

<b>Research Centre</b>	School of Chemical Sciences / National Centre for Sensor Research (NCSR)
<b>Post title</b>	Postdoctoral Researcher in Bioelectrochemistry/ Electrochemistry of Lipid Membranes
<b>Level on Framework</b>	Level 1
<b>Post duration</b>	Fixed Term Contract up to 2 years

### **Research Career Framework**

As part of this role the researcher will be required to participate in the DCU Research Career Framework <http://dcu.ie/hr/ResearchersFramework/index.shtml> This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

### **Overview**

The National Centre for Sensor Research (NCSR) is a large, multidisciplinary research unit based in state-of-the-art facilities situated on the campus of Dublin City University. Arising from success in recent proposals we are now seeking application for the following research position in DCU.

### **Background and Role**

We are seeking an experienced and enthusiastic scientist with experience in electrochemistry of biological particularly lipid membrane films to work as part of a dynamic multidisciplinary team on an ambitious project focused on development of novel cell membrane models for drug discovery applications. The role is focussed on developing microporous lipid bilayer array platforms and forms part of a project funded through Science Foundation Ireland's Investigator Programme. This programme is aimed at using these platforms for drug discovery and for elucidating lipid-drug and membrane-protein-drug interactions.

The candidate must have track record in bioelectrochemistry particularly in impedance spectroscopy of bio-interfacial films. Experience in preparing and studying lipid membrane

models such as GUVs and SLBs and/or use of biomembrane mimetic systems (GUVs adhesion on modified substrates, Langmuir-Blodgett, Langmuir-Schaefer, dipping) would be an advantage as would experience in fluorescence or Raman microscopy.

***The duration of this role will be up to 2 years, with potential to be extended for an additional 1 year subject to project requirements and funding availability.***

## **Principal Duties and Responsibilities**

Reporting to his/her Principal Investigator the Postdoctoral Researcher will:

- Conduct, with a very high degree of technical competence a specified programme of research and scholarship under the supervision and direction of the Principal Investigator
- Disseminate the outcomes of the research in which he/she is engaged including publishing in high quality peer reviewed journals of international standing.
- Support the PI and research group in the design and development and implementation of the broader research programme.
- Support if required, the development of proposals for research funding.
- Take responsibility as requested for day-to-day advice and support of graduate research students associated with your research group.
- Mentor, assist and train as appropriate and as directed, the research graduate students and more junior postdoctoral fellows within the group.
- Contribute to reporting, site visit preparation and other administrative management work associated with your programme of research and the research group
- Contribute to teaching and outreach activities of the group.
- Liaise with stakeholders such as industry and collaborators.
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University
- Carry out administrative work associated with the programme of research as necessary

## **Minimum Criteria**

The candidate should have a PhD in chemistry, physics or biochemistry, with experience in electrochemistry of biointerfaces, in particular electrochemical impedance spectroscopy. Preference will be given to candidates with experience in electrochemical methods applied to lipid membrane models. Experience in fluorescence microscopy methods is also highly desirable.

The candidate should be capable of working independently with a high degree of technical competence whilst also being a team player, he/she must demonstrate initiative, be hard working, versatile and productive. S/he should have good communication and organisational skills.

**Salary: \*€37,750 - €46,255**

*\* 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:** 15 February 2017

**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.

**Informal enquiries to:**

Professor Tia Keyes, School of Chemical Sciences, DCU, Dublin 9, Ireland

E-mail: [tia.keys@dcu.ie](mailto:tia.keys@dcu.ie)

Phone: +353 (0)1 7005298

*Please do not send applications to this email address, instead apply as described below.*

### **Application Procedure**

To apply for this role, applications should include a CV and covering letter and be submitted with the application form to the Human Resources Department as outlined below.

Application forms are available from the DCU Current Vacancies (open Competitions) website at <http://dcu.ie/hr/vacancies/current.shtml> and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 7005149.

**Please clearly state the role that you are applying for in your application and email subject line: Job Ref 446 Postdoctoral Researcher in Bioelectrochemistry/ Electrochemistry of Lipid Membranes**

Applications should be submitted by email to [hr.applications@dcu.ie](mailto:hr.applications@dcu.ie) or by Fax: +353 (0)1 7005500 or by post to the Human Resources Department, Dublin City University, Dublin 9. Human Resources Department, Dublin City University, Dublin 9. Tel: +353 1 700 5149; Fax: +353 1 700 5500 Email: [hr.applications@dcu.ie](mailto:hr.applications@dcu.ie)

***Dublin City University is an equal opportunities employer***