



Research Centre:	National Centre for Plasma Science and Technology (NCPST)
Post title:	Postdoctoral Researcher: Biomedical Plasma Applications
Level:	Level 1
Post duration	Fixed Term Contract Up to Three years

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 record in attracting both Irish and European Union research funding under Horizon 2020 (and previous Framework Programmes), Marie Curie Actions and Erasmus. We offer a dynamic and internationally-focused environment in which to advance your career.

Background & Role

The TRANSITION project is supported by Science Foundation Ireland. The project aims in general to develop a toolbox of novel technological approaches to manufacturing of biomedical devices, and in particular, to demonstrate the application of these tools to prosthetic biomedical device production. In this context, the project will explore the use of plasma technology to clean three dimensional printed structures, in the expectation that this approach will lead to faster processing with less waste. The project involves working in an interdisciplinary team within the wider TRANSITION project, interacting with both the TRANSITION team and commercial partners. Expertise in atmospheric plasma technology is essential, and knowledge of broader biomedical applications is desirable. A variety of plasma diagnostic techniques will be employed to characterize the plasma and establish the optimal conditions for the process, with a view to specifying how a practical high performance processing system should be constructed.

Principle Duties and Responsibilities

Reporting to the PI, the researcher will:

- Taking a leading role in the experimental investigation of the potential for cleaning biomedical devices using atmospheric pressure plasmas
- Have a strong background in low-temperature plasma physics, with a particular emphasis on atmospheric pressure plasmas for biomedical applications
- Be familiar with a wide range of plasma diagnostic techniques, such as optical and mass spectroscopy
- Be aware of (but not necessarily highly expert in) the techniques involved in modelling low-temperature plasma
- Participate in the supervision of research students
- Work with researchers in the broader team
- Engage with appropriate training and development opportunities

Minimum Criteria

Applicants should have a PhD in low-temperature plasma science, with a particular emphasis on diagnostics and modelling. They should be capable of working independently with a high degree of competence with strong attention to detail whilst also being a team player. He/she must demonstrate initiative, be hard working, versatile and productive. S/he should have good communication and organisational skills.

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: *€36,854 - €47,727

**Appointment will be commensurate with qualifications and experience will be made on the the appropriate point of the salary scale, in line with current Government pay policy*

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Closing date: 5th June 2018

Informal enquiries to:

Professor Miles Turner, School of Physical Sciences and National Centre for Plasma Science & Technology, DCU, Dublin 9, Ireland.

E-mail: miles.turner@dcu.ie

Phone: +353 (0)1 700 5298

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 (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 7005149](tel:+353(0)17005149).

Please clearly state the role that you are applying for in your application and email subject line: Job Ref 898 Postdoctoral Researcher Biomedical Plasma Applications, NCPST

Applications should be submitted by email to hr.applications@dcu.ie or by Fax: [+353 \(0\)1 7005500](tel:+353(0)17005500) or by post to the Human Resources Department, Dublin City University, Dublin 9.

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