Biomedical Engineer – KTP associate

Reference: 0150-24

Salary: Up to £35,000 per annum, depending on experience with up to £4,500 dedicated development and training budget

Contract Type: Fixed term (27 months)

Basis: Full Time

Job description

This 27-month project takes the form of a Knowledge Transfer Partnership (KTP), which provides you with practical and formal training and the availability of support from experienced mentors from Partners for Endoscopy Limited, Aston University and Innovate UK.

Job Purpose:

The proposed KTP project will continue the innovative and transformational work Partners for Endoscopy (PfE) are doing in endoscope cleaning and reprocessing. The project will develop a new Retractable Fibre Optic Inspection Device (RFOID) to inspect endoscope channels, detecting any residual material or defects. The device will identify and report on levels of contamination after disinfection. This will not only significantly improve validation of disinfection but ultimately enhance patient safety and device longevity in service.

The device will be developed to ensure commercial impact beyond the end of the project, and knowledge and know-how embedded into the company throughout the project via collaborative working, workshops, comprehensive training and a Project Knowledge Bank to house all project developments.

As a KTP Associate you will develop technical skills, as well as skills in project management, stakeholder engagement, and involvement in the delivery of a strategic project in an innovative business. The skills developed during the project will enable you to broaden your future career opportunities.

The project will be based at PfE headquarters in Stoke with a significant proportion of the time spent at Aston University in Birmingham.

Candidate Profile: MSc or PhD in physics or engineering related discipline.

Skills/ experience desired:

- Practical lab skills supported by experience in research & development.
- Experience and knowledge of the principles of fluorescence and mathematical modelling.
- Previous experience in practical microbiology is highly beneficial and advantageous, additional training will be provided.
- Experience of photonics and optical fibre technologies is desirable, additional training will be provided as required.
- A level of industrial experience would be a distinct advantage.

Main duties and responsibilities

- Company / market orientation and project oversight.
- Develop an optical fibre-based instrument for in-situ fluorescence detection starting with characterising fluorescence signals and building the design from those results.
- Development of bacterial biofilms on endoscopes and related devices and assessment of subsequent disinfection procedures.
- Determining practical design requirements including: cost/benefit analysis of
- component requirements; design for manufacture; life-cycle analysis; fibre replacement costs/timeframes; future technology direction; futureproofing of the RFOID.

- Final optimisation of the RFOID including novel ways of coupling UV more efficiently.

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.
- 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	MEng/MSc in biomedical engineering, bioscience, physics or related science or engineering discipline.	Application form
Experience	Experience and knowledge of the principles of fluorescence and mathematical modelling.	Application form and interview
Aptitude and skills	Good practical lab skills supported by experience in research and development. Aptitude for solving technical challenges. Ability to innovate and initiate work in a practical environment. The capability to work both independently and collaboratively to deadline. Effective technical communication skills (written and oral).	Application form and interview

	Desirable	Method of assessment
Education and qualifications	PhD in physics or engineering related discipline.	Application form and interview
Experience	Previous experience of having worked in industry. Experience of practical microbiology. Experience of photonics and optical fibre technologies.	Application form and interview
Aptitude and skills	Effective project management skills.	Application form and interview

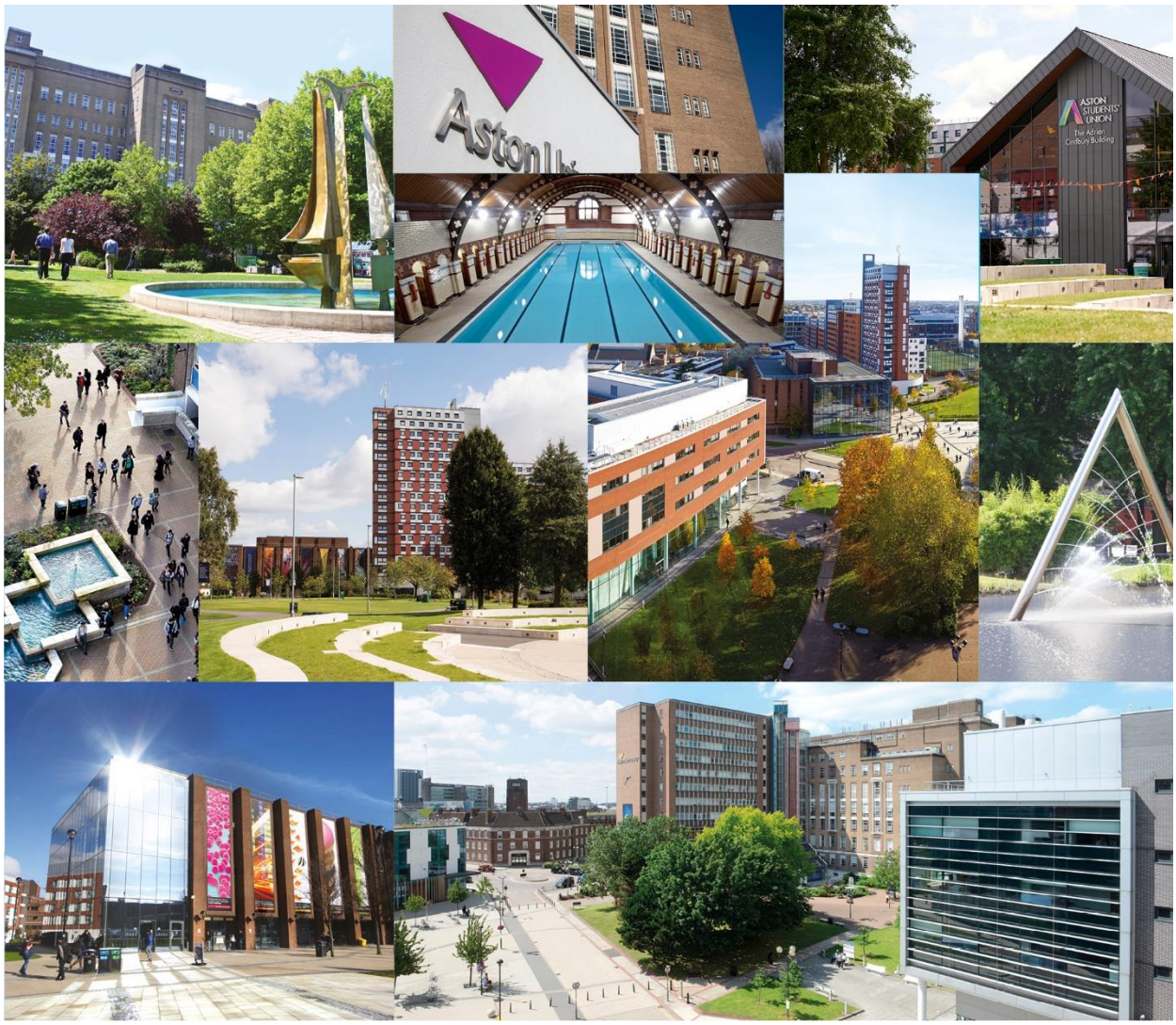
How to apply

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 BST 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: Dr David Benton
Job Title: Senior Research Fellow - EPS
E-mail: d.benton@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

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 https://www.gov.uk/settled-status-eu-citizens-families
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 https://www.gov.uk/browse/visas-immigration/work-visas. 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

Aston University
Birmingham
B4 7ET, UK.
+44 (0)121 204 3000
aston.ac.uk