Research Centre
Irish Separation Science Cluster (ISSC)
Post title
Postdoctoral Researcher - Microfluidics
Post duration
3 year contract till 31st March 2016

Overview

Located within the National Centre for Sensor Research (www.ncsr.ie) in Dublin City University, the Irish Separation Science Cluster (ISSC), funded by Science Foundation Ireland, brings together a team of researchers from a multidisciplinary background, spanning chemistry and materials, biotechnology and engineering, to develop the next generation of materials, methods and technologies to enable separation science overcome future challenges in the understanding and characterisation of complex biological systems. Particular emphasis is placed upon the application within the growing biopharmaceutical and medical diagnostic industries. The cluster consists of a consortium of eight funded academic researchers, administrative support, approximately forty-five associated postdoctoral and postgraduate students, and a significant number of industrial partners.

Background & Role

Arising from a recent Science Foundation Ireland award, the following postdoctoral research position is now available in Dublin City University. This position will focus on the development of new technologies toward the advancement of separation science using leading laser processing micro-fabrication techniques. The successful applicant will join an exciting multi-disciplinary and multi-partner research effort within the Irish Separation Science Cluster (ISSC) and Advanced Processing Technology Research Centre (APT) in the School of Mechanical & Manufacturing Engineering.

Principle Duties and Responsibilities

This postdoctoral position will be primarily focused on development of new micro-fluidic and thin film based platforms for target isolation, manipulation and separation of complex chemical and biological systems.

Reporting to Principal Investigator, Dr Dermot Brabazon, Postdoctoral Researcher will:

- Conduct specified programme of research on macro and nano-structured high-resolution HPLC and thin film chromatography systems
- Preparation of journal articles and conference presentations on generated results is an integral component of this role under the supervision of the Principal Investigator
- Assist in identifying and developing future research and funding initiatives
- Supervise and assist students working in this area with their research
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.
- Engage in teaching and teaching support as assigned by the Head of School under the direction of the Principal Investigator
• Liaise with both internal and external stakeholders including industry and academic partners/collaborators
• Carry out administrative work associated with the programme of research as necessary

Minimum Criteria

Applicants should have a PhD in in chemistry, analytical chemistry, bio-analytical chemistry, materials science, micro-engineering or closely related subject, with at least six years of experience in the development and application of micro-fluidic analytical systems. In addition, the candidate should have experience working in multi-disciplinary teams; in micro-fabrication; with micro-system assembly, integration, and control; knowledge of physical topology and chemical characterisation of laser processed samples. It is also desirable that the candidate have knowledge of process parameter mapping with design of experiments and data acquisition and use of LabVIEW control software.

Salary Scale: €37,750 - €46,255

Closing date: 20th March 2013

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 students.

Application Procedure
Informal enquiries to:
Dr Dermot Brabazon, School of Mechanical & Manufacturing Engineering, DCU
E-mail: dermot.brabazon@dcu.ie Phone: +353 (0)1 700 8213

Applications forms are available at: http://www4.dcu.ie/hr/vacancies/current.shtml and from the Human Resources Department, Dublin City University, Dublin 9. Tel: (01) 700 5149; Fax: (01) 700 5500 Email: hr.applications@dcu.ie

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