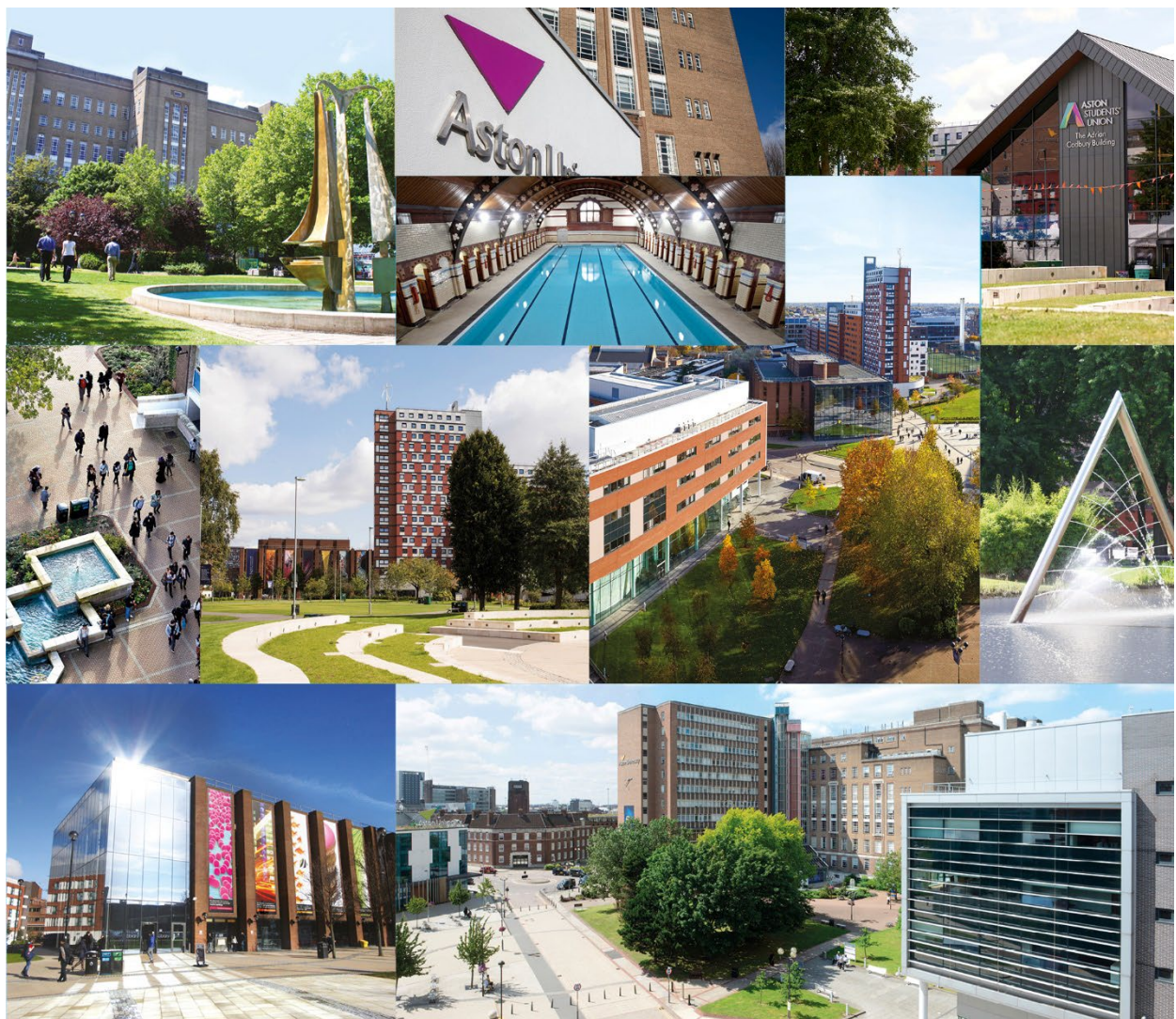
How to apply

You can apply for this role online via our website <https://www2.aston.ac.uk/staff-public/hr/jobs>.

Applications should be submitted by 23.59 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 jobs@aston.ac.uk.



Contact information

Enquiries about the vacancy:

Name: Tim Miller

Job Title: Government and Enterprise Engagement Manager

Email: t.miller1@aston.ac.uk

Enquiries about the application process, shortlisting or interviews:

Recruitment Team via 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:

Post-Brexit transition period / EU Settlement Scheme

The post-Brexit transition period ended on 31 December 2020. If you are an EU/EEA citizen and you were a resident in the UK before 31 December 2020, you and your family members (including non-EU citizens need to apply to the EU Settlement Scheme to continue to live, work and study in the UK beyond 30 June 2021. The deadline for applying to the EU settlement scheme is 30 June 2021. You can apply via the Government webpage <https://www.gov.uk/settled-status-eu-citizens-families>
Irish Nationals do not need to apply for settlement as they retain the right to work in the UK.

New immigration system for EU/EEA and Swiss Nationals who were not resident in the UK before 31 December 2020

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 moving to the UK to work will need to get a visa in advance. You can find more information on the following website. Candidates should check their eligibility to enter or remain in the UK in advance of making any job application via the UKVI website <https://www.gov.uk/browse/visas-immigration/work-visas>. 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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