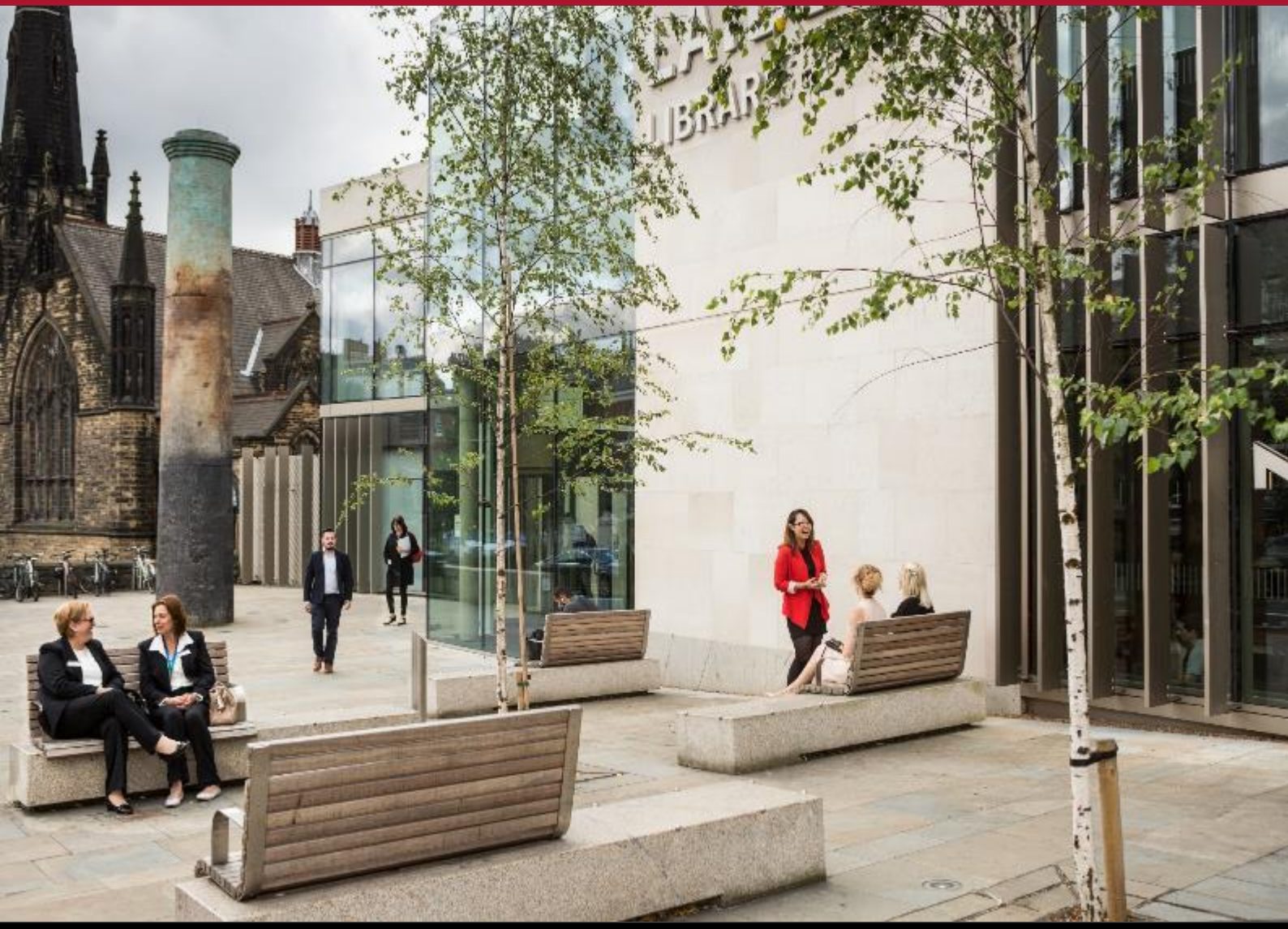
UNIVERSITY OF LEEDS

CANDIDATE BRIEF

Research Fellow in Sustainable Materials and Renewable Fibres, Faculty of Arts, Humanities and Cultures



Salary: Grade 7 (£33,199 – £39,609 p.a.)

Please note, this appointment is subject to confirmation of external funding. It is likely that an appointment will be made at or below £35,211 since there are funding limitations which dictate the level at which the appointment can start.

Reference: AHCDE1064

Closing date: 5 May 2019

Fixed-term for 24 months, with target start date of 1 May 2019

Research Fellow in Sustainable Materials and Renewable Fibres, School of Design, Faculty of Arts, Humanities and Cultures

Are you an ambitious researcher looking for your next challenge? Do you possess a PhD in Chemistry, Biochemistry, Polymer Chemistry or a related degree? Do you want to further your career in one of the UK's leading research intensive Universities?

Project Title: Regenerated protein fibres from food waste as a sustainable alternative to current textile fibres

Applications are invited for a Post-Doctoral Researcher to work with Dr. Richard Blackburn in the School of Design, who is leading the project. The research of Dr. Blackburn focuses on natural products chemistry, polymer chemistry, clean extraction of natural products from waste material, industrial scale up of chemical processes, and sustainability in textile fibres.

The University of Leeds is a collaborator on a project awarded to The University of the Arts London, which is one of nine game-changing Creative R&D Partnerships as part of the Government's investment in the UK's creative industries. The Business of Fashion, Textiles and Technology is focused on delivering innovation and growth throughout the entire fashion and textile supply chain, from manufacturing to retail. Over the next five years, the Arts & Humanities Research Council's Creative Industries Clusters Programme will strengthen the creative industries' position as vital to UK economic growth and resilience, and provide direct links into shaping Government policy.

This part of the overall project will focus on investigating the potential for food waste to be used in the development of regenerated protein fibres to make a new generation of innovative renewable and biodegradable modern sustainable materials. You will be involved in purification of protein extracted from food waste, converting the protein into fibres, and assessing the properties of those fibres for various applications.

You will have a PhD in Chemistry, Biochemistry, Polymer Chemistry or a related degree and a background in natural products chemistry/biochemistry/polymer chemistry.

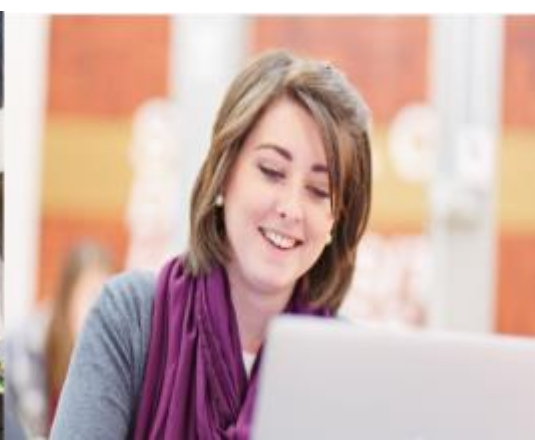


What does the role entail?

As a Research Fellow, your main duties will include:

- Carrying out a literature review of existing relevant work in this area and maintaining a good working knowledge of the pertinent literature and current developments in the field of the project;
- Using technical/scientific knowledge and experience in the subject area to develop processes to purify proteins extracted from waste material;
- Using technical/scientific knowledge and experience in the subject area to develop processes to make fibres from these waste materials;
- Using technical/scientific knowledge and experience in the subject area to test the properties of the fibres produced;
- Undertaking and delivering the agreed research programme in an efficient and timely manner;
- Gathering and manipulating data and information, interpreting the results and developing recommendations for next steps;
- Engaging in complex analyses and interpretation, working with research colleagues;
- Travelling to project partners to be involved with meetings and individual research packages within the wider project;
- Providing written reports on the progress of the research on a monthly basis for review meetings, at which the direction of the research will be reviewed and planned;
- Monitoring and maintaining records/reports to meet both internal and external requirements;
- Ensuring adherence to working to International and British Standards, where appropriate. Ensuring all Chemistry activities are COSHH compliant and fully risk assessed;
- Adhering personally to Health and Safety policies and procedures and implementing them within the associated facilities/activities. Ensuring individuals using the facilities are also aware of their responsibilities and report any concerns to an appropriate person;
- Undertaking ongoing training and development in all aspects of the work and taking responsibility of updating the skills and techniques required for the post.





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 in Chemistry, Biochemistry, Polymer Chemistry or a closely related subject;
- A background in natural products chemistry/biochemistry/polymer chemistry;
- Experience of working with polymers, fibres and/or textiles
- Experience of working with natural products;
- Excellent analytical and problem solving abilities;
- Experience of chemical analytical techniques, including NMR, LC-MS, UV/Vis spectroscopy, HPLC;
- Knowledge in techniques, scientific principles and procedures necessary to carry out the duties of the post;
- Excellent oral and written communication skills (especially in scientific writing for publications, producing conference abstracts and reports and presenting research outputs to a specialised academic and industrial audience);
- Good time management and planning skills, with the ability to meet tight deadlines and work effectively under pressure;
- Competence in using full Microsoft Office package and chemical drawing software;
- Evidence of ability to work both on own initiative, with minimal supervision, and also collaboratively with others;
- A strong commitment to your own continuous professional development.

You may also have:

- Experience in protein chemistry;
- Experience in working collaboratively with external industrial and academic partner organisations;
- Active membership of international scientific networks;
- A proven track record of peer-reviewed publications in high impact factor journals.



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 Blackburn, Head of Sustainable Materials Research Group
Email: **r.s.blackburn@leeds.ac.uk**

Additional information

Further information about the Schools can be found at http://www.design.leeds.ac.uk/ and https://www.chem.leeds.ac.uk/

Working at Leeds
Find out more about the benefits of working at the University and what it is 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.