



Applications are invited from suitably qualified candidates for the following position;

**Technical Officer – (ultraprecision) micromilling (UPM), prototyping and characterization of microfluidic “Lab-on-a-Chip” systems**

**Fraunhofer Project Centre for Embedded Bioanalytical Systems at Dublin City University**

**Fixed term Contract to 31st December 2021**

**Introduction**

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 career.

An exciting technical position in a very innovative, applied research initiative 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 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**

The successful candidate will demonstrate the ability to apply experience in (ultra-)precision machining, microfabrication, assembly and characterization / validation technologies to assist the efficient development of predominantly polymeric microfluidic devices towards high technology readiness levels. You will also be familiar with the underlying design and CAM software, such as SolidWorks, AutoCAD, and HSM Works, and show a keen interest to contribute to FPC@DCU’s commercial “*fit-for-industry*” focus.

**Principal Duties and Responsibilities**

The duties and responsibilities attached to the post include, but are not limited to the following:

- Development and implementation of CNC (ultra) precision milling (UPM) techniques for microfluidic systems.
- Implementation of CAD/CAM design for microfluidic platforms, which have been engineered by the research team.
- Ownership of the ultra-precision machining centre (UPM),
- Managing operation and maintenance of microfabrication equipment and infrastructure, equipment bookings and training.
- Characterisation of materials, (semi-finished) parts, components and systems.
- Ownership of the ultra-precision machining centre (UPM), managing equipment bookings, maintenance and training, where appropriate.

### **Minimum Criteria**

The successful candidate must hold an honours degree (NFQ Level 8) in a relevant discipline.

### **Desirable Criteria**

The successful candidate and should ideally have at least 1 year of relevant experience.

Additionally, it is desirable that candidates have a proven track record of working in a team as well as handling select aspects of research independently. Beyond CNC micromilling, familiarity with common polymer replication and assembly techniques such injection moulding, hot embossing and common bonding schemes would be a distinct advantage.

Experience of working in a scientific / engineering laboratory environment would also be desirable. A self-starting attitude, good interpersonal skills and high technical expertise are a prerequisite.

### **Mandatory Training**

Post holders will be required to undertake the following mandatory training: Orientation, GDPR, and Compliance. Other training may need to be undertaken when required