



UNIVERSITY OF LEEDS

CANDIDATE BRIEF

**Research Fellow in Spectral Reflectance Modelling for Horticulture ,
Faculty of Arts, Humanities and Cultures**



Salary: Grade 7 (£38,205 - £46, 485 p.a. depending on experience)

Reporting to: Dr Kaida Xiao

Reference: AHCDE1303

Location: University of Leeds Main Campus (with scope for hybrid working)

1FTE, 37.5 hours per week

Fixed Term for 12 months to complete a specific time limited work.

We are open to discussing flexible working arrangements.

Research Fellow in Spectral Reflectance Modelling for Horticulture.

School of Design

Overview of the Role

Are you an ambitious researcher looking for your next challenge? Do you have an established background in Colour Science and spectra measurement? Do you want to further your career in one of the UKs leading research intensive Universities?

The successful applicant will join the Colour Technology Research Group, the School of Design, is a world leading research centre with a focus in creativity and developing innovative materials and manufacturing solutions with interdisciplinary researchers and industrial partners. You will join an experienced, innovative and diverse team and will be actively involved in research, producing high quality publications and contributing to the School's Research Excellence Framework (REF).

Working in collaboration with the academic team, you will design an innovative vision system to enhance the viability of the UK's controlled environment agriculture (CEA) sector, including vertical farming. This system leverages advanced spectra measurement and analysis using novel image technology to extract valuable insights into crop health. These insights are delivered to growers through a plug-and-play camera unit and a user-friendly portal and API, making it affordable to install, adaptable to any indoor farm, and easy to use. The project is led by the Colour Technology Research Group in the School of Design and closely work with Vertically Urban LTD.

You will have a PhD in colour science or applied mathematics. You will also have a developing record of research (commensurate with the level of the post) and will provide a clear indication of the ability to achieve internationally recognised standards of excellence.



Main duties and responsibilities

As a Research Fellow your main duties will include:

- Designing, planning and conducting a programme of investigation, in consultation with Dr Kaida Xiao;
- Generating independent and original research ideas and methods in facial appearance assessment and modelling with an aim to extend the Colour Technology Group research portfolio;
- 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;
- Contributing to the supervision of junior researchers and PhD students and acting as a mentor to less experienced colleagues;
- Evaluating methods and techniques used and results obtained by other researchers and relating such evaluations to your own research;
- To contribute to, and to encourage, a safe working environment.

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.

Qualifications and skills

Essential

- A PhD in Colour Science or Applied Mathematics or a closely allied discipline;
- Experience in spectral reflectance estimation and modelling;
- Experience in camera colour processing;
- Experience in colour appearance modelling;
- The ability to design, execute and write up research independently;
- 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;



- Good time management and planning skills, with the ability to meet tight deadlines;
- A proven ability to work well both independently and as part of a team;
- Ability to work accurately and carefully;
- A strong commitment to your own continuous professional development

Desirable

- Experience in working with industry;
- Evidence 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 Kaida Xiao, Professor in Colour & Imaging Science

Email: K.Xiao1@leeds.ac.uk

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, this may be your status under the EU Settlement Scheme.

Additional 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.



Our University

As an international research-intensive university, we welcome students and staff from all walks of life. We foster an inclusive environment where all can flourish and prosper, and we are proud of our strong commitment to student education. Within the School of Design 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, people who belong to a minority ethnic community; people who identify as LGBT+; and disabled people. Candidates will always be selected based on merit and ability.

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.

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: www.gov.uk/skilled-worker-visa.

For research and academic posts, we will consider eligibility under the Global Talent visa. For more information please visit: <https://www.gov.uk/global-talent>.

