



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

**Experimental Officer in Physical Vapour Deposition,
Faculty of Engineering & Physical Sciences**



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

Reference: EPSME1008

Closing date: 03 November 2019

Fixed-term for 12 months

We will consider flexible working arrangements

Experimental Officer in Physical Vapour Deposition Institute of Functional Surfaces, School of Mechanical Engineering.

Would you like to join a vibrant research team in surface engineering research in the Institute of Functional Surfaces (iFS)? Are you interested in using your technical expertise and specialist knowledge to maintain and operate recently EPSRC upgraded state-of-the-art Hauzer Flexicoat 850 coating facility? Could you engage with industry and deliver both short and long-term projects?

At any given point of time you will be supporting several projects related to deposition of certain type of coating using Physical Vapour Deposition (PVD) technology. With an undergraduate degree in physics or mechanical engineering, you will have a strong technical background in PVD technique and coating characterisation. You will be well organised, with a high level of communication skills and interpersonal skills. You will also have the proven ability to motivate and supervise students and team members, helping them to achieve their full potential.

You will have a PhD (or near completion) in physics or mechanical engineering, with experience of working on industrial projects.

What does the role entail?

As an Experimental Officer, your main duties will include:

- Undertaking day-to-day management of PVD experimental facility, including facility daily recording, managing all risk and COSHH assessments, documenting evidence of training, use and maintenance; ensuring that the equipment is operational and delivers an acceptable standard of service; supervising technical staff;
- Operating PVD coating platform on a daily basis and carry out coating deposition processes including processing of routine coating recipes, development of new coating architectures and samples preparation;
- Carrying out coating characterisation tests including mechanical testing, structural characterisation and surface analysis;
- Liaising with the iFS staff, research groups at the University, external industrial and academic partners, equipment suppliers, external specialists;



- Providing day-to-day supervision to PhD students and researchers assigned to the Facility and managing the training of users to an appropriate level;
- Assisting in applying for and attracting funding from bodies and Industry to develop research objectives, planning objectives and setting budgets;
- Assisting undergraduate and postgraduate level teaching sessions on surface engineering and coating characterisation techniques, and acting as co-supervisor to Masters and postgraduate research projects;
- Using technical expertise and specialist knowledge to provide significant “added value” to existing research in the University and to be recognised as the local authority in the field of PVD technology and coating characterisation;
- Maintaining a high quality record of regular and original research publications of external standing, and presenting at international conferences;
- Contributing to the planning and coordination of the laboratory quality standard certification and accreditation;
- Maintaining own continuing professional development.

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 Experimental Officer you will have:

- A PhD (or near completion) in physics or mechanical engineering;
- Experience of PVD coating deposition and coating characterisation;
- Knowledge of various PVD methods;
- Experience of working on industrial projects;
- Strategy for ensuring the surface engineering labs and experimental equipment are maintained to the highest standard;
- A track record of high quality publications in national and internationally recognised journals;
- Experience of multi-disciplinary research and working with multiple stakeholders.



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 Liuquan Yang](#), Lecturer in Surface Engineering

Tel: +44 (0) 113 343

Email: l.q.yang@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.

