

Professor of Photonics

Reference: R220341

Salary: Professor Band 1, £59,854 to £93,155 per annum (depending on

skills and experience)

Contract Type: Permanent

Basis: Full Time









Job description

Job Purpose:

Based in the Aston Institute of Photonic Technologies (AIPT), to lead aspects of photonic technology research and scholarship activities within the College of Engineering and Applied Sciences through professional practice and expertise. In addition, to lead external links with regional, UK and international bodies such as government agencies, schools, colleges, professional bodies, business and industry as appropriate with the aim of promoting the use and commercial exploitation of photonic technologies for societal and economic advantage.

Whilst initially bias towards research and engagement, the balance between research and teaching and learning will be discussed and agreed with individuals annually in line with operational needs, Institute, School and University strategy and with consideration of the individual's career goals and development plans.

Professors will have established and maintained international recognition through original, innovative and distinguished contributions to scholarship and research.

Main Duties/Responsibilities:

Research

- ▶ To pursue and lead an internationally recognised Photonic Technology based research programme which both informs and is consistent with the College's research priorities.
- ► To publish the outcomes of research in highly regarded international journals appropriate to industrial, academic, and public audiences.
- ▶ To have proven experience of securing significant external funding from prestigious funders including research councils, charities and the European Commission and a record of successfully leading and managing research projects, people and resources.
- ► To establish, and sustainably operate, key Photonics facilities and major research programmes.
- ▶ To establish partnership links with external organisations to enhance Aston's research and industry profile with a particular focus on high potential value start-ups, UK SMEs, industry.
- ▶ To provide strong leadership and team building in the management of research projects.
- ► To supervise postgraduate, masters and doctoral levels students to completion. To foster an environment which encourages collaborative research at all levels.
- To lead research initiatives with colleagues and a wide range of external collaborators including internationally funded research projects as appropriate.
- ► To conduct research capable of demonstrating significant impact e.g. research which has the potential to benefit the economy, society, culture, public policy or services, health, the environment or quality of life.
- ► To develop and nurture an entrepreneurial culture amongst PGR, PDRAs, and academic staff in AIPT
- ▶ To build critical mass and promote excellence in photonic technologies.

Teaching and Learning

- ► To develop strong links with at least one undergraduate programme in the School of Informatics and Digital Engineering (CS, Maths, EEE).
- ► To be ready to develop appropriate PGT&CPD courses
- ► To engage with undergraduate students at different levels, offering opportunities to experience research culture and enhancing employability.
- ► To identify the opportunities for taught programmes in Photonics with a particular focus of the needs of Aston's stakeholders, or the addition of Photonics modules to existing programmes, and to oversee the development of appropriate modules and programmes.
- ► To provide academic support, pastoral care, and advice to Aston students at a variety of levels.
- ▶ To mentor colleagues in effective teaching practice.
- ► To cooperate with colleagues across disciplines in the continuous review and development of programmes and the curriculum.
- ► To promote the use of best-in-class methods and techniques in teaching, learning and assessment.

External Engagement

- ► To demonstrate research impact and secure commercialisation, identifying and pursuing opportunities for translational research.
- ► To continue to build on an established record of invited international keynote conference presentations and prestige lectures.
- ► To establish and lead partnerships for commercialisation including patents, inventions, and other exploitable intellectual property.
- ► To develop research and development collaborations with industry partners.
- ► To contribute to businesses, the public sector and communities e.g. through innovation, knowledge transfer, cultural enrichment, advising government bodies, contributing to and influencing government (UK or overseas) policy-making and standards.
- ► To take the lead in community engagement activities to raise the regional and national profile of the School.
- ► To enhance the University's reputation with professional bodies such as Optica, Institute of Physics, and the IEEE Photonics Society through active participation.
- ► To develop student placement schemes with companies and research institutions both in the UK and overseas.

Citizenship

- ▶ To contribute to effective leadership of the Aston Institute of Photonic Technologies.
- ► To make an outstanding contribution to governance and collegial life within and outside the University, for example by Chairing school committees, undertaking significant administrative positions, or participating in or Chairing University-level committees.
- ► To participate in continuing professional development e.g. through seminars or conferences and by engaging in training programmes run by the University which are consistent with the needs and aspirations of the academic and the School.

- ► To develop and manage major cross-departmental events e.g. Open Days, Sixth Form Conferences, Scientific Festivals etc.
- ▶ 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.
- ▶ 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	A doctorate in Photonics or semiconductors or equivalent industrial experience.	Application form
	Senior membership of a relevant professional body.	
	A recognised teaching qualification /membership of Advance HE (formally known as Higher Education Academy or HEA) at Fellow level as a minimum, Principal Teaching Fellow if focus is teaching.	
Experience	Significant experience of initiating and conducting Photonics research.	Application form and interview
	A proven track record of sustainable research as evidenced by publication in international journals specialising in Photonics, and participation	
	A record of accomplishment of having secured a pipeline of research funds from external sources sufficient to maintain a productive research team.	
	Proven experience of productive research collaborations in order to build critical mass and promote excellence.	
	Proven track record of the establishment and sustainable operation of research facilities of relevance to Photonics	
	Successful supervision of PhD students to completion.	
Aptitude and skills	Ability to lead the development and implementation of research strategy.	Interview
	Highly developed communication and presentation skills to present research findings at national and international conferences.	

Essential	Method of assessment
Ability to provide tutorial and counselling advice to undergraduate and postgraduate students.	
Commitment to Equality and Diversity.	

	Desirable	Method of assessment
Experience	Management and leadership of an academic department or Research Institute.	Application form and interview.
	Management of budgets and budget setting.	

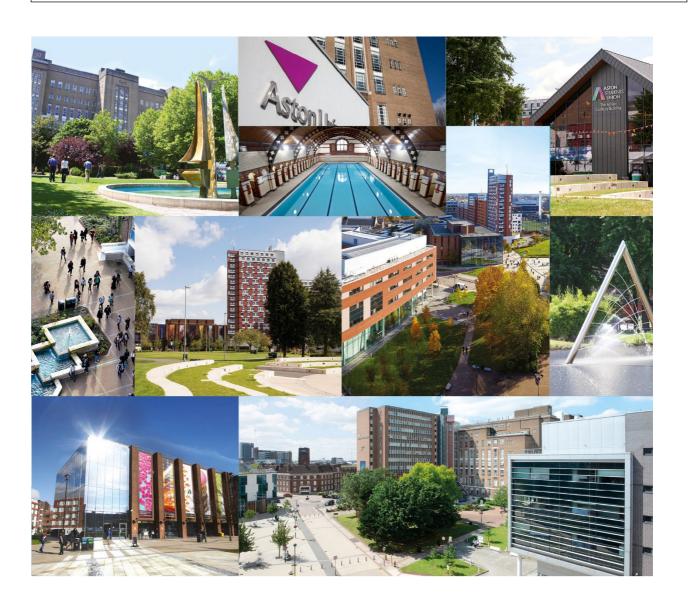
How to apply

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 jobs@aston.ac.uk.



Contact information

Enquiries about the vacancy:

Name: Andrew Ellis

Job Title: Professor, Deputy Director of AIPT

Email: andrew.ellis@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:

New immigration system from 1 January 2021

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 who were not resident in the UK before 31 December 2021 will need to get a visa in advance.

You can find more information here

Candidates should check their eligibility to enter or remain in the UK in advance of making any job application via the <u>UKVI website</u>. 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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