Within the framework of a funded tech transfer project, the Laboratory of Photonics and Quantum Measurements (LPQM) at the Swiss Federal Institute of Technology (EPFL) is looking for a

R&D Engineer with expertise in integrated photonics and electronics for prototyping of novel device technology

to work on the industrialization of a novel photonic integrated technology for use in the domain of telecommunication and ultrafast LiDAR, with the aim of launching a spin-off company.

The candidate's role will be to participate in the development of the laboratory demonstrator from the current stage of research prototype to a demonstrator that can be manufactured via foundry, and for use in applications. The candidate will be responsible for integrated photonics design, packaging and the engineering of custom electronic, optical and mechanical solutions for the system together with an internal team and external contractors, as well as participate in the in-house and field-testing of the final product with potential customers. The initial appointment is for 1 year, with the ability of renewal.

Located in Lausanne, EPFL has a campus-like environment situated on the shores of Lakes Geneva and offers a work environment unlike any other: we inspire passion, foster innovation, build collaboration, and reward excellence. The LPQM hosts a unique infrastructure, with a multi-million CHF investments in the in-house laboratory-based testing, and in-house silicon photonics foundry.

Your tasks:

- Development of custom electronic and optical subsystem
- Experience in silicon photonics design, packaging
- Participate in the mechanical design of the product and development of fiber-chip packaging solutions
- Participate in photonic chip design and testing
- Development of the system control software
- Reporting and documentation of the system development progress.

Your Profile:

We are looking for a solution-oriented candidate who matches some of the parts below:

- MSc or PhD in electrical engineering or physics
- Industrial experience is an asset
- Experience in one or more of the following areas: III-V semiconductor lasers and optoelectronics, silicon photonics design, integrated electronics, RF engineering, optical/electrical packaging, system design, or MEMS
- Familiarity with key software, including CAD software, Python and MATLAB, SiP design tools
- Working experience on similar projects bringing the basic research technologies towards the market as well as system integration/ telecom technologies/LiDAR - is a plus
- Experience in proposal writing is an asset.

We offer:

- Work on next generation integrated photonics technology for LiDAR, industrial metrology or data center interconnects
- Opportunity to become founding member of a future spin-off company
- A remarkably well-equipped laboratory, including full in-house electronic and optical testing, and in-house integrated silicon photonics foundry
- Join a laboratory PI with track record of successful startup launching
- A young, dynamic, flexible and highly motivated R&D environment
- Embedded within a team of academic scholars with track record in scientific excellence
- Substantial R&D funds for prototype development
- Position in Switzerland – an ideal place for high tech startups

We give preference to the candidate's ability, over area of specialization.

Activity rate: 100%, CDD
Place of work: EPFL, Lausanne
Start date: immediately or to be defined

Contacts:
For additional information, please contact Prof. Tobias J. Kippenberg (tobias.kippenberg@epfl.ch) by e-mail.

Application submission:
We look forward to receiving your application, by email (*with subject line* **RD Engineer**) only to jobs-klab@epfl.ch with a statement of interest, curriculum vitae, a copy of transcripts (BA and MA) and copies of certificates (**one single PDF file only**).