

Research Centre: School of Chemical Sciences / National Centre for Sensor Research (NCSR)

Post title: Postdoctoral Researcher in Deposition and Characterisation of Biochemical Sensor Films.

Level on Framework: Level 1

Post duration: Fixed Term Contract 9 months.

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.

DCU has a strong track record in attracting both Irish and European Union research funding under Horizon 2020 (and all previous Framework Programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally-focused environment in which to advance your academic career.

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.

Background and Role

We are seeking an enthusiastic scientist with experience in the deposition and characterisation of (bio) chemical sensor films using scanning electron, Raman and fluorescence microscopy as well as electrochemical techniques (voltammetry, impedance, open circuit potentials etc.). Enterprise Ireland and industry funding has recently been awarded to the NCSR to create films using wet chemical methods and compare their structure and performance against a state-of-the-art proprietary method.

As part of the funded team, the Post-Doctoral Fellow will prepare and characterise films using both fluorescently labelled and unlabelled proteins, characterise their structure using a range of microscopies (SEM, Raman, Confocal Fluorescence, AFM), electrochemical properties and analytical performance in assays.

The duration of this role will be for 9 months in the first instance.

Principal Duties and Responsibilities

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

- Conduct a specified programme of research on the deposition, characterisation and assay performance of protein based, chemically sensitive films.
- Deliver research outputs and provide input into reports as required according to project management schedules.
- Attend and present results at project technical progress meetings.
- Liaise with both internal and external stakeholders including industrial and academic partners.
- Disseminate the outcomes of the research in which he/she is engaged including publishing in high quality peer reviewed journals of international standing where appropriate.
- 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 the 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, funder/partner visits and other administrative management work associated with your programme of research and the research group.
- Contribute to teaching and outreach activities of the group.
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.

Minimum Criteria

Candidates must have a primary degree and PhD in Chemistry of which material or analytical science was a significant component. A good knowledge in one or more of the following areas is sought: protein layer deposition using wet chemical methods, microscopy (SEM, Raman, Confocal Fluorescence, AFM), electrochemistry and assay development. Applicants 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: *€36,488 - €47, 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: 31 July 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 and in collaboration with industry partners.

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

Communicating Research – Demonstrates the ability to communicate their research with their peers, with industry partners, and with 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 and to meet industry partner expectations regarding project turn-around times.

Informal enquiries to:

Prof. Robert Forster Robert.Forster@dcu.ie +353 (0)1 7005943

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.

Applications should be submitted by email to 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 Dublin City University is an equal opportunities employer.

Please clearly state the role that you are applying for in your application and email subject line: Job Ref 605 Postdoctoral Researcher in Deposition and Characterisation of Biochemical Sensor Films.

This Research is co-funded by the European Regional Development Fund (ERDF) under Ireland's European Structural and Investment Funds Programmes 2014-2020.

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