

Research & Innovation Associate



Reference: 0599-26

Grade: 8

Salary: £38,784 to £42,254, per annum, depending on experience

Contract Type: Fixed Term (up to 36 months at grade 8)

Basis: Full Time

Job description

Job Purpose:

To carry out research into optical communications systems using a combination of optical frequency combs, tuneable lasers, high cardinality modulation formats, digital signal processing and field programmable gate arrays 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. The post is funded by a project funded by Research Ireland and EPSRC.

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
- ▶ Maintain accurate and traceable working records, including appropriate software version control, links to raw data and appropriate calibration.
- ▶ Develop and maintain 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.
- ▶ To actively contribute to research initiatives with colleagues in and beyond the College as appropriate.
- ▶ To identify sources of funding, and fully support the development of further research proposals, contributing novel ideas, concepts and background material

Teaching

- ▶ 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.
- ▶ 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.
- ▶ 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.
- ▶ 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	<ul style="list-style-type: none"> • PhD in optical communications (completed or nearing completion), or equivalent experience gained in a research environment • First-class or upper second-class degree in Electronic Engineering, Applied Physics, or a related field 	Application form
Experience	<ul style="list-style-type: none"> • Experience of applying standard research techniques to gather and analyse data. • 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. • Excellent recent publication record in international journals and high impact conferences such as ECOC and/or OFC. <p>Experience in at least three:</p> <ul style="list-style-type: none"> • The use of fast tuneable laser in high-capacity communication systems • Development of recirculating loop based optical communications testbeds. • Low latency applications of FPGAs on a sub ns timescale 	Application form and interview

	Essential	Method of assessment
	<ul style="list-style-type: none"> Digital signal processing in high speed optical communications 	
Aptitude and skills	<ul style="list-style-type: none"> 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. 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.

Values + Behaviours



Innovation

We strive for excellence within ourselves and others, providing solutions to new and existing challenges.



Collaboration

We work best when we are collaborative, working together to contribute to the Aston community.



Ambition

We strive together for improvement and innovation looking ahead to see the bigger picture.



Inclusion

We treat everyone in our community equally and how they would like to be treated.



Integrity

We are open, honest and fair. We take ownership of the way we work and how we treat each other.

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 recruitment@aston.ac.uk.

Contact information

Enquiries about the vacancy:

Name: Andrew Ellis

Job Title: 50th Anniversary Chair of Optical Communications

Email: andrew.ellis@aston.ac.uk

Enquiries about the application process, shortlisting or interviews:

Recruitment Team via recruitment@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: 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**.

Please see UKVI guidance for further information on eligibility, knowledge of English requirements and approved test centres <https://www.gov.uk/skilled-worker-visa> You can also find further information on our candidate immigration [web 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 our candidate immigration [web page](#) for further details.

Before you start and Right to Work

Right to Work Check

All employees must complete a Right to Work check before they commence work at Aston. HR will contact you during the onboarding process to arrange your check.

Cost of Living - Estate and Letting Agents

There are numerous Estate and Letting Agents that can help you find suitable accommodation. Useful websites for support and guidance

<https://www.gov.uk/government/publications/how-to-rent/how-to-rent-the-checklist-for-renting-in-england> and <https://www.citizensadvice.org.uk/housing/>

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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