



Research Centre:	DCU Water Institute
Post title:	Post-doctoral Researcher in LCA and LCCA of wastewater treatment
Level on Framework:	Level 1
Post duration:	Fixed Term up to 7 Months

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 to advance your academic career

Overview

DCU Water Institute is a large, multidisciplinary research unit based in state-of-the-art facilities situated on the campus of Dublin City University. Arising from success in recent proposals we are now seeking applications for the following research position in DCU.

Background and Role

Applications are invited for a highly motivated and talented Post-Doctoral Researcher to conduct research in the Life Cycle Assessment (LCA) and Life Cycle Cost (LCC) modelling of wastewater treatment systems. This post is part of a 20 partner EU Demonstration project (<http://saltgae.eu/>) funded under the Societal Challenge Pillar of the H2020 framework program will target the sub-sector of the Food & Drink industry which deals with brine products. The large content of biodegradable matter and high salt levels typically found in this type of waste stream requires complex sequences of physicochemical and biological treatment processes to meet increasingly stringent EU standards for the management and protection of the water environment.

Applicants should be qualified Mechanical or Chemical engineers and hold a PhD in an appropriate discipline with research experience in the application of LCA and LCC to wastewater treatment

systems. The successful candidate will join a team of post-graduate and post-doctoral engineers and scientists from the School of Mechanical and Manufacturing Engineering at DCU. The post is full-time and fixed term for 7 months.

Principal Duties and Responsibilities

Reporting to his/her Principal Investigator the Postdoctoral Researcher will:

- Conduct, with a very high degree of technical competence, a specified programme of research and scholarship under the supervision and direction of the Principal Investigator;
- Disseminate the outcomes of the research in which he/she is engaged including publishing in high quality peer reviewed journals of international standing;
- Take responsibility as requested for day-to-day advice and support of graduate research students associated with your research group;
- Mentor, assist and train as appropriate and as directed, the research graduate students;
- Contribute to reporting, site visit preparation and other administrative management work associated with your programme of research and the research group;
- Liaise with project partners and stakeholders such as industry and other collaborators.

The successful candidate must have an excellent understanding of the modelling of wastewater and water treatment systems. The successful candidate must be able to demonstrate the ability to work with a diverse group of stakeholders to manage the planning and implementation of project objectives. The successful candidate will have:

- The LCA and LCC expertise necessary to carry out the role to a high standard;
- Excellent software skills (high proficiency in MATLAB, MS Visual Basic and GaBi);
- Excellent interpersonal, team-working and communication skills;
- Excellent written skills, with the demonstrated ability to publish in high impact journals.

The successful candidate will be responsible for several technical tasks including:

- The LCA and LCC modelling of wastewater treatment systems;
- Planning and conducting audits of partner sites;
- Optimising and recommending technology selection using LCA and LCC methodologies.

Minimum Criteria

The candidate should possess the following criteria:

- A PhD in the area of LCA, LCC and wastewater treatment;
- A track record of publishing in high impact factor journals;
- Excellent communication and writing skills are essential;
- Proven ability to work in teams, preferably cross-disciplinary teamwork.
- Proven ability to develop user friendly software solutions coupled to bio-chemical and physical processes.

Salary: €36,854 per annum

Closing Date: 4th May 2018

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.

Informal enquiries to:

Dr. Lorna Fitzsimons, School of Mechanical and Manufacturing Engineering, DCU, Dublin 9, Ireland

Phone: +353 (0)1 7007716

Please do not send applications to this email address, instead apply as described below.

Application Procedure

To apply for this role, applications should include a CV and covering letter and be submitted with the application form to the Human Resources Department as outlined below. Application forms are available from the DCU Current Vacancies (open Competitions) website at <http://www.dcu.ie/vacancies/current.shtml> and also from the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 (0) 1 700 5149

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

line: Job Ref #855 Post-doctoral Researcher in LCA and LCCA of wastewater treatment.

Applications should be submitted by email to hr.applications@dcu.ie or by Fax: +353 (0)1 7005500 or by post to the Human Resources Department, Dublin City University, Dublin 9. Tel: +353 1 700 5149; Fax: +353 1 700 5500 Email: hr.applications@dcu.ie

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