



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow: Tribochemistry in Challenging Environments

Faculty of Engineering & Physical Sciences



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

Reference: EPSME1018

Closing date: 2 February 2020

Fixed-term for 2 years

We will consider flexible working arrangements

Research Fellow: Tribochemistry in Challenging Environments, School of Mechanical Engineering.

Are you an ambitious researcher looking for your next challenge? Do you have a background in tribology/tribochemistry? Do you want to further your career in one of the UK's leading research intensive Universities?

This role is part of the EPSRC/BP Prosperity Partnership. Based in the School of Mechanical Engineering, you will work as part of a team of more than 20 researchers across five universities. The focus is on wear and corrosion in upstream and downstream environments.

You will work on an experimental study of tribochemical processes using in-situ methodologies. It will provide the reactive kinetics data that is needed for the modelling work which is intended to predict tribochemical film formation rates.

Holding a PhD, or near completion of a PhD, in a relevant field and with experience of tribology research, your drive and enthusiasm will ensure you will make a positive contribution to this highly collaborative, ground-breaking project.

What does the role entail?

As a Research Fellow, your main duties will include:

- Working with and in support of the Leeds team in the BP prosperity Partnership grant to ensure the project is successfully completed;
- Generating and pursuing 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, where appropriate 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;
- Communicating or presenting research results through publication or other recognised forms of output;
- Preparing papers for publication in leading international journals and independently writing reports;



- 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 research culture of the School, where appropriate;
- Contributing to the training of both undergraduate and postgraduate students, where appropriate, including assisting with the supervision of projects in areas relevant to the project.

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 Research Fellow, you will have:

- A PhD (or close to completion) in a relevant field;
- Experience of tribology research, with a specific focus on tribochemistry;
- Experience of tribochemistry and measurements of surface chemistry;
- Experience of x-ray techniques which may include synchrotron methodologies;
- Good time management and planning skills, with the ability to meet tight deadlines and work effectively under pressure;
- A proven track record of peer-reviewed publications in high impact factor journals;
- Excellent written and verbal communication skills including presentation skills;
- Proven ability to manage competing demands effectively, responsibly and without close support;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development.

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 Anne Neville](#), Director of Institute of Functional Surfaces

Tel: +44 (0)113 343 6812

Email: A.Neville@leeds.ac.uk

Additional information

Faculty and School Information

Further information is available on the research and teaching activities of the [Faculty of Engineering](#) and [School of Mechanical Engineering](#).

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.

