Applications are invited from suitably qualified candidates for the following position:

Postdoctoral Researcher / Research Fellow in Photonic Systems

School of Electronic Engineering

Fixed Term Contract up to 48 Months

Research Career Framework

As part of this role the researcher will be required to participate in the DCU Research Career Framework. This framework is designed to provide significant professional development opportunities to Researchers and offer the best opportunities in terms of a wider career path.

Role Profile

The School of Electronic Engineering is seeking to appoint a highly motivated Postdoctoral Researcher to undertake leading edge research in the domain of high speed optical communication systems. The successful applicant will join a multidisciplinary team to work in liaison with current researchers on the development of high capacity photonics systems for applications such as data centre interconnects, wireless optical transmission systems and coherent optical communications.

Duties and Responsibilities:

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

- Conduct a specified programme of research under the supervision and direction of the Principal Investigator. The programme of research will involve investigating the use of novel optical sources including fast tuneable lasers and optical frequency combs for a number of applications including:
  - High capacity optical switching fabrics for future data centre interconnects,
  - Fast reconfigurable optical networks employing advanced modulation formats,
  - High capacity WDM optical transmission systems employing frequency combs for fibre and wireless communication systems.

- Assist in identifying and developing future research and funding initiatives.
- Engage in the dissemination of the results of the research in which they are engaged with the support of and under the supervision of the Principal Investigator.
- Assist with the supervision of PhD students, researchers, internship students, and project students working in the area of photonic systems.
- Engage in appropriate training and development opportunities as required by the Principal Investigator, the School or Research Centre, or the University.
Engage in teaching and teaching support as assigned by the Head of School under the direction of the Principal Investigator.
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.

Qualifications and Experience

This position is open to candidates who meet the following criteria:

Applicants should have a PhD in Physics or Electronic Engineering.

In addition, it is desirable that the candidate has relevant postdoctoral experience in the following areas:

- Reconfigurable optical networks
- Coherent optical communication systems
- Optoelectronics devices including optical frequency combs and fast tuneable lasers
- Digital Signal Processing for coherent optical systems
- Experimental test-beds for photonic systems

Mandatory Training
The post holder will be required to undertake the following mandatory compliance training: Orientation, Health and Safety and Data Protection (GDPR). Other training may need to be undertaken when required.

Competencies
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 Scale: € 45,041 - € 59,622 (dependent on experience)

Closing date: February 8th, 2020.

Informal Enquiries in relation to this role should be directed to:

Prof. Liam Barry, School of Electronic Engineering, DCU, Dublin 9
E-mail: liam.barry@dcu.ie Phone: +353 (0)1 7005431
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.

Applications should be submitted by e-mail with your completed application form to hr.applications@dcu.ie or by post to the Human Resources Department, Dublin City University, DCU Glasnevin Campus, Dublin 9, D09W6Y4.

Please clearly state the role that you are applying for in your application and email subject line: Job Ref #RF1306 Postdoctoral Researcher / Research Fellow in Photonic Systems

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.