UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Control System Design: Coupling sensors to flow systems, Faculty of Engineering & Physical Sciences

Salary: Grade 7 (£33,797 – £40,322 p.a.)

Reference: EPSCH1019

Closing date: 19 July 2020

Fixed-term for 3 years

We will consider job share / flexible working arrangements

Research Fellow in Control System Design: Coupling sensors to flow systems
School of Chemistry

Are you an ambitious researcher looking for your next challenge? Do you have an established background in control system engineering and sensing/flow technology? Do you want to further your career in one of the UKs leading research intensive Universities? Do you want to be part of an EU funded international innovation programme?

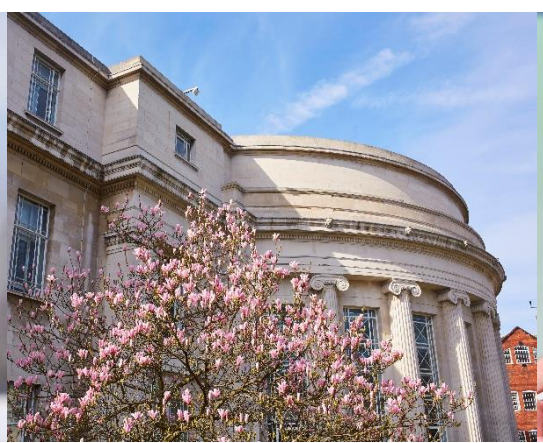
You will form a critical part of the Leeds team which is leading this ambitious and exciting international project. You will couple a well-developed sensing platform to a flow nanoparticle production system also developed in this project by a fellow research worker. In addition, you will adapt a unique flow corrosion cell system to characterise the stability of nanomaterial derived coatings used for protection and also medical implants. This is an innovation project and during the project lifetime the developed technology will be transferred to several companies who are partners in the project. You must be a team worker who will fully integrate with both the Leeds group and the other 18 partners. You will be expected to work closely with all project participants, especially the industrial companies. You will need to travel and spend some time in respective project partner's laboratories.

You will have a PhD in flow system technology or a closely allied discipline, a strong background in electrodic electrochemical systems and experience in experimental equipment design including the integration of measurement equipment and computer controls on to equipment.

What does the role entail?

As a Research Fellow, your main duties will include:

- Coupling sensing devices with a nanomaterial flow production platform;
- Adapting a corrosion cell for investigating stability of nanomaterial coatings;
- Coupling sensing system with corrosion flow systems;
- Transferring the developed technology to industrial companies;
- Generating and pursuing independent and original research ideas in the appropriate subject area;


- Developing research objectives and proposals and contributing to setting the direction of the research project and team including preparing proposals for funding in collaboration with colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own work;
- Preparing papers for publication in leading international journals and disseminating research results through other recognised forms of output;
- Working both independently and also as part of a larger team of researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development and acting as a mentor to less experienced colleagues as appropriate;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with the supervision of projects in areas relevant to the project.

What will you bring to the role?

As a Research Fellow, you will have:

- A PhD (or close to completion) in flow system technology or a closely allied discipline;
- A strong background in electrodic electrochemical systems;
- Definite experience in experimental equipment design including the integration of measurement equipment and computer controls on to equipment;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close support;
- A proven track record of peer-reviewed publications in high impact factor journals;
- Excellent written and verbal communication skills including presentation skills;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

You may also have:

- Experience of pursuing external funding to support research;
- Experience of using material characterisation equipment;
- Experience of following toxicity screening protocol;
- Experience of working on projects with International and/or Industrial partners.


How to apply

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

Contact information

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

Professor Andrew Nelson
Tel: +44 (0)113 343 6409
Email: A.L.Nelson@leeds.ac.uk

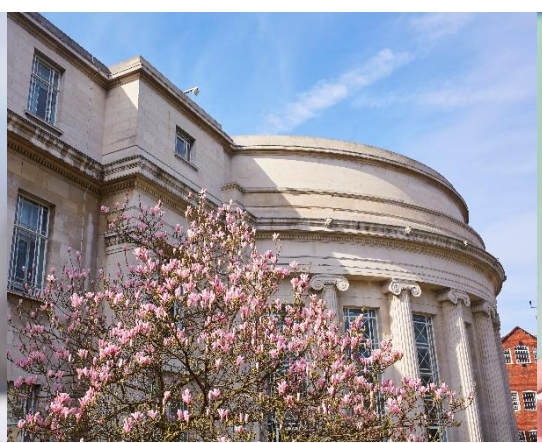
Professor Nik Kapur
Tel: +44 (0)113 343 2152
Email: N.Kapur@leeds.ac.uk

Additional information

Faculty and School Information
Further information is available on the research and teaching activities of the School of Chemistry.

A diverse workforce
The Schools in the Faculty of Engineering & Physical Sciences are proud to have been awarded the Athena SWAN Bronze or Silver Award from the Equality Challenge Unit, the national body that promotes equality in the higher education sector. Our equality and inclusion webpage provides more information.

Working at Leeds
Find out more about the benefits of working at the University and what it is like to live and work in the Leeds area on our Working at Leeds information page.


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

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 Criminal Records information page.