



**UNIVERSITY OF LEEDS**

## **CANDIDATE BRIEF**

**Research Fellow in Plant Protein Digestion and Quality, Faculty of Environment**



**Salary: Grade 7 (£ 38,205 – £45,585 p.a.). This role cannot be appointed above £ 40,521 p.a. due to funding restrictions.**

**Reference: ENVFS1116**

**Fixed-term for 18 months, available from 1<sup>st</sup> September 2024**

**We will consider job share / flexible working arrangements**

## Research Fellow in Plant Protein Digestion and Quality, School of Food Science and Nutrition, Faculty of Environment

**Are you an ambitious researcher looking for your next challenge? Do you have a strong background in food science/technology at PhD level? Do you have experience in protein digestion and processing? Do you want to further your career in one of the UKs leading research intensive Universities and also work with an exciting and dynamic company to develop novel plant-based foods for the future funded by Innovate UK?**

This Canada-UK plant-based Protein Innovation project involves a bi-lateral consortium of academia and commercial food partners to bring a much-needed whole food plant-based burger to market addressing key SDGs (sustainable development goals): good health and well-being, zero hunger, responsible and sustainable consumption and production, and climate change project. The project brings together the taste, texture and mouthfeel of beef, along with the plant-based lipid structure to emulate an 18% fat content beef burger. It aims to develop an innovative delicious sustainably, locally produced whole foods plant-based alternative to a beef patty using Canadian and UK sourced products from the agri-food sector. The post-holder must be able to communicate with scientists, production engineers and marketeers on the nutritional, structural and digestion aspects of plant-based ingredients. The candidate will be working with Dr. Alan Javier Hernandez-Alvarez- PI at the School of Food Science and Nutrition, University of Leeds.

The University of Leeds has an opportunity for you to be involved in a project to develop, test and commercialise an innovative plant-based product for the emerging plant-based market. You will be working in collaboration with UK partners, STARS and the School of Food Science and Nutrition; and Canadian partners, Lovingly Made Ingredients, Botaneco, University of Guelph and the Saskatchewan Food Centre.

The post-holder will help to develop the company's expertise around protein chemistry, novel proteins, functionality and digestion to help bring a product to market that will appeal to anyone and everyone – vegans, vegetarians and flexitarians, among others.



## What does the role entail?

As a Research Fellow, your main duties will include:

- Assessing the nutritional and antinutritional composition of high and low moisture extrudate products;
- Analysis of plant protein sources and identification of research gaps in plant protein functionalities and nutritional values;
- Assessing the digestibility of plant-based ingredients for improved health benefits;
- Analysis of presence of gluten and allergenic proteins in plant-based products;
- Matching the desired product characteristics through analysis and measurement techniques for texture/rheology and microscopy techniques;
- Generating and pursuing independent and original research and innovation ideas within the scope of the project;
- Delivering research objectives and contributing to setting the direction of the research project and team;
- Preparing papers for publication in leading international journals and disseminating research results through seminars and conferences;
- Working both independently and as part of a larger team of academic and industry researchers, engaging in knowledge-transfer activities where appropriate and feasible;
- Maintaining your own continuing professional development;
- Contributing to the training of both undergraduate and postgraduate students, including assisting with supervising projects in areas relevant to the project;
- Contributing to the research culture of the School, where appropriate.

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 close to submitting final version at point of application) in Food Science, Food Technology, Chemical Engineering, Biochemistry or equivalent;



- A strong background in plant protein characterization, nutritional/antinutritional assessment of proteins and protein digestion and protein quality;
- Strong analytical skills, with experience in the following methods protein determination, sds-page, solubility, protein digestibility, allergen and protein quality assessment;
- Evidence of capacity to design and undertake research, and contribute into a wider research programme;
- Demonstrated experience of conducting research;
- Good time management and planning skills, with the ability to meet tight deadlines, manage competing demands and work effectively under pressure without close supervision;
- Excellent written and verbal communication skills including presentation skills and proven ability to work in collaboration with others;
- A proven ability to work well both individually and in a team;
- A strong commitment to your own continuous professional development;
- A high level of motivation with the ability to work independently for significant periods of time;
- A strong work ethic with a commitment to drive a project forward and meet challenges head on, seeking solutions to problems.

You may also have:

- A proven track record of peer-reviewed publications in high impact factor journals;
- Experience of working across multiple organisations with different working procedures and practices as well as a diverse group of individuals from a variety of working backgrounds;
- Experience of working with industry on chemical processing, food colloids, physical chemistry or related projects;
- A desire to develop your career in the fast growing and innovative plant-based food industry;
- Experience in the commercial application of your work in a company setting;
- Experience in food formulation.



## 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 Alan Javier Hernandez Alvarez, Lecturer in Nutrition and Global Health**

Email: [a.j.hernandezalvarez@leeds.ac.uk](mailto:a.j.hernandezalvarez@leeds.ac.uk)

## Additional information

Find out more about the [Faculty of Environment](#).

Find out more about the [School of Food Science and Nutrition](#)

### A diverse workforce

The Faculty of Environment is 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

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](mailto: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.

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](http://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>

