Research Centre

Fraunhofer Project Centre for Embedded Bioanalytical Systems at Dublin City University (FPC@DCU) – a joint initiative of Science Foundation Ireland and Fraunhofer

Post title
Postdoctoral Researcher – Microfluidic systems

Level on Framework
Level 1

Post duration
Fixed term up to 31st December 2019

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 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 you can advance your academic career.

We offer an exciting research position in FPC@DCU – Ireland’s first Fraunhofer Project Centre for Embedded Bioanalytical Systems at Dublin City University. In collaboration with the Fraunhofer Institute for Production Technology (IPT) in Germany, FPC@DCU engineers and manufactures next-generation life-science technologies for the benefit of people and societies. FPC@DCU operates at the challenging crossroads of microsystems engineering and the life sciences. Common fields of application are in-vitro (“Point-of-Care”) diagnostics, pharma, life-science research, agrifood and environmental monitoring.

Background & Role

You will develop microfluidic designs and manufacturing processes for typically polymer-based microfluidic systems towards high technology readiness levels (TRLs) within FPC@DCU. In this role you will have access to competent technical, infrastructural and administrative support and the opportunity to evolve a multi-facetted skillset in an environment where you closely collaborate with
world-class research organisations as well as domestic and international companies. Attractive career opportunities will arise with the success of FPC@DCU.

**Principal Duties and Responsibilities**

You will be reporting to the FPC@DCU director or a manager appointed by him. Your duties will include, but are not limited to:

- Development of microfluidic “Lab-on-a-Chip” systems by microfluidic design, experimental characterisation, modelling and simulation
- Development of advanced manufacturing processes for high-TRL, polymer-based microfluidic “Lab-on-a-Chip” systems
- Development of support instrumentation / optical detection platforms
- Bioassay optimisation on microfluidic systems;
- Support of project management, reporting and interactions with partners;
- Support of project acquisition from industry and funding agencies;
- Internal technical reporting;
- Authoring of scientific publications and marketing activities;
- Related administrative tasks.

For covering these tasks, you can avail of FPC@DCU’s interdisciplinary staff competency matrix and training.

**Minimum Criteria**

Applicants must have a PhD on a related topic and at least 4 years as postdoctoral researcher. Relevant experience in the design and testing of (typically polymer) microfluidic “Lab-on-a-Chip” systems for bioanalytical testing and their manufacture as well as in bioassay optimisation is desirable.

**Salary:** €36,854 - €47,728

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

**Closing date:** 2nd October 2018

**Candidates will be assessed on the following competencies:**

**Discipline specific knowledge and Research Skills** (demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline)

**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)

**Understanding the Research Environment** (demonstrates an awareness of the research environment (e.g. funding bodies) and takes responsibility for how their research is conducted.

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

**Application Procedure:**

Application forms are available from the DCU Current Vacancies (Open Competitions) website at [http://www4.dcu.ie/hr/vacancies/current.shtml](http://www4.dcu.ie/hr/vacancies/current.shtml) and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0)1 700 5149; Fax: +353 (0)1 700 5500 Email: hr.applications@dcu.ie

Applications should be submitted by e-mail 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.

Please clearly state the role that you are applying for in your application and email subject line: **Job Ref#995** Postdoctoral Researcher - Microfluidic systems

*Dublin City University is an equal opportunities employer*