



Research Centre

School of Chemical Sciences

Post title

Postdoctoral Researcher

Synthetic Organic/Polymer/Materials Chemist

Level on Framework

Level 1

Post duration

13 Month Fixed Term Contract x2 Positions

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.

Research Career Framework

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 Chemical Sciences at Dublin City University invites applications for two postdoctoral researchers in synthetic organic/polymer/materials chemistry to work on a collaborative project on the development of depolymerisation techniques for the chemical recycling of textile waste, and the production and testing of sustainable polyurethane insulation foams. The positions are available from February 2024, for a 13 month fixed term contract. The project will be led by Dr Susan Kelleher and involve collaboration with the Dr Jennifer Gaughran in the School of Physical Sciences, DCU. This is a Science Foundation Ireland funded project under the National Challenge Fund scheme (<https://www.sfi.ie/challenges/>) and is in collaboration with the Rediscovery Centre in Ballymun.

Principal Duties and Responsibilities

Reporting to the Principal Investigator the Postdoctoral Researchers will:

- Conduct a specified programme of research under the supervision and direction of the Principal Investigator, with a specific focus on the design and execution of synthetic polymer processes (depolymerisation and polymerisation reactions), as well as materials characterisation.
- Engage in the dissemination of the results of the research in which they are engaged with the assistance of and under the supervision of the Principal Investigator, with a specific focus on completing funding reports and preparing presentations and material for funding reviews.
- Supervise and assist undergraduate and postgraduate students working in this area with their research.
- Liaise with both internal and external stakeholders including industry and academic partners/collaborators.
- Carry out administrative work associated with the programme of research as necessary, including assisting the Principal Investigator in tendering for equipment and instruments required for the project.

Minimum Criteria

Individuals should have a PhD in organic/polymer chemistry or a related field e.g. materials science. In addition, it is desirable that the individual has experience in:

- Material synthesis/fabrication and characterisation.
- Working in multidisciplinary and high collaborative projects, and possess excellent communication and writing skills, as evidenced by the production of publications/ reports.

Individuals 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