



Researcher-High speed components & Photonic Integrated Circuits

FP-43 Researcher: High Speed Components and Photonic Integrated Circuits for New Generation of Communication System

Contract: Full Time/Fixed Term

The Tyndall National Institute at University College Cork invite applications for a postdoctoral position aimed at the research and development of high speed components (modulators, lasers and detectors) and Photonic Integrated Circuits (PICs) for a new generation of communication systems. The role will be focussed on investigating the design and fabrication the high speed components and the PICs. This includes designing of the high speed components and PICs, developing the fabrication processing as well as the characterizing of the fabricated PICs. The successful candidate will have completed PhD in a physics or engineering related discipline.

Responsibilities:

- The candidate will need to take a leadership role in processing and characterizing the high-speed electro-absorption modulators and take the role in developing InP and GaAs based photonic integrated circuits (PICs).
- Participate in Education and Public Engagement activities, as required.
- Contribute to the engagement on intellectual property activities in partnership with the Office of Technology Transfer.
- Ensure all activities are compliant with the Tyndall Quality Management system.
- Ensure all activities are compliant with the required Health and Safety standards.
- Carry out any additional duties as may reasonably be required within the general scope and level of the post.

Academic/Educational Requirements

- The candidate should have a PhD in Engineering or Physics. They should have a proven track record in the design fabrication and characterisation of photonic devices.

Qualifications Desirable

- Experience in the fabrication of photonic devices and photonic integrated circuits
- Experience in the design and characterisation of photonic integrated circuits
- Experience in the modelling of different photonics device (lasers, modulators and detectors)
- Experience in mask design and mask design software
- Excellent hands-on lab skills in device testing, characterization, problem-solving, etc. and willing to work in the lab
- Excellent verbal and written communication skills
- Strong leadership skills
- Experience in the growth of III-V devices is also an asset.

For further information on this position, please contact Dr Frank Peters, Integrated Photonics Group, Tyndall National Institute (Email: frank.peters@tyndall.ie)

Appointment may be made on the IUA Researcher Scale €37,873- €45,041. Salary placement on appointment will be in accordance with public sector pay policy.

Application Instructions

Step 1 - Click [here](#) to download and complete the Application form and indicate the Job Reference FP-43

Step 2 – Return the completed Application form, together with your CV and motivation letter to careers@tyndall.ie.

Please note that Garda vetting and/or an international police clearance check may form part of the selection process.

The University, at its discretion, may undertake to make an additional appointment(s) from this competition following the conclusion of the process.

Please note that an appointment to posts advertised will be dependent on University approval, together with the terms of the employment control framework for the higher education sector.

At this time, Tyndall National Institute does not require the assistance of recruitment agencies.

Tyndall National Institute at University College, Cork is an Equal Opportunities Employer.