

Research Assistant/Research Associate



Reference: 0056-25 Grade: 7/8 Salary: £30,805 to £38,249, per annum, depending on experience Contract Type: Fixed Term (Up to 15 months) Basis: Full Time

Job description

Job Purpose:

To carry out research into optical communications systems using a combination of optical frequency combs, tuneable lasers and high cardinality modulation formats and contribute to the growth of the group by enhancing reputation and fostering collaboration. In addition, to exploit external links with regional, UK and international bodies such as schools, colleges, professional bodies, business, and industry as appropriate.

Main duties and responsibilities

Research

- To carry out research in line with the project plan to which you are assigned, implementing novel ideas and planning associated research tasks novel ideas and contributing to the planning of associated research tasks.
- To develop research objectives, projects and proposals for personal/joint research programmes consistent with the priorities and strategy of AiPT, with the assistance of a mentor at Grade 7.
- Maintain accurate and traceable working records, including appropriate software version control and links to raw data.
- Develop (Grade 7) and maintain (Grade 7 & 8) a sufficient breadth or depth of specialist knowledge in the discipline, and of research methods and techniques to work within established and new research programmes.
- ▶ To write up and publish the outcomes of research in top quality journals and conferences.
- Engage fully in Aston Universities Open Access and Open Data initiatives, optimising the format of data to be made accessible, and maintain an appropriate presence on the AIPT web pages and other electronic communication tools.
- (Grade 8 only) To actively contribute to research initiatives with colleagues in and beyond the College as appropriate.
- (Grade 8 only) To identify sources of funding, and fully support the development of further research proposals, contributing novel ideas, concepts and background material

Teaching

- (Grade 8 only) To assist in the supervision of PhD students and MSc research projects, and provide reasonable support to the delivery of undergraduate modules as requested by your group leader
- To contribute to the assessment of student knowledge and the supervision of student projects.
- To undertake up to 6 hours of teaching per week or support teaching and assessment activity in a module(s) relevant to area of research.
- ► (Grade 8 only) To assist in the development of student research skills.
- (Grade 7 only) Assist in the supervision of student projects

External engagement

- Travel nationally and internationally to disseminate research output, participate in project meetings and activities and plan future research proposals.
- To represent the interests of the subject and School via activities to raise the regional, national and international profile, particularly with the professions, schools and businesses.
- Grade 8 only) To forge relationships with the professional bodies and other bodies representing relevant professional interests.

Citizenship

- To take part in the meetings and activities of AiPT and, on occasion, act as Chair of one or more activity, these responsibilities being equitably distributed across all staff.
- (Grade 8 only) To demonstrate the University's leadership 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 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.

Person specification

	Essential	Method of assessment
Education and qualifications	 1st class or upper second in Electronic Engineering, Applied Physics or equivalent. 	Application form
	Grade 7:	
	Experience in the application of machine learning to optical communications or in wavelength division multiplexed optical communications.	
	Grade 8:	
	PhD or near to completion in the application of machine learning to wavelength division multiplexed optical communications or equivalent research experience.	
Experience	Grade 7 & 8:	Application form and interview
	 Experience of applying standard research techniques to gather and analyse data. 	Interview
	 Experience of writing reports and delivering presentations. 	
	 Experience in undertaking data analysis and interpreting result. 	
	 Experience of positive collaboration within and outside of candidate's immediate research team. 	
	Grade 8:	
	Good recent publication record in international journals and high impact conferences including ECOC and/or OFC.	

	Essential	Method of assessment
	 Experience of experimental optical communication system performance characterisation, test bed design and assembly. Experience of the development of advanced digital signal processing algorithms. 	
Aptitude and skills	 Grade 7 & 8: Ability to present data in both a clear and concise manner that is visually appealing. Ability to prepare written communications to a high standard. A willingness to undertake further training as appropriate and to adopt new procedures as and when required. Grade 8 only: Knowledge of the protection of intellectual property. Ability to harness IT as a research and teaching tool. 	Application form and interview

University values

All staff are expected to demonstrate/promote the University's values and expectations, which are an integral part of our strategy and underpin the culture of the University. In addition, our leaders are expected to be accountable, help to execute strategic visions of the University and share and set clear expectations that inspire those around them.



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 23.59pm 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 <u>recruitment@aston.ac.uk</u>.

Contact information

Enquiries about the vacancy:

Name: Andrew Ellis Job Title: 50th Anniversary Chair of Optical Communications Email: <u>andrew.ellis@aston.ac.uk</u>

Enquiries about the application process, shortlisting or interviews: Recruitment Team via <u>recruitment@aston.ac.uk</u> or 0121 204 4500.

Additional information

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

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

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 <u>English language standards</u>. 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 <u>https://www.gov.uk/tier-2-general</u>

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, <u>but</u> 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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www.aston.ac.uk