

## **Biomedical Diagnostics Institute**

Post-doctoral Researcher in Biomedical Diagnostics  
Postdoctoral Researcher Level 1

### **Research Career Framework**

As part of this role the researcher will be required to participate in the DCU Research Career Framework <http://www.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.

### **Background and role:**

A team at the Biomedical Diagnostics Institute in Dublin City University is leading the development of novel breath diagnostic sensor technologies. They have recently been awarded funding under the Enterprise Ireland Commercialisation Fund Program to bring functional prototypes into three clinical studies. The award will require the production of multiple system prototypes and sensors to accompany the system, before their installation in three clinical sites in Dublin and London.

As part of this activity we wish to recruit an experienced Post-Doctoral Researcher to focus on the production of printed sensors for their integration with the pre-commercial prototype instrument.

### **Duties and responsibilities:**

Duties and responsibilities of the position include but are not restricted to the following:

- Set up the processing and production of conducting polymer nanomaterials to a defined specification.
- Fabricate printed sensors using combinations of printing techniques including screen printing and inkjet printing.
- Undertake sensor performance verification and validation, both independently, and in combination with the accompanying instrumentation.
- Preparation of documentation for approval processes, analysis of analytical and clinical data and supporting parallel commercialisation objectives.

### **Qualifications and experience:**

The successful individual must have a PhD in a relevant discipline such as organic, synthetic or analytical chemistry. In addition, it is desirable that the candidate has:

- Experience in conducting polymer fabrication techniques and print production processing including screen and inkjet printing.
- Knowledge of analytical validation and verification processes.
- The ability to be highly productive and capable of adhering to a defined project plan and tight deadlines.
- Demonstrated experience of being pro-active and capable of using their initiative.
- Excellent communication skills to work with a very cross-disciplinary team of scientists, clinicians, medical staff, commercialisation specialists and management.

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

- **Discipline knowledge and Research skills** – Demonstrates knowledge of a research discipline and the ability to conduct a specific programme of research within that discipline.
- **Understanding the Research Environment** – Demonstrates an awareness of the research environment (for example funding bodies) and the ability to contribute to grant applications.
- **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 projects including the supervision of undergraduate students.

**Closing date:** Monday, 5<sup>th</sup> January 2015

**Duration:** 9 months in the first instance and extended to 15 months on satisfactory completion of project stage gates, commencing February 2015.

**Salary scale:** €37,750 - €40,003

Appointment will be commensurate with qualifications and experience

**Informal enquiries to:** Denise Carthy, Integration Manager at the BDI: [denise.carthy@dcu.ie](mailto:denise.carthy@dcu.ie)

**Application Procedure:** A CV & cover letter, should be sent to Denise Carthy, Integration Manager at the BDI: [denise.carthy@dcu.ie](mailto:denise.carthy@dcu.ie)

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