

TEAGASC MASTERS WALSH SCHOLARSHIP OPPORTUNITY

“Reducing fertiliser nitrogen emissions in field using nitrification and urease inhibitor technologies”

Reference: 2022203

Background

We seek a self-motivated, enthusiastic student to undertake a fully funded 2-year Research Masters project. You will investigate the potential of urease and nitrification inhibitors to reduce emissions from nitrogen and nitrogen plus sulphur fertilisers. This scholarship is funded by the Department of Agriculture Food and the Marine as part of a larger project focused on the efficacy and safety of inhibitors (Grant number 2021R477).

Nitrogen (N) fertilisers contribute to farm productivity by boosting plant chlorophyll production and thus photosynthesis and the production of plant biomass. We must raise the bar on the environmental credentials of the fertiliser N that is applied on Irish farms to meet sustainability goals. In your Master’s project work you will conduct field research, write up your results in your thesis and publish your work. Your work will help agriculture meet emission reductions targets while maintaining or improving yield performance and nitrogen use efficiency.

You will have the support of the team at the Teagasc Soils, Environment and Land Use Department within the Crops, Environment and Land Use Programme at the Johnstown Castle, Co. Wexford Research Centre.

Requirements

The work will be a mix of field, lab and scientific writing. Applicants should hold or expect to hold a first or a second class honours degree in an appropriate discipline (e.g. Agricultural Science, Plant Science, Soil Science, Environmental Science, Chemistry, Biosystems Engineering). Candidate should be highly self-motivated and be interested in agriculture along with both field and laboratory work. Field sampling and laboratory experimental and analytical skills are highly desirable as is a good practical knowledge of Irish agricultural production systems and farm nutrient management practices. Applicants must be fluent in English (spoken and written) and must hold a full EU driving licence. For applicants whose first language is not English, requirements are outlined [here](#).

Award

As a student you will be primarily based at the Teagasc Johnstown Castle Research Centre and will be registered at University College Dublin, under the supervision of Prof. Enda Cummins in association with Teagasc supervisors including Dr. Patrick Forrester. The Scholarship provides an annual flat rate stipend of €18,000 and contribution to university fees of up to a maximum of €6,000. Fees for non-EU citizens are significantly higher. The scholarship is tenable for 2 years.

Further Information/Applications

Dr Patrick Forrester, Teagasc, Johnstown Castle, Wexford, Ireland email: patrick.forrester@teagasc.ie

Prof. Enda Cummins, University College Dublin. email: enda.cummins@ucd.ie

Application Procedure

Submit an electronic copy of Curriculum Vitae and a short letter describing why you are motivated to apply for this particular position simultaneously to:

Dr. Patrick Forrester: patrick.forrester@teagasc.ie & Prof. Enda Cummins: enda.cummins@ucd.ie

The closing date for applications is April 10th 2023

