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

Post Title: Research Assistant in microfluidic design, development and manufacturing

Post Duration: Fixed term until 31st October 2020

Background:
Dublin City University (www.dcu.ie) is a research intensive, globally engaged, dynamic institution which has developed its own research specialists, established internationally recognized centres of excellence that have substantive collaborative links with leading universities and industrial partners. DCU is distinguished both by the quality and impact of its graduates and by its focus on the translation of knowledge into societal and economic benefit. Through its mission to transform lives and societies through education, research and innovation DCU acts as an agent of social, cultural and economic progress. DCU is Ireland’s fastest growing university and now hosts more than 17,000 students across its three academic campuses: DCU Glasnevin Campus, DCU St Patrick’s Campus and CU All hallows campus. 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 to advance your academic career.

FPC@DCU - an initiative jointly supported by Science Foundation Ireland and Fraunhofer-Gesellschaft - operates as a virtual institute (VI) headquartered in DCU and synergistically partners with a widely complementary mirror group within the Aachen-based Fraunhofer Institute for Production Technology (FhG-IPT). Within a joint development environment (JDE) aligning manufacturing and characterisation equipment, the Dublin branch leads microfluidic design, simulation, prototyping and fluidic testing as well as project acquisition and management while FhG-
IPT is mainly responsible for the scale-up of production. FPC@DCU also benefits from its firm embedding in DCU’s interdisciplinary environment and its proven-track record in translational research, and can thus act as a 1-stop-shop for offering integrated solutions to its customers, clients and partners.

The Project and Role

The 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. In this project, the post holder will develop microfluidics-based systems towards high technology readiness levels (TRLs) within the Fraunhofer Project Centre (FPC) for Embedded Bioanalytical Systems planned to be established at Dublin City University (DCU) in collaboration with the Fraunhofer Institute for Production Technology (IPT) in Germany. Furthermore, the post holder will support the business development and project management teams of the FPC in their interactions with industry, academia and funding agencies.

Principle Duties and Responsibilities

Please refer to the job description for a full list of duties and responsibilities associated with this role.

Qualifications, Skills and Experience Required:

The candidate will hold a primary degree (NFQ Level 8) in Mechanical Engineering/Biomedical Engineering/Physical Sciences or related Engineer/Science Degree with at least three years of experience research in a higher education field or hold a doctoral degree or in the final stages of a doctorate in research in this field.

The candidate should possess the following skills;

- 1+ Years’ Experience designing Microfluidic biochip products
- Solid working knowledge of designing with AutoCAD, SolidWorks and COMSOL / Open FOAM.
- Design, development and system level integration of microfluidic platforms/lab-on-a-chip systems.
- Polymer microfabrication techniques and rapid prototyping.
- Small series production methods such as injection moulding
- A proven track record of team working as well as well-defined individual experience handling select aspects.
• A self-starting attitude combining a proven ability to prioritize workload and work to strict deadlines.
• Excellent written and oral proficiency in English (essential)
• Excellent oral, verbal communication and social skills.

**Mandatory Training**

The post holder will be required to undertake the following mandatory compliance training: Orientation, Health and Safety and Intellectual Property and Data Protection training. Other training may need to be undertaken when required.

**Salary Scale:** (Research Assistant) Point 1 – Point 5 (€22,609 - €26,087)

*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:** August 13th 2020

**Informal enquiries to:**
Dr. Damien King, Fraunhofer Project Centre for Embedded Bioanalytical Systems at Dublin City Email: Damien.king@dcu.ie Ph: (01) 700 6277

**Application Procedure:**
Application forms are available from the DCU Current Vacancies (open Competitions) website at http://www.dcu.ie/vacancies/current.shtml

Applications should be submitted by e-mail with your completed application form to hr.applications@dcu.ie

Please clearly state the role that you are applying for in your application and email subject line: Job Ref- #RF1389 Research Assistant in microfluidic design, development and manufacturing

Dublin City University is an equal opportunities employer and is committed to promoting gender equality reflected in its attainment of the Athena SWAN Bronze Award. Information on a range of university policies aimed at creating a supportive and flexible work environment are available at www4.dcu.ie/policies/policy-starter-packs.shtml