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# IPIC PhD Studentships – Photonic Packaging & Hybrid Integration Theme

## PMO-18 IPIC PhD Studentships – Photonic Packaging & Hybrid Integration Theme

### Contract: Full Time/Fixed Term

Photonics Packaging Group at Tyndall has two PhD studentships starting in September 2020. The positions will involve cutting-edge research in the area of hybrid photonic device integration and packaging and thermal management of integrated photonic devices. The projects will involve the design and laboratory prototyping of state-of-the-art photonic devices. The technology to be developed will use different photonic material systems, including Silicon, Indium Phosphide and Silicon Nitride. Target applications for this technology include high speed communications, medical diagnostics and remote sensing. Students will have an opportunity to work with the highly experienced researchers in the Tyndall Institute, as well as work with the group's many collaborators across the world. Training will also be provided across the many areas of advanced photonic integration and packaging.

The PhD projects focus on:

- Packaging PhD4 PAC-9 (Supervisor – Brian Corbett)
- Hybrid integration and packaging of integrated photonics devices (Supervisor – Prof. Peter O'Brien)
- UV Emitters for biomedical applications – (Prof Peter Parbrook, Position BIO-7)
- Thermal management of integrated photonic devices (Supervisor – Dr. Kafil Razeeb) - Closing 30th April, 2020

Each studentship will offer the opportunity to:

- Complete a cutting-edge research project in a core technology area that is in great demand
- Complete your research within a highly experienced research team
- Access Tyndall's world-class photonic packaging facilities
- Publish in leading journals and present at top international conferences
- Complete advanced training courses, e.g. semiconductor fabrication and packaging
- Develop translational skills, e.g. project management, communication & dissemination and entrepreneurial skills
- Connect with our global network of industry and academic research partners
- Join a diverse community of young researchers from across the world
- PAC-9: The student will develop photonic integrated circuits and the associated novel packaging strategies to realise state-of-the-art high bandwidth multichannel and efficient coupling to output lenses. The circuits will be characterised and performance validated.

Both PhD studentships will be based at the Tyndall Institute, University College Cork, the three first will be at Tyndall National Institute, while the fourth will be at Biochemistry.

An annual student stipend of €18,500 applies for this successful candidate for this position. Yearly University Academic Fees will be paid by the Tyndall National Institute.

If you are interested in helping us achieve our ambition, complete and submit an application form

and motivation letter, indicating your preferred PhD project.

## **Application Instructions**

**Step 1 - Click [here](#) to download and complete the Application form and indicate the Job Reference PMO-18**

**Step 2 – Return the completed Application form, together with your CV and motivation letter to [careers@tyndall.ie](mailto:careers@tyndall.ie).**

*Postgraduate applicants whose first language is not English must provide evidence of English language proficiency as per UCC regulations*

(<https://www.ucc.ie/en/study/comparison/english/postgraduate/>). Certificates should be valid (usually less than 2 years old) and should be uploaded with their application. In special circumstances the panel may consider a prior degree in English (e.g. Master thesis written in English) as evidence of English language proficiency.

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.