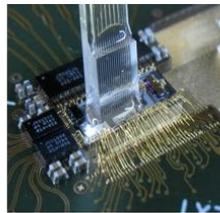
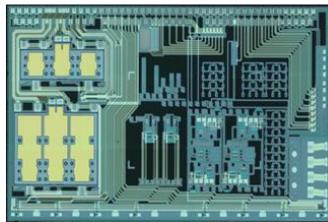


Doctoral Researcher (PhD) position (f/m/d)

The Institute of Integrated Photonics (IPH) is a leading research group in the field of Integrated Photonic devices and systems. We focus on Silicon (Si) and Silicon-Nitride (SiN) based photonics technologies with activities ranging from core device development to system integration, with applications in optical communication technologies, bio-photonics, quantum communications, neuromorphic computing and advanced instrumentation. IPH has established expertise in the fields of design and modelling of photonic integrated circuits (PICs), fabrication, and electrical and optical characterization (www.iph.rwth-aachen.de).

We seek to fill 2 doctoral researcher positions for the project “HiPEQ – Highly Integrated PIC based External Cavity Laser Sources for Quantum Technology Applications”. We are looking for people who are driven by excellence, excited about innovation, and looking to make a difference. If this sounds like you, you’ve come to the right place!



Your Profile

You have earned a Master’s degree (M.Sc. or equivalent) in electrical engineering, optical engineering, physics, or similar with outstanding grades.

Within your studies you have

gained experience in semiconductor processing technology and working in a clean room environment

and/or

you have gained experience in the design of photonic integrated circuits (PICs) and optical systems.

You are highly motivated and willing to pitch your own ideas. Commitment, team working, and a critical mind are part of your skillset. You are interested to work in an international research environment and you have fluent written and verbal communication skills in English.

What we offer

The BMBF(*) funded project “HiPEQ – Highly Integrated PIC based External Cavity Laser Sources for Quantum Technology Applications” aims at the realization of an advanced tunable external cavity laser system based on SiN-PIC technology for quantum technology applications.

A first PhD project will focus on the design of the photonic devices and of the optical system with state-of-the-art design and development tools. You will create layouts that will be taped out to a commercial chip-foundry and measure and verify the performance of the fabricated PICs using our state-of-the-art optical characterization lab at IPH.

A second PhD project will start with the development of the optical assembly technology required for the system integration. In this project, you will develop novel optical assembly as well as special back-end-of-line PIC fabrication processes and assemble the ECDL-laser system demonstrators in our dedicated photonics cleanroom. These systems will be optically and electrically characterized in close cooperation with our industry partners from within the project.

We expect you to be able to present and defend your results in front of the members of IPH as well as at international conferences and contribute to peer-reviewed journal publications.

The Doctoral Researcher (PhD) position is offered as a full time (40h/week) position based on the unified wage agreement for employees in public service TV-L at EG13 salary grade.

The position will start on October 1st, 2021 as a 1+3 years project.

Further information can be obtained from: Dr. Florian Merget – fmerget@iph.rwth-aachen.de

Please submit your comprehensive application **before September, 30th, 2021** including your CV, motivation letter, transcript of record, Master thesis (if electronic application) and list of publications (if applicable) by email (preferred communication channel) to

Dr. Florian Merget – fmerget@iph.rwth-aachen.de

or via mail to

Inst. of Integrated Photonics
RWTH Aachen University
c/o Dr. Florian Merget
Campus Boulevard 73
52074 Aachen – GERMANY

(*) – Bundesministerium für Bildung und Forschung (BMBF)

RWTH Aachen University

RWTH is a certified family-friendly University. We support our employees in maintaining a good work-life balance with a wide range of health, advising, and prevention services, for example university sports. We also offer a comprehensive continuing education scheme and a public transportation ticket available at a significantly reduced price.

RWTH is an equal opportunities employer. We therefore welcome and encourage applications from all suitably qualified candidates, particularly from groups that are underrepresented at the University. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of national or ethnic origin, sex, sexual orientation, gender identity, religion, disability or age. RWTH is strongly committed to encouraging women in their careers. Female applicants are given preference if they are equally suitable, competent, and professionally qualified, unless a fellow candidate is favored for a specific reason.

As RWTH is committed to equality of opportunity, we ask you not to include a photo in your application.

You can find information on the personal data we collect from applicants in accordance with Articles 13 and 14 of the European Union's General Data Protection Regulation (GDPR) at <http://www.rwth-aachen.de/dsgvo-information-bewerbung>.