

## INDUSTRIAL ENGINEER FOR ELECTRONIC PROTOTYPING AND TECHNICAL MAINTENANCE OF RESEARCH MEASUREMENT LAB

Ghent University – IMEC, Photonics Research Group  
Tech Lane Ghent Science Park – Campus A  
Technologiepark – Zwijnaarde 126, B-9052 Gent, Belgium

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### JOB DESCRIPTION:

The Photonics Research Group of Ghent University and imec is active in the field of integrated photonics. This is the field in which optical and photonic functions are implemented in the form of an integrated circuit, similar to how electronic functions are implemented. Such Photonic Integrated Circuits (PICs) are used in large numbers for fiber-optic communication where they enable gigabit data transmission. However, in recent years the application span has broadened dramatically and our research group develops integrated photonics for novel applications like machine learning, quantum computing or medical devices and photonics FPGAs. Located in the Science Park of Gent-Zwijnaarde, the Photonics Research Group is an international team with open, dynamic and cooperative researchers. Development tasks of the team cover design, simulations and fabrication of photonic integrated circuits but also their performance characterization in the measurement lab. We are looking for a new member to join the team that runs the measurement lab. The duties of this new member include the support of researchers for electronic prototyping and the technical maintenance of measurement equipment in the lab.

### RESPONSIBILITIES AND DUTIES:

You will be in charge of electronics developments and support in the lab. This includes tasks like e.g. printed circuit board (PCB) design, development of equivalent circuit models or electronic assembly. Additionally, the responsibilities include regular maintenance of measurements setups and supplies to facilitate efficient experiments and prototyping.

The job provides a good mix of short and long term assignments including tasks like project based development of electronics or training of people in electronics competences. The duties also involve setup maintenance with tasks that range from IT support to e.g. hardware optimization for accurate temperature control.

You will be part of a dedicated team that runs the photonics measurement laboratory. Together, we prioritize workload and make strategic decisions to advance the infrastructure of the lab. You will report to the lab manager who coordinates lab infrastructure, measurements and knowledge transfer. Although your work is in close collaboration with the lab manager and researchers, in general we expect complex tasks to be solved with minimal supervision.

### QUALIFICATIONS AND SKILLS:

Must have

- Master in electrical engineering technology, or a professional bachelor degree in this field
- experience with TH or SMD soldering
- knowledge of PCB layout design (hands-on experience is advantage)
- knowledge of digital and analog electronic circuit design
- knowledge of object oriented programming (python programming is advantage)
- knowledge of control systems and controller design

### NICE TO HAVES

- interest and experience in electronics hardware assembly and/or repair
- experience with MCU programming, testing, debugging
- experience in IT support

- experience with CAD software
- experience with 3D printing
- Interest in optics and integrated circuits

#### WHAT WE OFFER:

We offer a pleasant working environment in an international top research group with a dynamic team of young researchers and a salary adapted to the candidate's experience. You will be employed in the team as a member of the imec staff.

#### CONTACT:

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#### APPLICATION:

Please apply online through the following link:

<http://photonics.intec.ugent.be/contact/vacancies/Application.htm>

