Information on Postgraduate Research Scholarship
Ref: FS-ES-04-2027-12

Faculty:	Engineering & Science	**School:**	Engineering
Lead Supervisor:	Dr. Hamid Salehi		
Project Title:	Eco-Friendly Plant-based Protein Enrichment via Dry Air Fractionation: A Techno-economic Investigation vs Common Wet Methods		
Project Description:	Can we produce high-quality plant-based proteins using less energy, water and fewer chemicals? As global demand for sustainable food grows, developing more efficient and environmentally friendly protein production technologies is becoming increasingly important. This exciting PhD project will investigate dry air fractionation, a promising technology that uses air-based separation to produce protein-rich ingredients from plant materials such as peas and faba beans. The research aims to determine whether this approach can offer a more sustainable and economically competitive alternative to conventional wet protein extraction. Using specialist processing equipment at the University of Greenwich's Medway Food Innovation Centre (MFIC), the successful candidate will optimise processing conditions, investigate protein enrichment and yield, and evaluate the quality and functional properties of the resulting protein fractions. The project will also combine experimental findings with techno-economic and environmental assessments to compare dry and wet processing methods in terms of energy consumption, water use, production costs and environmental impacts. Working with an interdisciplinary team of researchers in chemical engineering, powder technology and food science, the successful candidate will gain valuable experience in experimental research, process optimisation and engineering modelling, with opportunities for engagement with industry. The findings could contribute to the development of more sustainable and resource-efficient technologies for the rapidly growing plant-based protein industry. This scholarship is awarded competitively, and all applications are carefully reviewed. While we cannot guarantee an offer, we encourage strong candidates to apply.		
Duration:	3 years, full-time study 6 years, part-time study		

Support available (subject to satisfactory performance):

For Home students

- A full tuition fee waiver at the Home student rate for the duration of the scholarship.

For International students

- 50% tuition fee waiver against the International student rate for the duration of the scholarship.

Important information

- Tuition fees are subject to annual review and may increase during the course of study.
- This scholarship covers tuition fees only and does not include funding for living, accommodation, or maintenance costs.

The successful candidate will have access to specialist research facilities at the Medway Food Innovation Centre (MFIC) and the Wolfson Centre for Bulk Solids Handling Technology, including advanced milling, air classification, particle characterisation and analytical equipment. Working alongside experienced researchers, the student will gain hands-on experience with industry-relevant technologies and develop practical skills in sustainable food and process engineering.

Person Specification of Essential (E) or Desirable (D) requirements:	
Criteria:	**E or D**
Education and Training:	
• 1st Class or 2nd class, First Division (Upper Second Class) honours degree or a taught master's degree with a minimum average of 60% in all areas of assessment (UK or UK equivalent) in a relevant area to the proposed research project	**E**
• For those whose first language is not English and/or if from a country where English is not the majority spoken language (as recognised by the UKBA), a language proficiency score of at least IELTS 6.5 (in all elements of the test) or an equivalent UK VISA and Immigration secure English Language Test is required, if your programme falls within the faculty of Engineering and Science a language proficiency score of at least IELTS 6.5 overall with a minimum of 6.0 in all elements of the test or an equivalent UK VISA and Immigration secure English Language Test is required. Unless the degree above was taught in English **and** obtained in a majority English speaking country, e.g. UK, USA, Australia, New Zealand, etc, as recognised by the UKBA.	**E**
Experience & Skills:	
• Previous experience of undertaking research (e.g. undergraduate or taught master's dissertation)	**E**
• Good understanding of engineering or scientific principles relevant to chemical processing, food technology or related disciplines.	**E**
• Ability to analyse and interpret experimental data and demonstrate good problem-solving skills.	**E**
Personal Attributes:	
• Understands the fundamental differences between a taught degree and a research degree in terms of approach and personal discipline/motivation	**E**
• Able to, under guidance, complete independent work successfully	**E**
Other Requirements:	
• This scholarship may require Academic Technology Approval Scheme approval for the successful candidate if from outside of the EU/EEA	**E**
• The scholarship must commence before 5th April 2027	**E**
Closing date for applications:	**Midnight UTC on 30th November 2026**

For further information contact:	**Dr. Hamid Salehi (H.Salehi@gre.ac.uk)**

Making an application:

Please read this information before making an application. Information on the application process is available at: https://www.gre.ac.uk/research/study/apply/application-process. Applications need to be made online via this link. **No other form of application will be considered**.

All applications **must include** the following information. **Applications not containing these documents will not be considered.**

- **Scholarship Reference Number (FS-ES-04-2027-12)**– included in the personal statement section together with your personal statement as to why you are applying
- **a CV including 2 referees** *
- **academic qualification certificates/transcripts and IELTs/English Language certificate if you are an international applicant, if English is not your first language or you are from a country where English is not the majority spoken language as defined by the UK Border Agency** *

**upload to the qualification section of the application form. Attachments must be a PDF format.*

Before submitting your application, you are encouraged to liaise with the Lead Supervisor on the details above.