




**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 31<sup>st</sup> 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-faceted 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 an honours degree (NFQ Level 8) 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 Scale\*:** €21,459 - €33,930 p.a

\*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:** 15<sup>th</sup> December 2017

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

***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 <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.

**Please clearly state the role that you are applying for in your application and email subject line:**  
**Job Ref 721 Research Assistant Fraunhofer Project Centre**

Applications should be submitted by email to [hr.applications@dcu.ie](mailto: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](mailto:hr.applications@dcu.ie)

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