UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Associate Professor in Mechanical Engineering/Tribology/Surface Engineering, Faculty of Engineering and Physical Sciences

Salary: Grade 9 (£56,021 – £64,914 p.a.)

Reference: EPSME1174

Location: Leeds campus

Closing date: Sunday 28 July 2024

We are open to discussing flexible working arrangements

Associate Professor in Mechanical Engineering/Tribology/ Surface Engineering,
School of Mechanical Engineering.

Are you passionate about research on surfaces, interfaces and related topics in tribology or surface engineering? Do you have the vision and drive to tackle new engineering challenges related to surfaces and interfaces that underpin the dual transition in Green and Digital technologies and want to be part of a vibrant, collaborative and supportive research and teaching environment? If so, the University of Leeds has an exciting opportunity for you to join us as an Associate Professor in Tribology/Surface Engineering.

The Institute of Functional Surfaces (iFS), is one of four institutes in the School of Mechanical Engineering at the University of Leeds. It carries out interdisciplinary research across length scales and at technology readiness levels, from fundamental science to application and commercialisation in the fields of 1). tribology, 2). surface engineering, and 3). corrosion and flow assurance.

In line with the university strategy of growing our capabilities to tackle global challenges, we are now seeking an experienced researcher at the level of Associate Professor to join the institute to continue building research excellence in tackling global engineering challenges in surfaces and interfaces. We are interested in candidates with a strong research background and vision in Green Tribology, Novel Applications of Tribology, Sensing of Surface Integrity, Smart Coatings/Condition Monitoring, Sustainability of Tribological Systems used in Extreme/Demanding Environments or any other materials/tribology/surface engineering research area. There must be a clear vision of how your research would complement and enhance existing research activity in the Institute of Functional Surfaces and the wider Bragg Centre for Materials Research.

Through the Functional Surfaces theme of the University's Bragg Centre, you will have access to an advanced materials research infrastructure and the opportunity to build new collaborations with colleagues across the university. Teaching duties will be in areas relevant to our undergraduate and postgraduate programmes in Mechanical, Aerospace and Automotive programmes and you will be expected to offer undergraduate and postgraduate projects. You will also contribute to the School's continuing professional development and knowledge transfer activities and provide

academic leadership to further enhance the international research and teaching reputation of the School of Mechanical Engineering.

For appointment as Grade 9 Associate Professor, you will be able to demonstrate a track record of successful and substantive grant applications, a track record of successful research training, an achievable plan for developing new research projects, a strong track record of high-quality publications in one or more of the research areas relevant to this available position and the capacity to deliver an outstanding student experience for mechanical engineering undergraduate and taught postgraduate students. You will also be able to demonstrate international standing in your field, and an ability to undertake successful academic leadership.

What does the role entail?

As an Associate Professor, your main duties will include:

- Being recognised internationally as an authority in your field, developing and maintaining an external profile as appropriate to the discipline;
- Pursuing, leading and developing the strategic direction of research, innovation and impact at an appropriately benchmarked level including attracting funding for PDRA and PhD support as appropriate, pursuing research of international standing and enhancing the research activity of the School;
- Attracting research funding individually and collaboratively to underpin high quality research activity and research programmes/projects;
- Maintaining a record of high quality publications in peer reviewed journals of high international standing;
- Providing research supervision and helping to attract research students to the University, and to supervise other students as appropriate;
- Participating in knowledge transfer activities, research dissemination and activities to broaden research impact, where appropriate and feasible;
- Undertaking research-led teaching at different levels on undergraduate and/or postgraduate taught courses, regularly collecting, and responding to, student feedback as well as being involved in the assessment of course work and examinations;
- Playing a significant role in the design, development, planning and review of modules and programmes within the subject area as required;

- Using innovative approaches to teaching and learning to develop and deliver teaching materials that will enhance the School's delivery of its programmes of study at both undergraduate and postgraduate levels, as required;
- Delivering inspirational teaching in Mechanical Engineering subjects to undergraduate and taught postgraduate students through a variety of formats, including lectures, practical classes, tutorials and online delivery;
- Responsibility for academic leadership of colleagues and less experienced members of staff;
- Contributing to the management and administrative processes and committee structures of the School, Faculty and University;
- Managing or leading executive tasks (sustained or one-off projects) which facilitate School performance or business, and being actively involved in the management of School business;

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 an Associate Professor, you will have:

- A PhD degree in Mechanical Engineering or a related discipline;
- An international reputation in your research area, including a sustained track record of raising research funds from national and international funding agencies for significant research and innovation projects;
- A sustained record of high-quality research outputs/reports as a leading author in top journals relevant to the field;
- Experience or involvement in leading, mentoring and training, acting as primary supervisor to successful doctoral graduates or providing leadership and direction to a team of people;
- Experience in teaching effectively at undergraduate and postgraduate levels, and the ability to interact with students in ways that will enhance the student experience; for applicants from the industry, evidence of mentoring young professionals;
- A high level of interpersonal and communication skills, and a strong ability to communicate effectively in writing and verbally with students, academic and external audiences;

- Evidence of team working and networking including the ability to contribute to and develop interdisciplinary collaborative research projects;
- Evidence of effective programme/academic leadership, including staff development from a research and teaching perspective.

You may also have:

- Experience of teaching overseas;
- Evidence of the ability to build partnerships with industrial, professional and public sector organisations on interdisciplinary collaboration, knowledge exchange and funding.

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.

Your application must also include:

1. **A one-page statement outlining your research vision and future funding strategy** including an outline of your plans for delivering this, looking ahead to the next five years. You should explain how your research aligns with iFS, school and university research strengths, how it complements existing activity and how you would utilise and build upon established facilities and expertise.

2. **A one page-statement of your experience in student education** and how your approach aligns with University of Leeds aspirations.

3. **A copy of your curriculum vitae** giving full details of qualifications, experience and a record of research grants and publications.

Prior to applying, candidates are strongly encouraged to talk to staff members in the School of Mechanical Engineering and the wider university to identify how research activities align and explore potential future opportunities.

Contact information

To explore the post further or for any queries you may have, for example if you are applying directly from industry, please contact:

Professor Neil W. Bressloff, Head of School, School of Mechanical Engineering,
Email: N.Bressloff@leeds.ac.uk

Professor Ardian Morina, Director of the Institute for Functional Surfaces,
Email: A.Morina@leeds.ac.uk

Additional information

Please note: If you are not a British or Irish citizen, you will require permission to work in the UK. This will normally be in the form of a visa but, if you are an EEA/Swiss citizen and resident in the UK before 31 December 2020, this may be your passport or status under the EU Settlement Scheme.

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

A diverse workforce
As an international research-intensive university, we welcome students and staff from all walks of life and from across the world. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the Faculty of Engineering and Physical Sciences we are dedicated to diversifying our community and we welcome the unique contributions that individuals can bring, and particularly encourage applications from, but not limited to Black, Asian and ethnically diverse people; people who identify as LGBT+; and people with disabilities. Candidates will always be selected based on merit and ability.

The Faculty of Engineering and Physical Sciences are proud to have been awarded the Athena SWAN 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
We are a campus-based community and regular interaction with campus is an expectation of all roles in line with academic and service needs and the requirements of the role. We are also open to discussing flexible working arrangements. To find out more about the benefits of working at the University and what it is like to live and work in the Leeds area visit our Working at Leeds information page.

Information for disabled candidates
Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found on our Accessibility information page or by getting in touch with us at hr@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.