



Research Assistant

PPSAD: Plasma Processes for Selective Area Deposition – Atomic Layer Deposition and X-ray

Photoelectron Spectroscopy Tool Manager

School of Physical Sciences and National Centre for Plasma Science & Technology

Fixed Term Contract up to 18 months

Background and Role Profile

PPSAD: Plasma Processes for Selective Area Deposition is an AMBER SFI Funded Industry-Led Research Project.

The overall goal of this project is to develop a novel process for selective area deposition using block co-polymer infiltration with the goal of sub-10 nm feature size realisation for large scale CMOS process integration in the semiconductor manufacturing industry. Selective area deposition is seen as a 'grand-challenge' in integrated circuit (IC) manufacture as it allows development of features on a substrate surface without the need for lithographic steps.

The project includes both materials characterisation and plasma physics/engineering elements. The present role is a technical researcher role comprising both research and equipment maintenance and development aspects specifically around in-situ surface and interface characterisation methods.

Principle Duties and Responsibilities

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

Minimum Criteria

Applicants should have a Degree (BSc/BEng) in a discipline relevant to surface and interface characterisation methods. A broad knowledge of surface and interface characterisation methods and vacuum technologies is essential.

Desirable Criteria

The successful candidate will:

- Demonstrate the ability to design and/or implement a substantial programme of research including initiating and steering new research programmes (for example by using critical judgement and an understanding of new research methodologies)

- Demonstrate the ability to design, commission and further develop surface and interface characterisation experimental set-ups and techniques, utilising surface science and vacuum technologies, for novel in-situ analyses
- Demonstrates a thorough understanding of the research environment both nationally and internationally, the ability to assist in securing research funding and where relevant the ability to apply for intellectual property rights and/or patents for their research

Salary Scale: Point 1 to 17 of the IUA Research Assistant Salary Scale: €22,609 - €35,218

Appointments will be commensurate with qualifications and experience and will be made on the appropriate point of the salary scales, in line with current Government pay policy.

Closing Date: Wednesday 30th of September 2020

Informal enquiries should be directed to:

Dr. Robert O' Connor, School of Physical Sciences, DCU, Dublin 9, Ireland.

E-mail: robert.p.oconnor@dcu.ie

Phone: +353 (0)1 700 5743

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>.

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 #RF1411 Research Assistant- PPSAD**

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.