

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

**Research Centre** School of Biotechnology

Post title Postdoctoral Researcher in Bioprocess

Engineering

Level on Framework Level 1

Up to 11-month fixed-term

Post duration contract

## **Dublin City University**

Dublin City University (DCU) is a young, ambitious and vibrant university, with a mission 'to transform lives and societies through education, research, innovation and engagement'. Known as Ireland's 'University of Enterprise', DCU is a values-based institution, committed to the delivery of impact for the public good. DCU was named Sunday Times Irish University of the Year 2021.

DCU is based on three academic campuses in the Glasnevin-Drumcondra region of north Dublin. More than 18,000 students are enrolled across five faculties – Science and Health, DCU Business School, Computing and Engineering, Humanities and Social Sciences and DCU Institute of Education.

DCU is committed to excellence across all its activities. This is demonstrated by its world-class research initiatives, its cutting-edge approach to teaching and learning, its focus on delivering a transformative student experience, and its positive social and economic impact. The university continues to develop innovative programmes in collaboration with industry, such as the DCU Futures suite of degrees, which are designed to equip graduates with the skills and knowledge required in a rapidly evolving economy.

DCU's pursuit of excellence has led to its current ranking among the top 2% of universities globally. It is also one of the world's Top Young Universities (QS Top 100 Under 50, Times Higher Top 150 Under 100). In the Times Higher Education University Impact Rankings 2021, DCU ranked 23rd in the world for its approach to widening participation in higher education and its ongoing commitment to eradicating poverty, while it ranks 38th globally for its work in reducing inequality and 89th globally for gender equality.

The university is ranked 23rd in the world and first in Ireland for its graduate employment rate, according to the 2020 QS Graduate Employability Rankings. Over the past decade, DCU has been the leading Irish university in the area of technology transfer, as reflected by licensing of intellectual property.

#### **Background & Role**

Grain-4-Lab is a €2.4 million funded sustainability project, part of the SFI Future Innovator Prize Programme (<a href="https://grain4lab.ie/">https://grain4lab.ie/</a>). The aim of the project is to reduce the reliance on fossil-fuel based single-use plastics in research laboratories, be providing a more sustainable and functionally equivalent alternative. In Grain-4-Lab we take waste products from the brewing and distilling industry and aim to produce a high quality bioplastic alternative.

We are a highly multi-disciplinary team which includes researchers from the fields of bioprocessing, materials science, polymer synthesis, societal change and scientific outreach. Grain-4-Lab operates in close collaboration with an international network of companies and collaborators to develop, test and trial their bioplastic solution. The project was recently featured on Irish national news channel RTE (https://www.rte.ie/news/ireland/2022/1005/1327355-dcu-scientists/).

The School of Biotechnology at Dublin City University invites applications for a postdoctoral researcher role in Microbial Bioprocess Engineering to work on the Grain-4-Lab project, valorising waste-streams using Lactic Acid Bacteria towards the development of compositable biopolymers. The position is available from December 2022 with the possibility of an extension dependant on funding available and ongoing requirements for the project.

The goal of this specific project is bioprocess development & optimisations, both Up-Stream and Down-Stream towards the production of high-quality Lactic Acid from waste feedstocks. Extensive bench-scale development & optimisation using Process Analytical Tools will be required along with pilot and production scale testing. This is an excellent opportunity for researchers looking to focus on commercialisation and industrial related research. The work will be undertaken in Microbial Bioprocessing Facility (School of Biotechnology) but the project will involve collaboration with the Schools of Physical Sciences, Chemical Science, and Nursing, Psychotherapy and Community Health in Dublin City University.

#### **Principal Duties and Responsibilities**

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

#### **Minimum Criteria Essential:**

 Individuals should have a PhD in one of the following fields: Bioprocess Engineering, Chemical Engineering, or Microbial Biotechnology.

### Desirable:

- Experience in bench-scale microbial bioprocessesing and down-stream processing techniques advantageous.
- Individuals should be able to demonstrate their ability to work in multidisciplinary and high collaborative projects.
- Evidence of publication of research articles in the field of bioprocessing/microbial biotechnology/chemical engineering is also essential.
- In addition, it is desirable that the candidates have excellent microbial on-the-bench skills.

## **Essential Training**

The postholder will be required to undertake the following mandatory compliance training: Orientation, Health & Safety and Data Protection (GDPR). Other training may need to be undertaken when required.

Salary: Postdoctoral Researcher Point 1-3 - €41,209 - €43,699

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

Closing date: Monday, 12th December 2022

For more information on DCU and benefits, please visit Why work at DCU?

# Informal Enquiries in relation to this role should be directed to:

Dr. Mehreen Mahmud, Project Manager, School of Biotechnology, Dublin City University. Email: mehreen.mahmud@dcu.ie

# **Application procedure:**

Application forms are available from the DCU Current Vacancies website at https://www.dcu.ie/hr/vacancies-current-vacancies-external-applicants

Applications should be submitted by e-mail with your completed application form and CV to: mehreen.mahmud@dcu.ie

Please clearly state the role that you are applying for in your application and email subject line: Job Reference #RF1696a Postdoctoral Researcher in Bioprocess Engineering.

Dublin City University is an equal opportunities employer. In line with the Employment Equality Acts 1998 – 2015, the University is committed to equality of treatment for all those who engage with its recruitment, selection and appointment processes. The University's Athena SWAN Bronze Award signifies the University's commitment to promoting gender equality and addressing any gender pay gaps. Information on a range of university policies aimed at creating a supportive and flexible work environment are available in the DCU Policy Starter Packs