

## Postdoctoral Research Position in Optoelectronics

Applications are invited for a postdoctoral research position in the School of Electronic and Communications Engineering in the Dublin Institute of Technology (DIT), to investigate the development of a CMOS compatible single photon avalanche photodiode. The project is Irish government (Enterprise Ireland) funded and is a collaboration between the School's Photonics and VLSI research groups. Both groups involve several faculty members, post-docs and graduate students undertaking research in areas such as CMOS imaging, CMOS detectors, plastic optical fibre communications, liquid crystals and integrated circuit design.

The candidate will be required to carry out leading edge research on single photon detection and CMOS compatible photodiodes. This will involve the design and development of a single photon avalanche photodiode using a commercial CMOS, SOI CMOS or BiCMOS process. The design of the photodiode will be realised either through simulation using Silvaco software or by mathematical modelling using Matlab.

### Requirements:

- A Ph.D. preferably specialising in an optoelectronics related field.
- A strong publications track record with publications in both international journals and conferences.
- A strong interest in designing and developing novel optoelectronic devices and/or integrated circuits.
- Excellent interpersonal and communication skills.

### Desirable:

- 1+ years postdoctoral experience
- Experience in the use of Unix/Linux environment
- Experience in integrated circuit design using Cadence or Mentor Graphics
- Experience with postgraduate student supervision

### Duration:

The post is for 12 months, with the possibility of extension, subject to the acquisition of further funding.

### Salary:

€52,969

### Applications:

Please send an up-to-date CV to: Dr. Aoife Moloney

**Email:** [aoife.moloney@dit.ie](mailto:aoife.moloney@dit.ie) **Phone:** +353-1-4024667 **Web:** [www.electronics.dit.ie](http://www.electronics.dit.ie)

