



Applications are invited from suitably qualified candidates for the following position:

Research Centre: School of Chemical Sciences / NCSR
Post Title: Postdoctoral Researcher
Electrochemical Biosensors
Level on Framework: Level 1
Post Duration: Fixed term 11 months

Dublin City University

Dublin City University (DCU) is a leading innovative European University. It is proud to be one of the world's leading Young Universities and is among the world's top 2% globally. DCU is known as Ireland's University of Impact, with a mission to 'transform lives and societies' and focuses on addressing global challenges in collaboration with key national and international partners and stakeholders.

DCU has over 20,000 students in five faculties spread across three academic campuses in the Glasnevin-Drumcondra area of North Dublin. Thanks to its innovative approach to teaching and learning, the University offers a 'transformative student experience' that helps to develop highly sought-after graduates. DCU is currently No. 1 in Ireland for Graduate Employment Rate, and for graduate income (CSO).

DCU is a research-intensive University and is home to a number of SFI-funded Research Centres. The University participates in a range of European and international research partnerships. DCU is also the leading Irish university in the area of technology transfer as reflected by licensing of intellectual property.

As a 'People First' institution, DCU is committed to Equality, Diversity and Inclusion - a University that helps staff and students to thrive. The University is a leader in terms of its work to increase access to education, and is placed in the world's Top 10 for reducing inequalities in the Times Higher Education Impact Rankings.

Background & Role

The School of Chemical Sciences is one of Ireland's most progressive and highest achieving Schools with outstanding facilities, housed within a modern and dynamic city campus. Our goal is to develop graduates with the ability to critically evaluate, and then to solve, chemical and pharmaceutical

problems, preparing the highest quality graduates capable of meeting the challenges of modern industry and research. The School is highly successful at attracting large scale research funding, with our researchers having significant roles within nationally significant university/industry collaborative initiatives and European funded Integrated Training Networks. The School is one of the leading academic schools within DCU and is ranked in the top 300 chemistry schools/departments in the world (QS Rankings), a reflection of the School's ambitious research activities and its undergraduate/postgraduate degree programmes.

This is a postdoctoral fellowship available for an initial period of 1 year in electroanalytical chemistry with an emphasis on the detection of anti-epileptic drugs and their metabolites first in blood and then in minimally invasive samples such as saliva and urine. The PD will join a multidisciplinary research team working to create, optimise and test sensors for point-of-care applications. Experience in electrochemistry, sensor development and practical application of sensors is essential. Experience in sensor assay development, screen-printed electrodes, and portable sensors are particularly sought. Experience in the design and fabrication of sample-to-answer devices, microfluidics, or electrochemiluminescence is an advantage. The position is fully funded, and you will work under the guidance of Professor Robert Forster and Assistant Professor Loanda Cumba in the School of Chemical Sciences

Principal Duties and Responsibilities:

Please see job description for full list of duties and responsibilities

Qualifications and Experience:

Essential Criteria

- A PhD in electrochemistry/electrochemical sensor development or very closely related area.
- Laboratory experience in assay development, electroanalysis, electrochemical sensing of drugs or biomarkers or related closely related area.
- A demonstrated strong work ethic, as well as an independent and creative mind set and a deep commitment to problem-solving.
- Excellent interpersonal skills as well as verbal and written communication skills.
- Very good organisational skills with an ability to prioritise workloads and to work successfully on their own initiative.

Desirable Criteria. The successful individual will ideally possess the following:

- Postdoctoral experience in electrochemistry/electroanalysis/sensors.
- Demonstrated ability to work as part of a collaborative team and to innovate in an organisational environment with multiple academic and clinical stakeholders.
- An interest in innovation, and real-world deployment of sensors within clinical settings.

Candidates will be assessed on the following competencies:

Discipline knowledge and Research skills – Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline.

Understanding the Research Environment – Demonstrates an awareness of the research environment (for example funding bodies) and the ability to contribute to grant applications.

Communicating Research – Demonstrates the ability to communicate their research with their peers and the wider research community (for example presenting at conferences and publishing research in relevant journals) and the potential to teach and tutor students.

Managing & Leadership skills - Demonstrates the potential to manage a research project including the supervision of undergraduate students.

Essential Training

Post holders will be required to undertake the following essential training: Orientation, GDPR, Research Integrity and Compliance. Other training may need to be undertaken when required.

Salary

Postdoctoral Researcher €41,208 per annum*

*Appointments will be commensurate with qualifications and experience and will be made on the appropriate point of the salary scales, in line with current Government pay policy.

Closing date: 10th March 2023

Informal Enquiries in relation to this role should be directed to:

Prof Robert Forster, robert.forster@dcu.ie, Dublin City University.

Application Procedure:

CV and cover letter should be sent to robert.forster@dcu.ie,

Please clearly state the role that you are applying for in your application and email subject line: Job Ref #RF1832 Post-Doctoral Researcher Electrochemical Biosensors

Dublin City University is an equal opportunities employer.

In line with the Employment Equality Acts 1998 – 2015, the University is committed to equality of treatment for all those who engage with its recruitment, selection and appointment processes.

The University's Athena SWAN Bronze Award signifies the University's commitment to promoting gender equality and addressing any gender pay gaps. Information on a range of university policies aimed at creating a supportive and flexible work environment are available in the [DCU Policy Starter Packs](#)