

PhD position in Photonic Integrated Technologies at EPFL

## **Project description**

Within the framework of the Horizon Europe Marie Skłodowska-Curie European Doctoral Network "<u>MicroCombSys</u>: Photonic-System Engineering with Microcombs", one **PhD position** is available in the Laboratory of Photonics and Quantum Measurements at EPFL focusing on:

The development of photonic integrated coherent LiDAR using microcombs and photonic integrated laser sources. The aim is to leverage photonic integrated circuits for soliton microcombs and state-of-the-art tunable lasers to enhance LiDAR acquisition.

The project will be carried out in the research group of Prof. Tobias J. Kippenberg (<a href="http://k-lab.epfl.ch">http://k-lab.epfl.ch</a>), who will serve as PhD supervisor. As this project resides at the interface of modern photonic integrated circuits fabrication technologies and modern applications (FMCW LiDAR, optical communications), the applicant will acquire a diverse set of experimental techniques ranging from wafer-mask design, optical characterization and electronic-photonic integration.

### We offer a unique PhD experience

- World-class research facilities
- Hands-on workshops in technical and transferable skills
- Industry exposure
- International conferences and outreach activities

#### Requirements

- A master's degree in engineering or physics
- An outstanding academic record

- Previous research experience in optics, numerical simulation of photonic or electronic circuits, or nanoscale fabrication would be beneficial.
- Good communication and English language skills

As per the Marie Curie eligibility rules, the candidate must not have resided or carried out his/her main activity (work, studies, etc.) in Switzerland for more than 12 months during the last three years.

#### Diversity

EPFL is committed to diversity in the workplace. We offer an open, multicultural environment. Excellent, flexible working arrangements enable both women and men to strike the desired balance between their professional development and their personal lives.

# Applicants should submit the following documents

- A motivation letter
- Curriculum vitae
- Transcripts of undergraduate and graduate grades

## Apply

https://careers.epfl.ch/job-invite/1739/



Horizon Europe Marie Skłodowska-Curie European Doctoral Network "<u>MicroCombSys</u>: Photonic-System Engineering with Microcombs", <a href="https://www.microcombsys.eu/">https://www.microcombsys.eu/</a>