



## PhD Scholarship Advertisement

### Fully Funded PhD in Wireless Implantable Sensing Systems at Smart Sensors Lab

School of Medicine, College of Medicine, Nursing and Health Sciences, University of Galway

Application(s) are invited from suitably qualified candidates for full-time funded PhD scholarship(s) starting in June, 2023 affiliated to the School of Medicine 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](http://www.euraxess.ie)

**Detailed Project Description:** The PhD project will focus on the development of an implantable wireless blood pressure sensor for patients with hypertension. Hypertension is considered a major cause of death from cardiovascular disease. Accurate monitoring of blood pressure results in better control of blood pressure, which can significantly reduce the risk of death due to hypertension. The development of a blood pressure sensor that can provide reliable blood pressure measurement for clinical use is highly desirable for continuous monitoring of blood pressure in hypertension patients. The PhD research will address the critical challenges design and modelling of flexible wireless pressure sensors. These include flexible electrode fabrication on flexible substrate materials, chemical surface modification/activation to achieve robust integration of sensors, optimization of sensors for wireless linkage in tissue environments, and improvement of biocompatibility and biosafety of the sensors.

**Living allowance (Stipend):** €18,500 per annum, [tax-exempt scholarship award]

**University fees:** €5,500

**Start date:** June 2023

**Academic Entry Requirements:** Applicants should ideally possess a Master's degree or a BSc(Hons) or BE with relevant experience in Electronic/Computer Engineering or a closely related discipline with a background in sensor design and characterisation. Additional requirements include:





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UNIVERSITY OF GALWAY



HR EXCELLENCE IN RESEARCH

- Experience in Python, and C coding.
- Experience in MATLAB, COMSOL, and AutoCAD.
- Knowledge of electrode fabrication and flexible substrate materials
- Problem-solving, critical thinking and troubleshooting skills.
- Excellent written and oral communication skills.

**To Apply for the Scholarship:** The PhD position is supported by the Horizon RIA grant

**Contact Name:** Dr Riaz Rehman

**Contact Email:** [riaz.rehman@universityofgalway.ie](mailto:riaz.rehman@universityofgalway.ie)

**Application Deadline:** 03/05/2023 and time 17:00 GMT



**Horizon Europe**  
**2021-2027**