



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Aerosol Deposition,
Faculty of Engineering and Physical Sciences



Salary: Grade 7 (£39,105 – £46,485 p.a.)

Reference: EPSCV1153

Location: Leeds campus (with scope for hybrid working)

Closing date: Thursday 12 December 2024

Fixed-term for up to 8 months

We are open to discussing flexible working arrangements

Research Fellow in Aerosol Deposition, School of Civil Engineering.

Are you an enthusiastic and motivated researcher with an interest in aerosol generation or sampling? Would you like to work with an industrial partner to generate proof-of-concept, and help to bring an aerosol sampler to market? Are you interested in the opportunity to build cross-disciplinary research collaborations?

At the School of Civil Engineering, we pride ourselves on our renowned research in indoor air quality and airborne infection control. Our expertise includes conducting (bio)aerosol chamber studies to investigate key factors affecting infection transmission and exploring innovative technologies to reduce these risks. In collaboration with Airstentry Ltd., we are advancing the development of a novel indoor air (bio)aerosol collector that requires rigorous laboratory testing to achieve market readiness.

You will play a key role in validating the functionality of the devices through nebulisation and deposition experiments in the environmental chamber in the School of Civil Engineering. You will collaborate closely with a dedicated team of postdocs and technicians, gaining valuable experience across diverse research activities and enhancing your expertise in the field.

You will hold a PhD (or have submitted your thesis before taking up the role) in a relevant engineering or science discipline, with strong experience of carrying out experimental aerosol research.

What does the role entail?

As a Research Fellow, your main duties will include:

- Leading experiments in the state-of-the-art environmental chamber at the School of Civil Engineering to validate the performance of a time-dependent deposition aerosol sampling device;
- Collaborating with multidisciplinary teams across faculties to design and refine innovative methodologies for quantifying the deposition of microorganism surrogates;
- 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 research;
- Making a significant contribution to the dissemination of research results by publication in leading peer-reviewed journals and by presentation at national and international meetings;
- Working independently and as part of a larger team of researchers, both internally and externally, to develop new research links and collaborations and engage in knowledge transfer activities where appropriate;
- 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.

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 have submitted your thesis before taking up the role) in engineering, physics, environmental science or another relevant discipline;
- A strong background in aerosol science with experience in measurement or generation of aerosols at the micron-scale;
- Demonstrated ability to work safely and responsibly in laboratory settings, adhering to health and safety regulations;
- Proven ability to analyse complex experimental data, creating clear visual representations and conducting robust statistical analyses to support findings;
- Good time management and planning skills, with the ability to meet tight deadlines and manage competing demands effectively without close support;
- A developing track record of peer-reviewed publications in international journals;



- Excellent communication skills both written and verbal, and the ability to communicate your research at national and international conferences;
- A proven ability to work well both independently 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 advanced microscopy techniques such as fluorescent microscopy or similar;
 - conducting experiments using bioaerosols;
 - applying modelling approaches alongside experimental data;
 - mentoring or supervision of students or less experienced researchers.

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 Marco-Felipe King](#), Lecturer in Environmental Engineering for Buildings

Tel: +44 (0)113 343 1957

Email: M.F.King@leeds.ac.uk

Additional information

Faculty and School Information

Further information is available on the research and teaching activities of the [Faculty of Engineering & Physical Sciences](#), and the [School of Civil Engineering](#).



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.

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.

Information for disabled candidates

Information for disabled candidates, impairments or health conditions, including requesting alternative formats, can be found under the 'Accessibility' heading on our [How to Apply](#) information page or by getting in touch by emailing HR via 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.



Salary Requirements of the Skilled Worker Visa Route

Please note that this post may be suitable for sponsorship under the Skilled Worker visa route but first-time applicants might need to qualify for salary concessions. For more information, please visit [the Government's Skilled Worker visa page](#).

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information, please visit [the Government's page, Apply for the Global Talent visa](#).

