**PhD Scholarship - Biomolecular Electronics Research**

**Laboratory**

Fully Funded PhD Scholarship in Enzyme Electrodes for Detection of Clinical Analytes

School of Biological & Chemical Sciences

Application is invited from suitably qualified candidates for a full-time funded PhD scholarship starting in May 2025, or sooner, affiliated to the Biomolecular Electronics Research Laboratory, School of Biological & Chemical Sciences 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](https://www.universityofgalway.ie/our-research/)

For information on moving to Ireland please see [www.euraxess.ie](http://www.euraxess.ie)

**Detailed Project Description**

The successful candidate will undertake training and research on ‘Enzyme Electrodes for Detection of Clinical Analytes’.

The Biomolecular Electronics Research Laboratory, Director Prof. Dónal Leech, was established in the University of Galway in 1997. Research in the laboratory focuses on preparation and characterisation of electron-transfer catalysts and modified electrode surfaces directed to eventual application as sensors and fuel cell electrodes. Information about research in the Biomolecular Electronics Research Laboratory is available at:

<https://www.universityofgalway.ie/our-research/people/biological-chemical-sciences/donalleech/>

This funded research programme seeks to develop and implement next-generation technologies for production of electrochemical enzyme-based devices applicable to detection of clinical analytes in body fluids. The programme builds on previous research in the laboratory and will involve developing approaches for improved sensing of glucose, lactate and other clinical biomarkers. The initial research focuses on synthesis of metal complexes, polymers, and redox polymers and characterisation of their application as mediators of enzyme electron transfer and as protective coatings for enzyme electrodes.

**Living allowance (Stipend):** €25,000 per annum, tax-exempt scholarship award, for a maximum period of 4-years.

**University fees**: Covered as part of the scholarship, apart from an annual student levy (currently €140 per annum)

**Start date**: May 2025, or as soon as possible.

**Academic Entry Requirements:**

* BSc Degree (minimum 2.1 or equivalent) and/or Master in Chemistry, or related area
* High level of spoken and written English and good communication skills.
* Experience of using electrochemical methods

**To Apply for the Scholarship:**

Expressions of interest comprising submission of a covering letter, CV, statement of personal research interests, evidence of performance, and experience of electrochemistry, at BSc and MSc or equivalent and the contact details of two referees, to be submitted via **e-mail** to Professor Dónal Leech**.**

**Use ‘BERL PhD 2025 in the e-mail subject.**

**Contact Name:** Professor Dónal Leech

**Contact Email:** donal.leech@universityofgalway.ie

**Application Deadline:** 7th February 2025[17:00] (Irish time 24hr format)