



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Microalgal Biotechnology,
Faculty of Engineering and Physical Sciences



Salary: Grade 7 (£37,099 – £44,263 p.a.) Due to funding restrictions, an appointment will not be made higher than £39,347 p.a.

Reference: EPSCV1120

Closing date: Sunday 03 December 2023

Fixed-term until 31 December 2024

We are open to discussing flexible working arrangements

Research Fellow in Microalgal Biotechnology, School of Civil Engineering, BioResource Systems Research Group.

Are you an experienced and ambitious researcher looking for your next challenge in an academic career? Do you have a background in algal based technologies for wastewater treatment? Do you want to further your career in one of the UK's leading Universities and be part of a multidisciplinary team delivering real-world solutions?

As a Research Fellow in Microalgal Biotechnology at Leeds, you will be part of a world-leading Research Group focused on fundamental and applied research activities aimed at supporting the development of a circular bioeconomy approach for sustainable waste management. This involves covering projects on nutrient control and recovery from wastewater, bioenergy generation from organic waste, bioprocesses for carbon capture, assessment and control of greenhouse gas (GHG) emissions from waste management facilities and developing technologies for microalgal biomass cultivation and valorisation.

In particular, you will be part of a multidisciplinary consortium working closely with industry partners and UK government funders in the delivery of bioprocesses for hydrogen production from organic waste, coupled with carbon capture and sequestration (CCS).

We are particularly looking for highly motivated applicants with ability to consolidate and further develop their technical and transferable skills, working in a supportive environment to conduct fundamental and applied research on the use of microalgae for the recovery and reuse of nutrients from waste streams, and using a combination of analytical and microbiology techniques at lab and pilot scale.

Holding a PhD (or have submitted your thesis before taking up the role) in Engineering; you will also have a strong background in algal based technologies for wastewater treatment and nutrient recovery, and lab experience on microalgae cultivation.



What does the role entail?

As a Research Fellow, your main duties will include:

- Developing and conducting experimental work on the use of microalgae for nutrient uptake from waste streams;
- Tracing the fate of carbon, nitrogen and phosphorus in algal-based waste management systems;
- Contributing to experimental design and operation of algal based systems at lab and pilot scale for nutrient uptake from waste streams;
- 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;
- 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;
- Evaluating methods and techniques used and results obtained by other researchers and to relate such evaluations appropriately to your own research;
- 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;
- A strong background in microalgae cultivation for wastewater remediation;
- Expertise in the use of microalgae for carbon dioxide capture and nutrient uptake from waste streams;
- Experience in the use of analytical and microbiological techniques for tracing the fate of carbon, nitrogen and phosphorus in algal based systems;
- Excellent lab skills for planning and conducting complex experimental work using microalgae;
- Proven expertise in proactively developing research networks and interdisciplinary collaborations;
- Experience in supporting the training of both undergraduate and postgraduate students, including assisting with the supervision of projects;
- 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.

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 Miller Alonso Camargo-Valero](#), Associate Professor of BioResource Systems

Tel: +44 (0)113 343 1580

Email: M.A.Camargo-Valero@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](#).

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.

