



PhD Scholarship Advertisement

Fully Funded PhD Scholarship in Adsorption-based Biotechnology
School of Biological and Chemical Sciences and Ryan Institute

Applications are invited from suitably qualified candidates for a full-time, fully funded four-year PhD scholarship starting in September 2023, affiliated to the School of Biological and Chemical Sciences (Microbiology) at the University of Galway.

University of Galway

Located in the vibrant cultural city of Galway in the west of Ireland, the University of Galway has a distinguished reputation for teaching and [research excellence](#). For information on moving to Ireland please see www.euraxess.ie

Detailed Project Description

The successful candidate will join the Siggins Lab. (www.sigginslab.com) based in the School of Biological and Chemical Sciences, and affiliated with the Ryan Institute, at the University of Galway. The School of Biological and Chemical Sciences has a strong record of Environmental Microbiology and Biotechnology research. The project is aligned with a Royal Society-Science Foundation Ireland University Research Fellowship, “Adsorption based biotechnology to integrate methane emission mitigation and valorisation”.

Global warming is universally recognised as one of the most important and urgent environmental issues of modern times. The ambitious goal of the Paris Agreement is to limit global warming to 1.5°C. Radical approaches, including the development of fundamentally novel and innovative biotechnological systems, will be necessary to reduce emissions of greenhouse gases, such as methane, in order to meet this goal.

The successful candidate will join a research group that is advancing scientific knowledge of microbial biotransformation of methane. They will use a range of microbiological techniques to assess the structure and functionality of targeted methane oxidising communities under varying environmental and process conditions. Microscopy analysis of biofilm development will be carried out with the support of the Centre for Microscopy and Imaging at the University of Galway. Using this information, students will design, optimise and trial novel environmental biotechnology platforms for sustainable methanotrophic production of high value industrial compounds.

In addition to joining a dynamic and growing interdisciplinary research group, students will be encouraged to avail of the extensive opportunities for professional development within the University of Galway and the Ryan Institute, including those offered by the Researcher Development Centre, and additional external opportunities offered by the program funding agencies: Science Foundation Ireland and The Royal Society.



The successful PhD student will be fully trained in all technical elements of the project. They will be supported and mentored by the project lead, with additional support from the wider research group, including experienced postdoctoral researchers.

In addition to fees and stipend, the student will receive a laptop and specific research related travel costs.

Living allowance (Stipend): €19,000 per annum, tax-exempt scholarship award

University fees: Four years EU fees are funded. A student levy applies (currently €140 per annum).

Start date: 1st September 2023

Academic Entry Requirements: A 1st class honours degree, or a Masters degree, in Microbiology or a relevant area (such as, but not limited to: Environmental Science, Biotechnology, Environmental Engineering).

Applicants must meet the following **essential** criteria:

- Highly self-motivated, enthusiastic, and scientifically curious;
- Demonstrate critical thinking, problem solving and troubleshooting skills;
- Have an interest in Environmental Biotechnology and climate change mitigation;
- Ability to work independently, and as part of a team;
- Excellent spoken and written communication skills, Non-native English speakers must satisfy the University of Galway English Language Entry Requirements available [here](#).

Additional information:

Prior publications from the research group are available [here](#).

Information regarding the Siggins Lab is available [here](#).

Enquiries regarding this position are encouraged and should be made via email to Dr Siggins.

To Apply for the Scholarship: Applications to include a cover letter, CV and the contact details of two references, should be sent in Word or PDF format to Dr Alma Siggins by email: alma.siggins@universityofgalway.ie

Contact Name: Dr Alma Siggins

Contact Email: alma.siggins@universityofgalway.ie

Application Deadline: 30th June 2023 by 17:00 (Irish time)

Primary Supervisor name: Dr Alma Siggins