Background & Role
The Plasma Research Laboratory (PRL) located in the School of Physical Sciences and associated with the NCPST at Dublin City University. The PRL is an Engineering-Physics group developing plasma source technology and new sub-systems and diagnostics to implement, diagnose, and control the plasma systems. The PRL is now looking to recruit suitable candidates for two Postdoctoral Researcher positions.

The development and application of plasma-science is inherently multi-disciplinary and as such there are many applicable skill-sets, some of which the candidates will bring to the group, and some of which will be developed as part of the research program.

The research program consists of developments both in experimental and computer-modeling, and application to PECVD of inorganic layers (Si, SiO, SiN, Al2O3, etc.). The group is strongly engaged with international partners and a considerable amount of international travel is anticipated.

The post holders will participate in the development of the PRL’s multi-tile, large-area, VHF plasma-source.

Principle Duties and Responsibilities
Reporting to his/her Principal Investigator the Postdoctoral Researcher will:

- Conduct a specified programme of research into characterization, optimization, and hardware-development of multi-tile plasma sources and their application to PECVD under the supervision and direction of the Principal Investigator
- Assist in identifying and developing future research and funding initiatives
- Engage in the dissemination of the results of the research in which he/she is engaged with the support of and under the supervision of the Principal Investigator
- Supervise and assist undergraduate students working in this area with their research
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.
- Liaise with both internal and external stakeholders including industry and academic partners/collaborators
- Carry out administrative work associated with the programme of research as necessary
Minimum Criteria
Applicants should have a PhD in a relevant discipline. In addition, it is desirable that the candidate has experience in:

- the design and building of rf-matching systems in application to plasma sources
- VHF matching systems and plasma diagnostics for VHF rf-systems and VHF plasma-diagnostics
- ion-mass-spectrometry of plasmas
- designing electronic circuits, multi-layer circuit boards for mixed rf / digital electronics
- plasma diagnostics such as OES, LIF, langmuir probes, etc.
- computer skills such as LabView, Unix, html / XML and materials characterization such as laser-interferometry, Raman, XRD, STM, Dek-Tak

Salary: €37,750 - €41,181 (subject to experience & qualifications)

Closing date: 22 March, 2013

Application Procedure

Informal enquiries to:
Dr. Bert Ellingboe, School of Physical Science, DCU
E-mail: bert.ellingboe@dcu.ie Phone: +353 (0)1 7005314

Application forms are available from:
Human Resources Department, Dublin City University, Dublin 9. Tel: +353 1 700 5149; Fax: +353 1 700 5500 Email: Insert hr.applications@dcu.ie

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