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

Post title
Postdoctoral Researcher Microfabrication and Microassembly.

Level on Framework
Level 1

Post duration
Fixed Term Contract up to 15 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](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 record in attracting both Irish and European Union research funding under Horizon 2020 (and previous Framework Programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally-focused environment in which to advance your 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 in DCU.

Background and Role
We are seeking an experienced and enthusiastic scientist with expertise in microfabrication and micro-assembly methods and associated characterization techniques to produce commercial prototypes of cell membrane models for a project supported under Enterprise Ireland Commercialisation Programme.

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 should have a minimum of and honours BSc in chemistry or related subject and at least 4 years research or industrial experience in a relevant field. Previous, demonstrable experience microfluidics, in microfabrication processes and metrology including hot embossing, lithography and metal deposition and lasere/optical and etching methods is essential. Experience in 3D printing, optical microscopy and/or SEM would be an advantage. Experience in handling lipid membranes and methods such as Langmuir-Blodgett, would also be an advantage.

The candidate should have be organised, have a strong work ethic and be capable of working both alone and with a team.

Principal Duties and Responsibilities

Reporting to his/her Principal Investigator the Postdoctoral Researcher:

- 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
- Within the constraints of IP protection of the project, disseminate the outcomes of the research in which he/she is engaged including funder reporting, industrial demos and 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 as required, the development of proposals for research funding.
- Contribute to support of graduate research students associated with your research group.
- Assist and train as directed, members of the research group.
- Take responsibility as requested for report generation, and administration associated as well as site visit preparation and other administrative management work associated with your programme of research and the research group
- Liaise with stakeholders such as funders, 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 physics, chemistry or materials engineering or a related area and a minimum of 4 years’ experience in microfabrication and metrology.

Previous, demonstrable experience microfluidics, in microfabrication processes and metrology including hot embossing, lithography and metal deposition and lasere/optical and etching methods is essential. Experience in 3D printing, optical microscopy and/or SEM would be an advantage. Experience in handling lipid membranes and methods such as Langmuir-Blodgett, would also be an advantage.

The candidate should have be organised, have a strong work ethic and be capable of working both alone and with a team.

They should be capable of working independently with a high degree of technical competence with strong attention to detail 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: €36,854 p.a

Closing date: 13th March 2018

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 Phone: +353 (0)1 7005298

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

Application forms are available from the DCU Current Vacancies (open Competitions) website at [http://www.dcu.ie/vacancies/current.shtml](http://www.dcu.ie/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 805 Postdoctoral Researcher, Microfabrication and Microassembly.

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

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