

## **AIME Postdoctoral Research Associate**



**OPPORTUNITY**

Where change gets real.



**Reference: 0516-24**

**Grade: 7-8**

**Salary: £30,505 - £37,999 per annum, depending on experience.**

**Contract Type: Fixed Term**

**Basis: Full Time**

## Job description

### Job Purpose:

The newly established Aston Institute for Membrane Excellence (AIME) is a unique, interdisciplinary, intersectoral research and training hub for translational membrane science. AIME is supported by the Research England (RE) Expanding Excellence in England (E3) Programme and will synergistically combine world-leading expertise in membrane biology and novel polymer chemistries to establish a first-of-its-kind institute, expanding our distinctive excellence in computational membrane science, membrane structural determination and sustainable polymers research. Over the next five years, we will recruit 20 new colleagues to expand our new institute.

We now wish to recruit one Postdoctoral Research Associate to build capacity in AIME. This is an exciting opportunity to create and contribute to the creation of knowledge by undertaking a specified range of activities within an established research program and/or specific research project.

Magnetosomes of magnetotactic bacteria (MTB) are magnetic nanomaterials with exceptional properties such as narrow size distribution, ferrimagnetic behaviour, allow for one-step functionalisation and are coated by an organic layer that prevents self-aggregation, which makes them extremely attractive for many biotechnology and biomedicine sectors. However, their real-world application as next generation nanomedicine is still outstanding. To address this challenge, this project aims to engineer magnetotactic bacteria for improved functionality and, evaluate the use of MTB cells and magnetosomes as drug carriers to develop novel therapies to treat cancer.

The post holder will work closely with members of AIME across the Colleges of Engineering and Physical Sciences (EPS) and Health and Life Sciences (HLS) and is expected to contribute to, develop and enhance the research and scholarship. In addition, the post holder will develop external links with regional UK and international bodies such as government agencies, schools, colleges, professional bodies, business and industry as appropriate to AIME's strategy.

The post is available for a fixed term of 1 year with the possibility to extend two additional years. The ideal start date is 1st December 2024 or as soon as possible thereafter.

### Main duties and responsibilities

The responsibilities may include some but not all of the responsibilities outlined below.

- ▶ Develop research objectives and proposals for own or joint research, with assistance of a mentor if required.
- ▶ Contribute to writing bids for research funding.
- ▶ Analyse and interpret data.
- ▶ Apply knowledge in a way which develops new intellectual understanding.
- ▶ Disseminate research findings for publication, research seminars, etc
- ▶ Supervise students on research related work and provide guidance to PhD students where appropriate to the discipline.
- ▶ Contribute to developing new models, techniques and methods.
- ▶ Undertake management/administration arising from research.
- ▶ Contribute to Departmental/School research-related activities and research-related administration.
- ▶ Collect research data; this may be through a variety of research methods, such as scientific experimentation, and literature reviews.
- ▶ Present research outputs, including drafting academic publications or parts thereof, for example at seminars and as posters.
- ▶ Provide guidance, as required, to support staff and any students who may be assisting with the research.
- ▶ Deal with problems that may affect the achievement of research objectives and deadlines.

### **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.

## Person specification

	Essential	Method of assessment
<b>Education and qualifications</b>	<p>First degree in a bioscience, biotechnology or biochemical engineering discipline and a PhD or near to completion (or equivalent doctoral qualification, eg EngD) in Chemical/Biochemical Engineering, Biotechnology, Cell Biology or a related area. Previous postdoctoral experience is not essential.</p> <p>For appointment at Grade 8: A PhD in a relevant subject.</p> <p>For appointment at Grade 7: PhD thesis in a relevant subject submitted and awaiting award.</p>	Application form
<b>Experience</b>	<p>Excellent written English evidenced through publications or similar.</p> <p>Extensive experience of microbiology and molecular biology</p> <p>Experience in the use of some or all of the following is desirable: cell culture, flow cytometry, TEM, confocal microscopy; microbial fermenters, spectroscopy techniques (e.g. LC-MS, ICP), nanoparticle characterisation techniques (e.g. DLS, nanoFCM)</p> <p>High level analytical capability</p> <p>Ability to communicate complex information clearly.</p> <p>Fluency in relevant models, techniques or methods and ability to contribute to developing new ones.</p>	Application form and interview

	Essential	Method of assessment
<b>Aptitude and skills</b>	<p>Ability to assess resource requirements and use resources effectively.</p> <p>Understanding of and ability to contribute to broader management/administration processes.</p> <p>Contribute to the planning and organising of the AIME research project.</p> <p>Decide in consultation with the principal investigator as appropriate, on the most appropriate way of undertaking the specified research activities.</p> <p>Decide in consultation with the principal investigator as appropriate how to analyse and interpret the data from the specified research activities.</p> <p>Decide in consultation with the principal investigator as appropriate what knowledge to draw on and how to apply it to develop new intellectual understanding.</p> <p>Decide in collaboration with co-authors which aspects of the research findings to include in a presentation or a publication and how to convey the findings.</p> <p>Give guidance, support and advice to students on research related work including PhD and MEng students and decide the most appropriate method of providing this supervision.</p> <p>Co-ordinate own work with project co-leads and collaborators</p> <p>Liaise with research staff and support staff on research-related matters.</p> <p>Give presentations and/or contribute to presentations at project meetings with other project collaborators.</p> <p>Give presentations and/or contribute to presentations at national and/or international conferences.</p> <p>Referee articles for peer-reviewed academic journals.</p> <p>Maintain contact with (including membership of) appropriate professional bodies.</p>	Application form and interview

	Essential	Method of assessment
	<p>Liaise with the relevant external research community via seminars and conferences.</p> <p>Ensure compliance with health and safety in all aspects of work.</p>	

	Desirable	Method of assessment
<b>Experience</b>	<p>Experience with microbial fermenters/ bioreactors.</p> <p>Experience with “omics” techniques.</p> <p>Ability or potential to contribute to the development of funding proposals in order to generate external funding to support research projects.</p> <p>Previous expertise in genetics of magnetotactic bacteria and/or magnetosome bioprocessing will be an asset.</p>	Application form and interview
<b>Aptitude and skills</b>	<p>Excellent verbal communication skills and the ability to deal with a wide range of people.</p> <p>Ability to organise own work with minimal supervision.</p>	Application form and interview



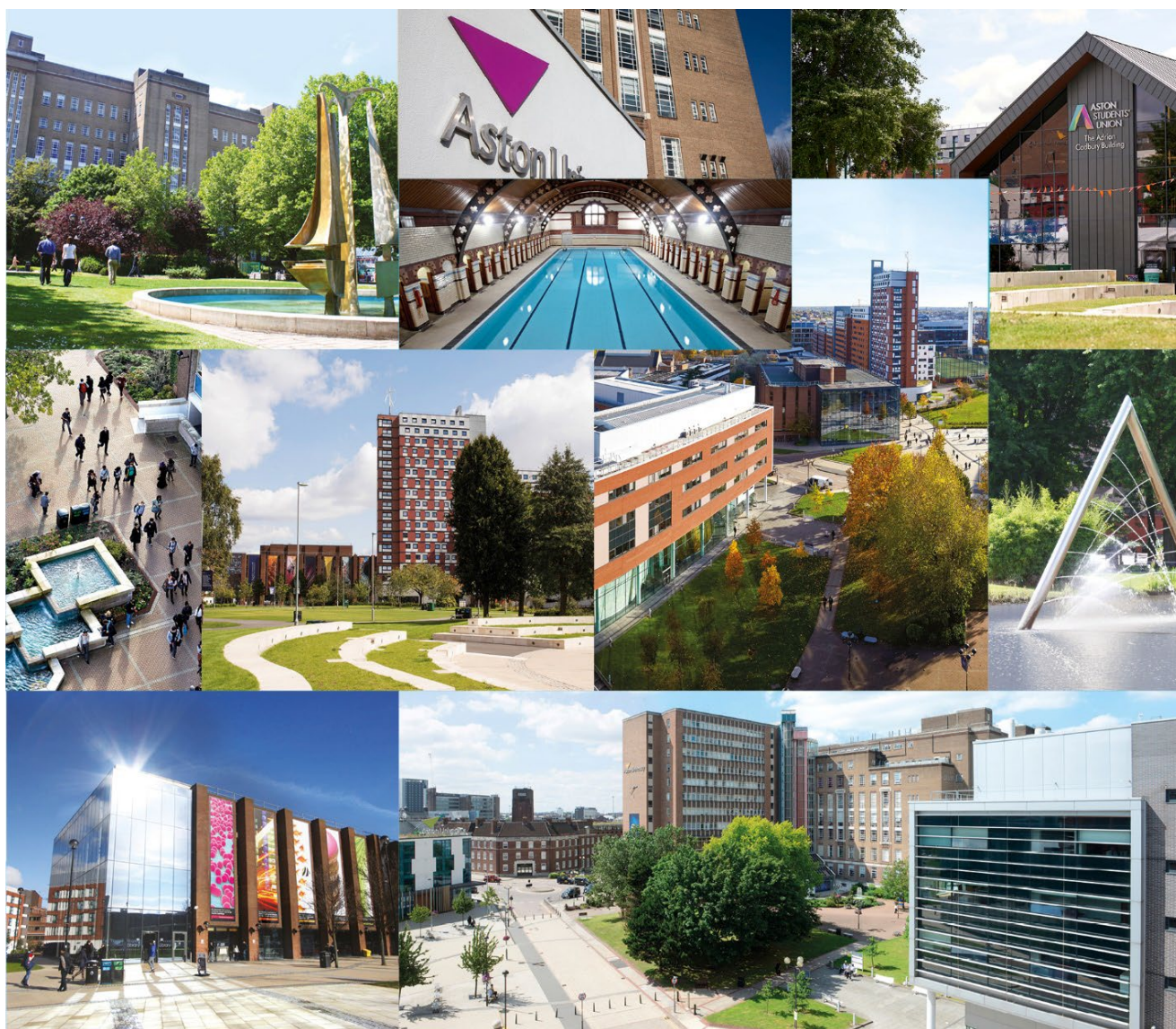
## How to apply

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 pm 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](mailto:jobs@aston.ac.uk).



## Contact information.

### Enquiries about the vacancy:

Name: Alfred Fernandez-Castane

Job Title: Senior Lecturer

Email: [a.fernandez-castane1@aston.ac.uk](mailto:a.fernandez-castane1@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:** [Benefits and Rewards | Aston University](#)

**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:** You should ensure that you meet the eligibility requirements, including meeting the [English language standards](#). If you do not meet the eligibility criteria, any application for a work visa would be unsuccessful. Please see UKVI guidance for further information on eligibility, knowledge of English requirements and approved test centres <https://www.gov.uk/tier-2-general>

With the end of free movement for EU/EEA/Swiss nationals from 1 January 2021, the UK's new immigration system applies to all non-UK/Irish nationals who require a visa.

Where an individual is subject to UK immigration control, they will require a visa to work in the UK.

The following individuals do not need a visa for the UK, but do still have to prove their right to work before employment can commence:

- **British Citizens or Irish Nationals**
- **EU/EEA/Swiss nationals with Settled or Pre-settled status under the EU Settlement Scheme**
- **Non-EEA nationals with Indefinite Leave to Remain/Settlement in the UK**



The main routes available for those who need a visa to work in the UK are **Skilled Worker**, **Global Talent** and the **Graduate Route**.

You can find further information about each of these visa routes on our [candidate immigration page](#).

If you will conduct research in your role, you may need to apply for and obtain ATAS clearance before Aston can issue a Certificate of Sponsorship for your visa application. Please see below for further details.

**Academic Technology Approval Scheme (ATAS):** If you will conduct research in your role and you apply for a Skilled Worker or Temporary Worker GAE visa, you may need to apply for and obtain ATAS clearance before Aston can issue a Certificate of Sponsorship for your visa application.

This process can take at least 6 weeks to process, and Aston will consider this when confirming your expected start date. Processing times will increase between April and September and can longer to complete.

There is no fast-track option available. ATAS certificates will be processed in order of receipt.

You can find more information about ATAS on our [candidate immigration page](#).

## **Before you start and Right to Work**

### **90-day entry vignette**

If you have applied for your visa outside of the UK, you will receive a vignette in your passport which is usually valid for 90 days. Please make sure to travel to the UK within the 'valid from' and 'valid to' dates on this visa. If you entered the UK before or after these dates, you would not 'activate' the visa and you would need to leave and re-enter the country.

You will also receive a decision letter confirming details about your immigration permission and where to collect your Biometric Residence Permit.

### **Cost of Living - Estate and Letting Agents**

There are numerous Estate and Letting Agents in and around Birmingham that can help you find suitable accommodation. The [Midland Landlord Accreditation Scheme](#) provides a list of professional agencies and landlords who have applied with them for accreditation. Whilst accreditation is not a guarantee of quality, it provides some reassurance about the standard of the service they provide.

You can also use property search websites such as [Rightmove](#) or [Zoopla](#).

**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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[aston.ac](https://www2.aston.ac.uk)



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