Research Centre: Fraunhofer Project Centre for Embedded Bioanalytical Systems at Dublin City University – a joint initiative of Science Foundation Ireland and Fraunhofer

Post title: Research Assistant supporting prototyping, assembly, characterization and system-level testing of microfluidic "Lab-on-a-Chip" systems

Post duration: Fixed Term up to Dec 31st 2019

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.

An exciting job opportunity in a very innovatively spirited, commercially focussed research centre within Dublin City University (DCU) – Ireland's University of Enterprise. The technology-led centre engineers next-generation life-science technologies for the benefit of people and societies. In this role, you will have access to competent technical, infrastructural and administrative support, and the opportunity to evolve a multi-facetted skill set in an environment where you closely collaborate with leading Irish and international companies and research organisations. You support the application driven development of microfluidics-based "Lab-on-a-Chip" systems for decentralised bioanalytical testing towards high technology readiness levels.

The position is based in the Fraunhofer Project Centre for Embedded Bioanalytical Systems at Dublin City University (FPC@DCU), a joint initiative of Science Foundation Ireland and Fraunhofer-Gesellschaft. In close collaboration with the Fraunhofer Institute for Production Technology (IPT) in Germany, FPC@DCU develops typically microfluidics-based solutions for applications such as in-vitro ("point-of-care") diagnostics, pharma, agrifood and environmental monitoring.

Research Assistant

The successful candidate can demonstrate the ability to apply experience in polymer prototyping, systems assembly & integration, and characterization / validation technologies to support the efficient development of predominantly polymeric microfluidic devices. A working knowledge of biochemical sample handling and assay protocols would be a distinct advantage, as would the development of instrumentation for the characterisation, control and interrogation of lab-on-a-chip platforms and their materials and manufacture. You will be familiar with underlying design software such as Solidworks and AutoCAD and show a keen interest to contribute to FPC@DCU's commercial "fit-for-industry" focus.

Duties and Responsibilities:

Reporting to the centre director or a manager appointed by him, the duties and responsibilities related to the post include, but are not restricted to:

- Development and implementation of microfabrication techniques such as milling, surface functionalisation and 3D printing of typically polymer microfluidic devices;
- Implementation of assembly and bonding techniques of such multi-component devices;
- Implementation of accelerated ageing and thermal treatment protocols for polymer materials and integrated microfluidic platforms;
- Characterisation of materials, (semi-finished) parts, components and systems using techniques such as optical microscopy, profilometry and spectroscopy;
- Characterisation of fluidic functionality of assembled microfluidic consumables;
- Characterisation of bioassay performance of integrated microfluidic consumables;
- Support in CAD/CAM design for microfluidic systems, which have been engineered by the research team at the FPC@DCU.
- Certain administrative tasks.

Desired Skills and Experience:

The successful candidate must hold a primary degree in a relevant discipline and should have at least 1 year of relevant experience. Under overall guidance of a researcher, you should have a proven track record of working in a team as well as handling aspects of research independently. Familiarity with the operations of a scientific / engineering laboratory environment would be desirable. A self-starting attitude, good interpersonal skills and high technical expertise are a prerequisite.

Salary range*: €21,674 - €34,269

*Appointment will be commensurate with qualifications and experience according to the appropriate point of the salary scale, in line with current Government pay policy.

Closing date: 12th September 2018

Informal enquiries to: Prof. Jens Ducrée (jens.ducree@dcu.ie)

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

Application forms are available from the DCU Current Vacancies (open Competitions) website at https://www.dcu.ie/hr/vacancies/current.shtml and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 700 5149.

Applications should be submitted by email to hr.applications@dcu.ie or by Fax: +353 (0)1 700 5500 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

Please clearly state the role that you are applying for in your application and email subject line: Job Ref 983 Research Assistant* supporting prototyping, assembly, characterization and system-level testing of microfluidic "Lab-on-a-Chip" systems at *Fraunhofer Project Centre

Dublin City University is an equal opportunities employer