Faculty of Mathematics and Physical Sciences
School of Food Science and Nutrition

University Academic Fellow
Remote and Non-Invasive Sensing for Food Reassurance

Given the increasing pressures on the global food system to produce more from the planet's diminishing resources, the need to produce food that is safe to consume and abides by the information declared on pack is becoming ever more difficult to achieve as shown by the recent 'horsemeat' scandal. The salutary lesson that emerged from this latest food scandal, being the highly complex nature of our food supply networks. These convoluted networks also increase the potential for product contamination through physical, chemical or microbial means, with potentially life threatening consequences, highlighted in 2013 by the worldwide recall of dairy products manufactured by Fonterra.

You will be expected to build on and develop existing internationally leading expertise at Leeds in a wide range of rapid sensing techniques including ultrasound, terahertz and dielectric spectroscopy, allying it with an understanding of biological systems and knowledge of the entire food network both locally and globally. In this way you will develop and pilot unique rapid product monitoring and detection systems for the identification of product adulteration in real time, minimising the risk to food manufacturers of expensive recalls, and maintaining consumer confidence.

The multi-disciplinary nature of this project requires specialists to work together with someone who can bridge the specialisms and lever the synergy contained within them and then apply it to practical industrial problems. You must therefore be able to build good contacts with a few industrial partners to deliver practical and commercial solutions to the food industry. In this way new systems built on a combination of modalities could be developed and commercialised. Commercialisation is important for impact and by close working with Leeds University Research and Innovation Service we expect you to be able to develop new and valuable IP.

Based in the School of Food Science and Nutrition you will interact with other researchers in the School and the University, to help develop a unique programme of research and teaching in food and health by writing and contributing to multidisciplinary grant applications (large and small). You will be expected to submit your own grant applications for research support, and to work with colleagues across the University to submit larger grants.

You will also be expected to develop a research profile that will contribute to the School's ambition to excel in REF2020, with a sustained record of internationally excellent publications and the potential of the impact of your research.
You will co-supervise PhD students and be expected to contribute to the development and delivery of educational materials and programmes at undergraduate, Masters and PhD level.

You will have a PhD and significant proven research experience in one of the fields of engineering, physics and food science, the ability to engage in multi-disciplinary research, the ability to engage in student education at both Undergraduate and Postgraduate level, as well as a clear and compelling vision for personal academic development.

**Career Pathway: Successful completion of a 5 year probationary period leading to appointment to grade 9 Associate Professor.**

**University Grade 8 (£38,511 to £45,954)**

For informal enquiries about the role please contact Professor Malcolm Povey, tel. 44 (0)113 343 2963, email: M.J.W.Povey@food.leeds.ac.uk.

Ref: MAPFS1014

Click here for further information about working at the University of Leeds www.leeds.ac.uk/info/20025/university_jobs
Job Description

With a vision and drive to develop a prestigious internationally competitive research portfolio as well as a passion for undertaking research-led teaching you will make a significant impact on the performance, stature and profile of research and student education at The University of Leeds.

This University Academic Fellowship (UAF) is for future academic leaders providing an excellent opportunity to establish an academic career at a research intensive university and play a key role in our ambitious plans for the future.

You will embark on a structured five year development programme, successful completion of which will lead to your appointment as a grade 9 Associate Professor.

You will have a PhD (or equivalent qualification/experience), the ability to teach at both undergraduate and postgraduate level, as well as outstanding post-doctoral research experience in a relevant subject area. You will also have the potential to obtain competitive research funding, along with initiative, motivation and enthusiasm for supporting and advancing the University research and student education goals.

Main Duties and Responsibilities

Research, Innovation and Impact

- Pursue a programme of individual and collaborative research, resulting in high quality publications and a national and international profile and engaging with industry as appropriate to attract and co-ordinate major initiatives.
- Promote the integration of your own research area with other research interests and themes, in the school, faculty and University.
- Attract research income on an individual and collaborative basis according to an agreed plan, as appropriate to the field or discipline, to support high quality research activity.
- Develop a strategy to ensure that your research has the potential for impact beyond academia.

Student Education

- Undertake research-led teaching at undergraduate and/or postgraduate level, with engagement in continual improvement in response to student and other feedback.
- Contribute to the design, development and planning of modules and policy within the subject area as required.
- Work in line with the University’s Partnership Agreement and with our students as members of a learning community to provide outstanding education and an excellent student experience.

Academic Leadership

- Contribute to the management of the school by taking on appropriate leadership, management and administrative responsibility.
- Lead academic initiatives and projects in research and student education which facilitate school, faculty and/or University development.
- Participate in the recruitment, management and development of staff as well as acting as a mentor to less experienced colleagues.
- Contribute to the development of the discipline or research area, e.g. through
organisation of conferences or membership of key bodies setting the strategic direction of the area.

General

- Contribute to the development and achievement of University, faculty and school strategy within the context of an international, research-led university.
- Become a specialist in the field, developing and maintaining an external profile as appropriate to the discipline.
- Maintain own continuing professional development.
- Carry out the duties of the post in accordance with University policies, procedures, values and standards, including the Leadership and Management Standard.

This job description provides a framework for the role and it may be necessary for a University Academic Fellow to undertake any duties commensurate with the post as might reasonably be required.
Person Specification

Essential

- A PhD (or equivalent qualification) in a relevant field.
- A clear and compelling academic plan that will deliver academic and more general impact at an international level, in order to meet the criteria for progression to Associate Professor within the 5 year probationary period.
- Significant proven research experience within the academic discipline with a developing record of internationally excellent publications.
- A track record of gaining competitive research funding.
- Experience of presenting at national and international conferences and/or symposia.
- Evidence of building strong working relationships within and, as appropriate, beyond your own discipline and to contribute to successful projects and collaborations.
- The potential and commitment to undertake high quality and innovative teaching and gain a higher education teaching qualification or award.
- Experience of delivering and engaging with student education where opportunities have existed.
- A high level of interpersonal and communication skills, and a strong ability to communicate effectively in writing and verbally with students, academic and external audiences.
- The ability to lead projects and organise, balance and prioritise work commitments.

Desirable

- Success in gaining significant independent research funding.
- Experience of leading on projects and initiatives, including managing resources and conflicting priorities within challenging circumstances.
- A growing track record of successful and innovative teaching at both undergraduate and/or postgraduate level.
- Experience of involvement in postgraduate research supervision.
- Experience of working collaboratively with external partner organisations.
- Experience of mentoring less experienced colleagues.
University Values

All staff are expected to operate in line with the University’s values and standards, which work as an integral part of our strategy and set out the principles of how we work together. More information about the University’s strategy and values is available at http://www.leeds.ac.uk/comms/strategy/.

Additional Information

The University offers generous terms and conditions of employment, a wide range of benefits, services, facilities and family friendly policies. Full details are available on the Human Resources web pages accessible at www.leeds.ac.uk/hr

The Partnership

The Partnership has been developed by students and staff and describes the mutual expectations of us all as members of the University of Leeds community. More information about the Partnership is available at http://partnership.leeds.ac.uk

Disclosure and Barring Service checks

A Disclosure and Barring Service (DBS) check is not required for this position. However, applicants who have unspent convictions must indicate this in the ‘other personal details’ section of the application form and send details to the Recruitment Officer at disclosure@leeds.ac.uk.

Disabled Applicants

Disabled applicants wishing to review access to the building are invited to contact the department direct. Additional information may be sought from the Recruitment Officer, email disclosure@leeds.ac.uk or tel +44 (0)113 343 1723.

Disabled applicants are not obliged to inform employers of their disability but will still be covered by the Equality Act once their disability becomes known.

Further information for applicants with disabilities, impairments or health conditions is available in the applicant guidance.