

CANDIDATE BRIEF

KTP Associate – Chemical/Mechanical/Textile Engineer, Faculty of Engineering, Faculty of Arts, Humanities & Cultures and Environmental Technologies Group Ltd.



Salary: £competitive plus training allowance of £4,450

Reference: CSRIS1071

Fixed-term for 20 months (external funding for a fixed period)

Based at the company premises in Knaresborough, North Yorkshire

The successful candidate will need to be in post (or awaiting a VISA) by the end of February 2018.

KTP Associate – Chemical/Mechanical/Textile Engineer Faculty of Engineering, Faculty of Arts, Humanities and Cultures, and Environmental Technologies Group Ltd

Are you keen to pursue a career in industry? Do you have a background in Mechanical, Chemical or Textile Engineering? Do you want to further your career in a project with one of the UK's leading research intensive Universities?

We have an opportunity for a graduate with an MSc or MEng in Mechanical, Chemical or Textile Engineering, to 'fast track' their career into business by leading a high profile and strategically important project to a successful conclusion.

Through a <u>Knowledge Transfer Partnership</u> (KTP), you will be working in partnership with <u>Environmental Technologies Group Ltd</u> and the University's <u>Institute of Thermofluids</u>, <u>School of Mechanical Engineering</u> and the <u>Textile Technology Research Group</u>, <u>School of Design</u>. You should be looking for a career which allows you to utilise your academic achievements in an industry setting.

Based on an experimental analysis of the liquid filtration process, filter structure and fluid flow behaviour, your objective is to develop market leading by-pass filtration systems capable of addressing challenging performance requirements. You will undertake experimental work at the company and University, developing testing and characterisation methods, data analysis and numerical modelling. You will also make a significant contribution to the development of the company's technical marketing activities, working closely with the Managing Director to help the company achieve its five year strategic growth plans. You will help to develop fundamental scientific understanding of the operation and failure modes of a filter cartridge, optimise the performance of the existing product and produce an innovative, market leading filter element and filtration system with validated performance.

You will be based at the company premises in Knaresborough, North Yorkshire, but will be employed by the University of Leeds for the duration of the project, a fixed period of 20 months. Members of the Textile Technology Research Group, School of Design and the Institute of Thermofluids, School of Mechanical Engineering will provide academic and technical support to you throughout the project.



If there is sufficient justification, an opportunity may exist to register for a higher degree at the University of Leeds to carry out further studies related to the KTP work which would involve working in your own time. You will also be required to attend residential KTP training as well as various appropriate management, personal development and training courses for which time is allocated and funding provided, with a package worth approximately £4,450.

What does the role entail?

As a KTP Associate your main duties will include:

- Project and business familiarisation;
- Literature, manufacturing and supply chain review;
- Identification of failure modes and filter testing environments and plan;
- Evaluation of filter performance:
- Investigation of alternative materials and filter designs;
- Testing of selected materials and filter designs;
- Establishment of performance/cost benefits;
- Development of a performance test methodology for QC purposes;
- IP protection and marketing;
- Dissemination.

These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

What will you bring to the role?

As a KTP Associate you will have:

- An MSc or MEng degree in Mechanical Engineering, Chemical Engineering or Textile Engineering;
- The proven ability to design, execute and write up work independently without close supervision;
- A positive approach to problem solving and issue resolution;
- An understanding of approaches to modelling flow;
- Experience of practical work in a laboratory environment including designing test procedures;
- Capable of working independently as well as being a good team member;



- Self-motivated with good time management, presentation, and communication skills (oral and written);
- Some relevant industrial work experience and a strong desire to develop a career in industry;
- Full UK driving licence or alternative means of travel to visit client locations.

You may also have:

- Experience of flow modelling;
- Experience of textile characterisation.

How to apply

You can apply for this role online; more guidance can be found on our <u>How to Apply</u> information page. Applications should be submitted by **23.59** (UK time) on the advertised closing date.

Candidates must be available for an onsite interview at the company premises.

Contact information

To explore the post further or for any queries you may have, please contact:

Professor Nik Kapur, Professor of Applied Fluid Mechanics

Tel: +44 (0)113 343 2152 Email: n.kapur@leeds.ac.uk

Professor Stephen Russell, Tel: +44 (0)113 343 3705

Email: s.j.russell@leeds.ac.uk



Additional information



It is part of Environmental Technologies Group Ltd.'s long term plan to strengthen their R&D and Technical capabilities. Pending the outcome of the project, you will be in a prime position to occupy this function beyond the duration of the KTP. It is therefore essential that you aspire to a career in business rather than academia.

Working as a KTP Associate at Leeds

You will be an employee of the University of Leeds and will have access to University facilities. However, you will be based for the majority of your time at the company premises, working to their terms. You will have access to the University's USS pension scheme, with generous employer contributions.

Faculty and School Information

Further information is available on the research and teaching activities in the links contained within the text above.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found on our <u>Accessibility</u> information page or by getting in touch with us at <u>disclosure@leeds.ac.uk.</u>

The post is located at the company premises. Candidates with disabilities wishing to review access to the building are invited to contact Laura Dugdale (Research and Innovation Service), L.Dugdale@Leeds.ac.uk or Tel: 0113 343 0928.

Criminal record information

Rehabilitation of Offenders Act 1974

A criminal record check is not required for this position. However, all applicants will be required to declare if they have any 'unspent' criminal offences, including those pending.



Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our <u>Criminal Records information</u>.

