



Ollscoil
Teicneolaíochta
an Álainn
Atlantic
Technological
University



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine



PhD Postgraduate Research Opportunity

PhD Project Title:	Monitoring and evaluating mitigation approaches to improve water quality: Evaluating break the pathway measures (P230071)
Project Duration:	45 month funded PhD project
Organisation:	Atlantic Technological University (ATU)
Location:	ATU Galway City, Dublin Road, Galway
Stipend:	€25,000 per annum
Responsible to:	Project Supervisors: Dr Heather Lally, Dr Emma Gray and Dr Dolores Byrne

Funding: This Scholarship (Grant-Aid Agreement No. 2023RP957) is funded by the Department of Agriculture, Food and the Marine's Competitive Research Funding Programme under their 2023 Thematic Research Call with the support of the Irish Government.

Description: This project is a multidisciplinary collaboration between ATU Galway City, Teagasc, and University College Cork. It combines the expertise of personnel in the integrated fields of water quality, soil, hydrology, chemistry, and ecology and agri-environment to evaluate the efficacy and efficiency of break the pathway measures (e.g., riparian buffer zones and wetlands) to protect and improve water quality within agricultural catchments. Within the context of a doctoral degree programme at ATU Galway City, the PhD candidate, under the guidance of the supervisory team will:

- Assess the effectiveness of implemented break the pathway measures to mitigate and reduce nutrient and sediment pollution,
- Use physico-chemical parameters and biological data (aquatic macrophytes, riparian vegetation and macroinvertebrates) to determine whether implemented break the pathway measures provide protection and improvements in water quality of adjacent aquatic water bodies during base and spate flow conditions,
- Inform the design and implementation of break the pathway measures with specific reference to pollution critical source areas, and
- Make recommendations on appropriate parameters and bioindicators for assessing the water quality of adjacent waterbodies where sediment and nutrients are pressure of concern.

The expected outcomes of this project include the identification, evaluation and dissemination of effective mitigation approaches (i.e., measures, management practices, tools and technologies) to protect and improve water quality as an essential element of sustainable agricultural systems in Ireland.

Requirements/Qualifications: The successful candidate will

- Hold an Honours Degree with a minimum award classification of 2:1 or equivalent in a cognate discipline (Agroecology, Aquatic Ecology, Zoology, Biology, or Ecology).
- A full clean Irish/European Union driving licence is required.

The candidate will be expected to work on their own initiative and be willing to acquire the broader skills necessary for the successful completion of a PhD project.

Project Duration: 45 months

Conditions:

- €25,000 Stipend per annum
- Postgraduate fees for students will be covered by the project.
- In addition, any necessary travel and material costs incurred during the project will be covered.

If either English or Irish is not the applicant's first language, evidence of English language proficiency is required for registration. Please refer to web link [English Language Requirements | ATU - Atlantic Technological University](#) view the minimum English language proficiency standards for entry to ATU

Project Start Date: March 2025

Application Closing Date: 12 noon Friday 31st January 2025

Applicants should submit their:

- Curriculum Vitae (to include details of 2 referees)
- A copy of transcript of results
- A Personal Statement which should not exceed 1 page and must include details on:
 - How your qualifications and experience have prepared you for this PhD research programme
 - Why you would like to pursue this PhD research programme

Applications must be submitted to ResearchOffice.galwaymayo@atu.ie e-mail address only. Please ensure all documents are emailed as a single Word or PDF file.

For further information on the project, please contact: Dr Heather Lally (heather.lally@atu.ie) or Dr Emma Gray (emma.gray@atu.ie)

Data Protection Statement

ATU takes very seriously its legal obligations as set out in the General Data Protection Regulation 2016/679 (GDPR) and the Irish Data Protection Act 2018 to safeguard and protect your personal information in our possession. The personal information which you disclose to us in this form will only be used to assess your suitability; administer and register you for this scholarship. We will not keep your personal information for any longer than is necessary for those stated purposes. **For more details, please refer to ATU's Student Privacy Statement:** <http://www.gmit.ie/general/student-privacy-statement>