

# Research Fellow in High Speed Optical Fibre Communications

Reference: R210203

**Salary:** Grade 8 or 9, £33,797 to £49,553 per annum

Contract Type: Fixed term (36 months)

Basis: Full Time









## Job description

#### Job Purpose:

To plan, direct and undertake research into high speed optical fibre communications, provide technical inputs within Aston and to external partners, and to design, implement, and conduct complex experiments to measure optical fibre communications system performance.

#### Main duties and responsibilities

- To carry out research in the field of high speed optical fibre communications, implementing and investigating new ideas, and planning associated research tasks.
- ► To develop research objectives consistent with the delivery of the EPSRC TRANSNET research project.
- To operate high speed optical transceivers, optical amplifiers, optical switches, and sundry related photonic technologies, and associated optical and electronics test equipment in the conduct of TRANSNET research.
- ► To conduct associated numerical modelling of optical communication system performance.
- To maintain a sufficient breadth or depth of specialist knowledge in the discipline, and of research methods and techniques to work within the TRANSNET research programme.
- To maintain accurate and traceable working records, including appropriate software version control as appropriate, and links to raw data.
- ► To write up, publish and present research outcomes of research for journal papers, conferences, seminars, and the media.
- To engage with TRANSNET academic and industrial project partners.
- To coach junior colleagues in research.
- To support supervision and training of postgraduate students.
- To assist with the development of related research initiatives, including funding applications to secure external research funding

#### 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	1 <sup>st</sup> class or upper second degree in Electronic Engineering, Applied Physics or equivalent.	Application form
	PhD in optical communications or closely related field, or near completion of PhD, or relevant industrial experience.	
Experience	Good recent publication record of relevant articles in international journals and high impact conferences such as OFC and ECOC.	Application form and interview
	Experience of experimental optical fibre communication system performance characterization, test bed design and operation.	
	Experience of the modelling/simulation of optical communication systems.	
	Experience of processing of high speed optical data using Matlab-based offline DSP.	
	Experience of academic and industrial collaboration.	
Aptitude and skills	Ability to present scientific/engineering data in a clear and concise matter.	Application form and interview
	Ability to prepare written communications to a high standard.	
	Ability to use IT as a research tool.	
	Willingness to undertake training as appropriate and to adopt new procedures as required.	

	Desirable	Method of assessment
Experience	Experience of using machine learning algorithms in Matlab.	Application form

## How to apply

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

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 <a href="jobs@aston.ac.uk">jobs@aston.ac.uk</a>.



#### **Contact information**

#### **Enquiries about the vacancy:**

Name: Wladek Forysiak Job Title: Professor

Email: W.Forysiak@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 <a href="https://www2.aston.ac.uk/staff-public/hr">https://www2.aston.ac.uk/staff-public/hr</a> for full details of our salary scales and benefits Aston University staff enjoy

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

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

Working in Birmingham: <a href="https://www2.aston.ac.uk/birmingham">https://www2.aston.ac.uk/birmingham</a>

**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 <a href="https://www.gov.uk/settled-status-eu-citizens-families">https://www.gov.uk/settled-status-eu-citizens-families</a>

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 <a href="https://www.gov.uk/browse/visas-immigration/work-visas">https://www.gov.uk/browse/visas-immigration/work-visas</a>. 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 <a href="https://www2.aston.ac.uk/data-protection">https://www2.aston.ac.uk/data-protection</a>. 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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