JOB DESCRIPTION

Research Assistant (Electrochemical Treatment of Wastewater)

National Centre for Sensor Research

Part Time – Fixed Term Contract 6 Months

Dublin City University:
Dublin City University www.dcu.ie is a research-intensive, globally engaged, dynamic institution that is distinguished by both the quality and impact of its graduates and its focus on the translation of knowledge into societal and economic benefit. DCU prepares its students for success in life and in the workplace, by providing a high-quality, rounded education appropriate to the challenges and opportunities of the 21st century. As Ireland's University of Enterprise and Transformation, DCU is characterised by a focus on creativity, innovation and entrepreneurship and a track-record of effective engagement with various external stakeholders, including the public sector, the voluntary sector, and enterprise sector. The university fosters creativity, innovation and enterprise, and collaboration with commercial, technological, social, arts and cultural enterprises. DCU's Graduate Attributes scheme specifically encourages students to be creative and enterprising, solutions-oriented, and globally engaged. Excellence in its education and research activities has led to DCU's consistent position in the rankings of the world's top young universities and its recent recognition by The Sunday Times as Ireland's University of the Year 2021. DCU now hosts over 18,000 students across five faculties.

National Centre for Sensor Research:
The National Centre for Sensor Research (NCSR) is large, multidisciplinary research unit based in state-of-the-art facilities situated on the campus of Dublin City University. We are now seeking applications for the following research position in DCU.

Research Career Framework:
As part of this role the researcher will be required to participate in the DCU Research Career Framework (http://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. DCU has a strong track record in attracting both Irish and European Union research funding under Horizon 2020 (and all previous Framework programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally-focused environment in which you can advance your academic career

Background & Role:

The NCSR is developing a new, wireless electrochemical approach to the decomposition and destruction of challenging pollutants in water ranging from pharmaceutical and metabolites to food waste. We are seeking a researcher with a BSc in Chemistry or a closely related subject and with an interest in electrochemistry and electrochemical methods of wastewater treatment. The RA will join a multidisciplinary research team working to create, optimise and test a 3D printed reactor.

Duties and Responsibilities:

Reporting to the Principal Investigators (PIs), the researcher will fulfil the duties which will include, but not be limited to:

- Support the PIs on project planning to ensure all milestones and deliverables are met particularly the 3D printing of the reactor and testing with wastewater samples.
- Provide weekly updates and a monthly written report on progress.
- Compile, analyse data generated in the project on an ongoing basis.
- Produce a full report and presentation at the end of the contract.
- Support the team's ongoing communication and dissemination efforts including social media and project website.
- Engage with internal and external stakeholders.
- Carry out a landscaping exercise on patents on the topic and support the team's protection of intellectual property efforts.

Applicant Requirements:

Essential Criteria

- The successful candidate must have an honours primary degree in chemistry or a very closely related area.
- Laboratory experience in electrochemical methods or related closely related area.
- A demonstrated strong work ethic, as well as an independent and creative mind set and a deep commitment to problem-solving.
- Excellent interpersonal skills as well as verbal and written communication skills.
- Very good organisational skills with an ability to prioritise workloads and to work successfully on their own initiative.

Desirable Criteria

The successful candidate will ideally possess the following:

- Postgraduate qualification or experience or working on a research programme.
- The candidate should ideally be familiar with electrochemistry, wastewater treatment and reactor optimisation.
- The ability to work as part of a collaborative team and to innovate in an organisational environment with multiple stakeholders.
- An interest in commercialisation, innovation, and real-world deployment of reactors.

Essential Training

Post holders will be required to undertake the following essential training: Orientation, GDPR, Research Integrity and Compliance. Other training may need to be undertaken when required.