



# TUS

**Technological University of the Shannon:  
Midlands Midwest**  
Ollscoil Teicneolaíochta na Sionainne:  
Lár Tíre Iarthar Láir

## POSTGRADUATE RESEARCH OPPORTUNITY

### **Project Title: Macronutrient and Dissolved Gases Measurement using a Digital Controller**

**Short Project Description:** Circular Co-Products Valorisation (CirCoVal) project focuses on transforming low-value or waste co-products from the meat industry into high-value, sustainable products.

As part of this project, we wish to develop Digital controls in the form of field Sensors for macronutrients and dissolved gases measurement to monitor their levels in wastewater purification, Agricultural Nitrogen Phosphate management and other processes developed within the project where such sensors are required.

**Annual Stipend:**

**€25,000 (plus full fees covered)**

**Location:**

**Full time, based at TUS Moylish campus, Limerick**

**Start Date:**

**1st October 2025**

**Type of Degree Offered:**

**Masters by Research**

**Duration of Project:**

**24 months**

**Funding Agency: Department of Agriculture, Food and the Marine (DAFM)**

**Minimum Qualifications/Experience Required:**

- Primary degree in Electronic Engineering or a closely related discipline
- Some experience or a qualification in Automation Engineering is also required
- Strong software skills are desirable or an interest in software development or software development experience.
- Experience of embedded system design and/or edge computing is desirable
- Strong interest in sustainability innovation
- Ability to work independently and collaboratively in both lab and industry environments
- For international candidates: IELTS 6.0 minimum (with no band below 6.0)

Minimum classification of *2.1 honours or equivalent*.

IELTS [International English Testing System] Applicants must have a minimum of 6.0 with no component score less than 6.0.

**Project Lead Supervisor:**

**Dr Joe Sullivan Department of Electrical and Electronic Engineering**

**For further information, please contact:**

[Joe.sullivan@tus.ie](mailto:Joe.sullivan@tus.ie) or [Frank.doyle@tus.ie](mailto:Frank.doyle@tus.ie)

Closing date for receipt of completed application form is 11<sup>th</sup> September 11.50pm.



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Interviews will take place within subsequent weeks.

Download application form below and email it to [pro@tus.ie](mailto:pro@tus.ie) :  
<https://tus.ie/rdi/research/office/funded-research/>