Research Centre	School of Biotechnology
Post title	Postdoctoral Researcher in chemical engineering/process engineering
Level on Framework	Level 1
Post duration	15 Months Fixed Term Contract

Dublin City University

Dublin City University (DCU) is a leading innovative European University. It is proud to be one of the world's leading Young Universities and is among the world's top 2% globally. DCU is known as Ireland's University of Impact, with a mission to 'transform lives and societies' and focuses on addressing global challenges in collaboration with key national and international partners and stakeholders.

DCU has over 20,000 students in five faculties spread across three academic campuses in the Glasnevin-Drumcondra area of North Dublin. Thanks to its innovative approach to teaching and learning, the University offers a 'transformative student experience' that helps to develop highly sought-after graduates. DCU is currently No. 1 in Ireland for Graduate Employment Rate, and for graduate income (CSO).

DCU is a research-intensive University and is home to a number of SFI-funded Research Centres. The University participates in a range of European and international research partnerships. DCU is also the leading Irish university in the area of technology transfer as reflected by licensing of intellectual property.

As a 'People First' institution, DCU is committed to Equality, Diversity and Inclusion - a University that helps staff and students to thrive. The University is a leader in terms of its work to increase access to education, and is placed in the world's Top 10 for reducing inequalities in the Times Higher Education Impact Rankings.

As part of this role the researcher will be required to participate in the DCU Research Career Framework. 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 & Role

The School of Biotechnology at Dublin City University invites applications for a postdoctoral researcher role in chemical engineering/process engineering.

The School of Biotechnology is the academic unit leading life science and biotechnology education and research within the Faculty of Science & Health at Dublin City University (DCU). The school is an active centre of fundamental, applied and multi-disciplinary research, supporting a defined cluster of intersecting research themes which link closely with the School's teaching programmes. The School and associated research centres offer core facilities and technical support in the areas of Bioprocessing, Molecular Biology, Bioinformatics, Cell Characterisation, and Proteomics. Research projects fall into the general categories of Life Science or Industry-associated with activity in the domains of Biodesign, Bioengineering, Environmental Science, Health/Ageing/Disease, and Precision Health. They bring together a critical mass of multidisciplinary researchers that are strategically positioned to pursue national and international opportunities for research and innovation.

The individual will join a multidisciplinary team to contribute to a funded project focusing on the development, scale-up and validation of an innovative membrane biofouling control solution. The appointee will work together with the researchers in membrane technology, microbiology, and nanotechnology within the project team, conduct the process development and scale-up, and perform bench, pilot scale filtration experiments, process analysis and modelling study etc, investigating the membrane fouling degree and testing the fouling control solution. The appointee will also support the scale-up setup development in the team.

The project will be conducted in the biointerface and membrane engineering lab in the School of Biotechnology. Besides the research facilities in the lab, a range of research infrastructures can be accessed from the school, facility centres and collaborated universities such as the Molecular Core Facility of the School of Biotechnology and DCU Nano Research Facility (https://www.dcu.ie/research/nano-research-facility).

Principal Duties and Responsibilities

Reporting to the principal investigator, the duties and responsibilities of the position include, but are not restricted to, the following:

- Conduct a specified programme of research under the supervision and the direction of the Principal Investigator
- Contributing to Laboratory management, maintenance, and inventory management
- Supporting the experimental setup development in the team
- Delivering research outputs according to project schedules.
- Reporting the research/project outputs regularly as required by the project schedule
- Engaging with relevant stakeholders and overseeing outreach to different audiences.
- Participating in project meetings and working with partners across the project consortia
- Working closely with and supporting the team members

- Carrying out administrative work associated with the programme of research
- Handling confidential information and data in a sensitive manner

Minimum Criteria

- Applicants should have a PhD in Chemical engineering, process engineering, environmental engineering or relative area
- A membrane technology background with ideal 3-year research or industrial experiences in membrane filtration process for water treatment
- Excellent communication skills (Oral, Written, Presentation etc)

In addition, it is desirable that the candidate has:

- Experience in operating pilot scale membrane filtration system
- Experience in process development and reactor setup
- Experience in process analysis and modelling study
- Experience in analysis of material surfaces
- Lead author of publications or patents in the field of membrane filtration
- Strong problem-solving skills
- Ability to communicate well with team members and external stockholders
- Excellent teamwork and collaboration skills
- Understanding of technology transfer
- Ability to handle confidential information and data in a sensitive manner
- High levels of self-management and self-motivation

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 project including the supervision of undergraduate students

Application Procedure:

Please submit your application through the online system. In order to be considered for the role to which you are applying for, you must upload:

1) Curriculum Vitae
2) Cover Letter

3) Completed application form (blank forms can be downloaded from the Vacancy Detail tab on the menu on the left hand side).

Please note, if all items are not uploaded, the application will be deemed incomplete, and will not be processed.

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***