



Research Centre	National Centre for Plasma Science and Technology
Post Title	Research Fellow Fusion Physics
Level on Framework:	Level 2
Post Duration	Fixed Term Contract 3 months

Background

EUROfusion Ireland is the Irish research unit of the EUROfusion consortium, which is a pan-European association of laboratories concerned with the implementation of the EURATOM research programme in the field of magnetically confined fusion. The consortium connects some 26 national laboratories and has a budget for the period 2018-2020 of EUR424M. The research programme of the consortium is “reactor focused” in that its aim is to support a demonstration of commercially useful power generation from magnetically confined fusion at the earliest possible date. In practice, this means that the goals of the programme are large-scale power production from fusion in the Iter experimental reactor, which is expected to occur around 2030, and beyond that the development of a prototype commercial fusion power plant by about 2040.

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.

The Project

EUROfusion Ireland's research programme aims to address critical problems in selected areas of the wider EUROfusion consortium. In particular, there is an emphasis on issues affecting the edge plasma region of magnetically confined fusion devices. Owing to the high power densities expected in burning fusion plasmas, managing power flow across the edge plasma is expected to be a critical issue. Therefore, research activities that improve understanding and hence ability to predict the behaviour of this region are important. These include impurity transport in the edge plasma, and radio-frequency phenomena associated with electromagnetic plasma heating technologies. Doctoral research student projects are an important implementation instrument.

Principle Duties and Responsibilities

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

Qualifications, Skills and Experience Required

Minimum Criteria

- A PhD in a discipline relevant to fusion science and technology
- A minimum of 4 years' postdoctoral research experience
- A broad knowledge of the field of fusion research is essential
- Experience of the development of software on High Performance Computing systems
- Knowledge of the goals and structure of the research programme of the EUROfusion Consortium is also essential

Desirable Criteria

- Demonstrated skills in the design, management and active conduct of research
- A high level of interpersonal and team working skills
- Strong report writing, time management skills and ability to work to deadlines
- Good presentation and academic article writing skills would also be desirable.

Candidates will be assessed on the following competencies:

Discipline Knowledge & Research skills – Demonstrates the ability to design and implement part of a programme of research (for example by using critical thinking and the application of relevant research methodologies).

Understanding the Research Environment – Demonstrates a thorough understanding of the research environment both nationally and internationally and the ability to contribute substantially to grant applications.

Communicating Research – Demonstrates the ability to communicate their research effectively to the research community and wider society (for example by publishing their research in high quality peer reviewed journals) and the ability to teach and tutor students.

Managing & Leadership skills – Successfully manages research projects including the management and supervision of postgraduates and/or junior research staff.

Mandatory Training:

The post holder will be required to undertake the following mandatory compliance training: Orientation, Health and Safety, Research Integrity and Intellectual Property and Data Protection training. Other training may need to be undertaken when required.

Closing Date: Friday 5th of March 2021

Salary Scale: € 55,811 - € 60,814 (*Point 1 – Point 4 of the IUA Salary scale*)

**Appointment will be commensurate with qualifications and experience*

Informal enquiries to:

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

E-mail: miles.turner@dcu.ie

Phone: +353 (0)1 7005298

Please do not send applications to these email addresses, 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>.

Applications must be submitted by e-mail to hr.applications@dcu.ie

Please clearly state the role that you are applying for in your application and email subject line: Job Ref #RF1475 Research Fellow in Fusion Physics

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 are available at www4.dcu.ie/policies/policy-starter-packs.shtml.