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

**Postdoctoral Researcher, Electrolyser Scale-up, Level 1**

**School of Chemical Sciences**

**Fixed Term Contract – 9 Months**

Dublin City University ([www.dcu.ie](http://www.dcu.ie)) is a research-intensive, globally-engaged, dynamic institution that is distinguished both by the quality and impact of its graduates and by its focus on the translation of knowledge into societal and economic benefit. Through its mission to transform lives and societies through education, research and innovation, DCU acts as an agent of social, cultural and economic progress. DCU is Ireland’s fastest growing university, and now hosts more than 17,000 students across its three academic campuses: DCU Glasnevin Campus, DCU St Patrick’s Campus and DCU All Hallows campus.

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 to advance your academic career.

**School of Chemical Sciences**

From the very early years of DCU, the School of Chemical Sciences has played a significant role in the rapid development of the University to the point where we can now compete with some of the best European Universities.

At the postgraduate research level, the School of Chemical Sciences possesses an outstanding track record, currently home to more than 45 postgraduate students, engaged in taught and research based MSc and PhD programmes, in diverse fields. These range from the development of chemical and biological sensors, and intelligent materials, to drug design and discovery, and advances in science education. The School houses a suite of state-of-the-art research equipment including high resolution electron microscopy and a range of both mass and magnetic resonance spectrometers.

In collaboration with an industrial partner, we are developing an electrolyser system for the on-site production of Hydrogen Peroxide from renewable electricity. This approach involves the immobilisation of custom catalysts for the continuous production of hydrogen peroxide within a Proton Exchange Membrane (PEM) electrolyser.

We are especially interested in candidates with the ability to drive the design of a scalable electrolyser informed by computational fluid dynamics. However, applicants with a background in electrocatalytic science and electrode preparation are also welcome.

**Principal Duties and Responsibilities**

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

Minimum Criteria
Applicants should have a PhD in one of the following: mechanical engineering; chemical engineering; process engineering; applied physics, or a closely related field.

Desirable Criteria
- Experience in electrolyser/reactor design, computational fluid dynamics, CAD, and rapid prototyping is highly desirable.
- Experience in computational fluid dynamics, computer aided design, and reactor engineering.
- Knowledge of electrochemical process engineering and/or PEM electrolyser/fuel cell design would be advantageous. Alternatively candidates with experience in electrocatalysis, particularly related to electrode processing, coating and testing for electrolyzers or fuel cells, are encouraged to apply.

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.

Salary: €37,874 - €40,221
Appointment will be commensurate with qualifications and experience and will be made on the appropriate point of the salary scales, in line with government pay policy.

Closing date: 17 January 2020

Informal enquiries to: Dr Mary T. Pryce, School of Chemical Sciences, DCU, Dublin 9.
Phone: +353 (0) 1 700 8005; Email: mary.pryce@dcu.ie.
Please do not send applications to this email address; instead, apply as described below.

Application Procedure:
Application forms are available from the DCU Current Vacancies website at https://www.dcu.ie/hr/vacancies/current.shtml and also from the Human Resources Department, Phone +353 (0) 1 700 5149. Please include a cover letter and CV with your application form.
Applications must be submitted by e-mail to hr.applications@dcu.ie or by post to the Human Resources Department, Dublin City University, DCU Glasnevin Campus, D09 W6Y4.

Please clearly state the role that you are applying for in your application form and email subject line: #RF1307 Postdoctoral Researcher in Electrolyser Scale-up

Dublin City University is an equal opportunities employer and is committed to promoting gender equality reflected in its attainment of the Athena SWAN Bronze Award. Information on a range of university policies aimed at creating a supportive and flexible work environment is available at https://www.dcu.ie/policies/policy-starter-packs.shtml