

## JOB OFFER: POSTDOCTORAL RESEARCHER QUANTUM PILOT

Ghent University – IMEC  
Technologiepark-Zwijnaarde 126, B-9052 Gent, Belgium

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### Context & Job Description

The Photonics Research Group, an associated lab of Ghent University and imec is a partner within the EU funded project QuPilot (<https://qu-pilot.eu>), which aims to accelerate the time-to-market of European industrial innovation in quantum technology by setting up a series of pilot lines addressing several major technology platforms, including a photonics platform. One of the objectives is to extend existing Photonic IC platforms with building blocks specifically geared for applications in quantum communication, quantum sensing and quantum computing.

You will be responsible for:

- The design of new building blocks in imec's existing Silicon and Silicon Nitride PIC platforms, and translating them in suitable mask files
- Improving existing heterogeneous integration processes, for realizing advanced electro-optic modulators and switches on imec's Silicon and Silicon Nitride PIC platforms
- Characterizing the fabricated devices
- Attending project meetings and progress reporting

You will work in the Photonic Research Group, an associated lab of imec at Ghent University. You will be employed by imec.

### Profile

- You have a PhD in Telecom, Photonics, Applied Physics or Quantum Optics.
- You have experience in photonic integrated circuit design and measurement.
- Some processing experience is a plus.
- Previous experience in quantum photonics is an advantage but not a must. This project is an excellent opportunity to get acquainted with the field.
- You are fluent in English. Knowledge of Dutch and/or French is appreciated.

### About the Photonics Research Group

The project will take place primarily in the Photonics Research Group (PRG), a joint imec-UGent lab, located at Ghent University. PRG has pioneered the field of integrated photonics and keeps on enriching that technology, especially using integration of other materials and functionalities. It hosts a fully equipped measurement infrastructure (single photon detectors, higher power lasers, cryostat, ...), a cleanroom facility, and an extensive simulation infrastructure. The group is also an affiliated lab of IMEC: one of the world leading research institutions in microelectronics. The photonics research group hosts 12 professors, 15 postdocs and 50+ PhD students of many nationalities (see <http://photonics.intec.ugent.be>).

### About IMEC

IMEC is one of the world's premier research centers in nanotechnology in the world. IMEC is [committed to being an inclusive employer](http://www.imec-int.com/en/careers#diversity) (<http://www.imec-int.com/en/careers#diversity>) and proud of its open, multicultural, and informal working environment with ample possibilities to take initiative and show responsibility. In everything we do, your future colleagues are guided by the imec values of passion, excellence, connectedness and integrity. We commit to supporting and guiding you in this process; not only with words but also with tangible actions. Through imec.academy, 'our corporate university', we actively invest in your development to further your technical and personal growth.

We are aware that your valuable contribution makes imec a top player in its field. Your energy and commitment are therefore appreciated by means of a market appropriate salary with many fringe benefits.

## Application

The positions are open at the date of publication and evaluations are performed as they are received. To apply, submit to Dries Van Thourhout by email:

- your CV
- a cover letter highlighting your research interest and expertise.

For more information, please contact  
Prof. Dries Van Thourhout ([dries.vanthourhout@UGent.be](mailto:dries.vanthourhout@UGent.be) )