



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

Postdoctoral Researcher
School of Mechanical and Manufacturing Engineering
Faculty of Engineering and Computing
7 Month 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.

The Project

The NewSkin project (newskin-oitb.eu) is a Pan-European collaboration of 35 academic and industry partners. The project aims to create an Open Innovation Test Bed (OITB) to provide the Innovation Ecosystem (IE) with the necessary technologies, resources and services to uptake efficient and cost-effective innovative processes to manufacture nano-enabled industrial and consumer products as well as the necessary testing capabilities to demonstrate the features of nano-enhanced goods.

Role Profile

This position is a 7-month position for a post-doctoral researcher recruited on a fixed term contract basis. The researcher will be responsible for the selection suitable set of case studies from the suite of NewSkin applications with the goal of translating improvements in function and mechanical properties of product coatings into measurable end-user benefits. This will be achieved by conducting life cycle assessments, and where appropriate Levelised Cost of Energy (LCoE) analysis of selected product systems. The researcher will also be responsible for upgrading and operation of a cavitation testbed for centrifugal pumps. The researcher will contribute to the design of nano-textured surfaces which will suppress the inception cavitation and test these nano-textured surfaces to evaluate their performance. They will then conduct life cycle assessment on these surfaces. Furthermore, the researchers will also engage with industry partners through the newskin-oitb.eu Open Call process.

Principal Duties and Responsibilities

Please see attached job description for principal duties and responsibilities of the role.

Qualifications, Skills and Experience Required

Candidates must have a PhD in a relevant discipline.

In addition to the above, it is desirable that the candidate possess a subset of the following skills.

- Experience or training in conducting life cycle assessment.
- Familiar with GaBi software or other LCA software packages.
- Excellent written and oral proficiency in English (essential).
- Excellent written and verbal communication and interpersonal skills.
- Proven ability to prioritise workload and work to strict deadlines.
- Ability to work independently.
- Strong problem-solving abilities.

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.

Essential Training

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

Salary Scale: Postdoctoral Researcher Salary €42,033 - €54,153

**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: Thursday 8th June 2023

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. Greg McNamara, School of Mechanical and Manufacturing Engineering, Dublin City University.

Phone + 353 (0)1 7005243

Email: greg.mcnamara@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 to

hr.applications@dcu.ie

Please clearly state the role that you are applying for in your application and email subject line:

Job Ref: #RF1869 Postdoctoral Researcher