



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Intelligent Corrosion Management,
Faculty of Engineering & Physical Sciences



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

Reference: EPSME1007

Closing date: 03 November 2019

Fixed-term for up to 24 months, to end by 30 June 2022

We will consider flexible working arrangements

Research Fellow in Intelligent Corrosion Management, School of Mechanical Engineering.

Are you an ambitious researcher looking for your next challenge? Do you have a background in corrosion in oilfield environments, surfaces or interfaces? Do you want to further your career in one of the UK's leading research intensive Universities?

This role is one of three Research Fellow positions on an EU funded Advanced Research Grant in Corrosion. You will join a vibrant research institute [Institute of Functional Surfaces](#) (iFS), and be part of the [INTELLICORR](#) project investigating approaches for intelligent corrosion management.

This project is focused towards corrosion in the oil and gas sector. You will undertake independent academic research in the field of oilfield corrosion as defined in the detailed workplan to be developed with Professor Neville on your appointment. You will also be involved in student education duties in the School of Mechanical Engineering and undertake management and leadership duties in iFS.

Holding a PhD (or near completion) in a relevant discipline, a BSc or BEng in engineering or physical science and experience in oilfield corrosion. You will also have experience of a number of analytical techniques, including advanced surface analysis, electrochemistry for corrosion analysis and research analysis.

What does the role entail?

As a Research Fellow, your main duties will include:

- 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;
- Worth 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 Institute and 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;
- Complying with EU reporting requirements for the INTELLICORR project for internal and external auditing processes.

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 Degree (or close to completion) in corrosion science/engineering, ideally related to oilfield environments;
- Experience of advanced surface analysis;
- Specific XRD experience;
- Experience in electrochemistry for corrosion analysis;
- Experience in the operation of autoclaves for HT/HP corrosion studies;
- Ability to organise own research activities, collaborations and resources to deadline and quality standards;
- Ability to develop and understanding of complex processes and apply in-depth multi-disciplinary knowledge to solve research problems;
- Ability to work effectively in a team;
- Strong written and verbal communication skills.

You may also have:

- Knowledge of fundamental aspects of metallurgy;
- Experience of working with industry.



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:

[Dr Richard Barker](#), Associate Professor

Tel: +44 (0)113 343 2206

Email: r.j.barker@leeds.ac.uk

Additional information

Faculty and School Information

Further information is available on the research and teaching activities of the [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's 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.

