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## About the company

Qplox is a fast-growing company offering test and automation engineering. Headquartered in Leuven, with offices in Barcelona and Eindhoven.

Our clients are major multinational enterprises and local companies from automotive, semiconductors, RF, consumer electronics.... Our Test automation group offers a one stop shop for design of automated test benches, system integration production, lab automation and data acquisition systems, with a growing focus in IoT sensor networks.

Our consultancy department offers services in RF, semiconductors and electronics design and test, as well as on the crossing roads of Nanotechnology, Bio-Science Engineering and Biotechnology.

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## Job Description

Our client is seeking a highly skilled and motivated R&D Silicon Photonics Materials Engineer with expertise in new material systems and devices for our existing Silicon Photonics process platforms. The successful candidate collaborates closely with design and engineering teams to ensure high yield and reproducibility of advanced photonic devices. The candidate will play a key role in advancing our research and development efforts towards new ultra-high-speed transceiver, integrated high speed detectors, multi-wavelength sources or neural network architectures based on our process platforms.

### Responsibilities

- Lead the development and optimization of fabrication processes for Silicon Photonics components utilizing specialized materials to match the requirements of future application scenarios.
- Work closely with design, fabrication and process engineering teams to implement and refine manufacturing processes, ensuring high yield and reproducibility of photonic devices.
- Conduct experiments and characterize materials and devices to understand their optical and electrical properties, including electro-optic coefficients, modulation bandwidth, signal-to-noise ratio, and responsivity of Ge APDs.
- Collaborate with cross-functional teams to integrate Silicon Photonics components into larger systems and evaluate their performance in real-world applications.
- Stay updated on the latest advancements in materials science and manufacturing technologies, conduct literature reviews, and apply new insights to drive innovation and improve the performance of Silicon Photonics components.

Location: Ghent (Belgium)

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## Candidate Description

- PhD. or Master's degree in Electrical Engineering, Materials Science, Photonics, or a related field.
- Strong background in materials science, with expertise in one or more of the following materials: Lithium Niobate (LiNbO<sub>3</sub>), Barium Titanate (BaTiO<sub>3</sub>), PZT, Silicon Germanium (SiGe), III-V semiconductors, or organic materials. Alternatively related process

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knowledge of Ge APDs, integrated SiGe photodetectors, integrated PD or APDelectro-optic modulators or for multi-wavelength sources is required.

- Basic knowledge of Silicon Photonics device concepts is a plus.
- Fluent in English, both spoken and written.
- Desirable skills: Strong communication skills, time management, proactive.

## We offer

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An attractive salary package with extra benefits. A high tech, multicultural and young ambient. A fast track in a growing company. Formation in multidisciplinary environment plenty of learning opportunities.

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## Contact

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Send your CV and application letter to [jobs@qplox.com](mailto:jobs@qplox.com) with the subject "**R&D Silicon Photonics Materials Expert**".

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