Empa - the place where innovation starts

Empa is the research institute for materials science and technology of the ETH Domain and conducts cutting-edge research for the benefit of industry and the well-being of society.

The Laboratory Transport at Nanoscale Interfaces pioneers and implements novel fabrication methods for functional nanostructured interfaces. We develop fundamental understanding in the opto-electronic, thermal and ionic transport properties of low-dimensional materials & devices and transfer our knowledge to applications for biochemical sensing and bioelectronics.

To strengthen our interdisciplinary team, we look for a

PostDoc in THz Science for nanoscale systems

Tasks

- Further development of experimental THz facilities (automation, sample environmental control, pump/probe set-up)
- Numerical modeling (Matlab, Comsol) of static and dynamic electromagnetic wave propagation
- Design and fabrication of 2D micro-structures for THz applications (antenna)
- Presentation of results in peer-reviewed scientific journals and at international conferences.
- Submission of research proposals

Profile

- PhD in physics, nanoscience, materials science, or a closely related field
- Experience in THz research
- Experience in modeling in optics (Matlab, Comsol) a plus
- Fluent in English (oral and written) and preferably basic knowledge of German
- Good publication record at PhD/postdoc level
- Highly motivated, critical thinking, open-minded and communicative person, with a strong interest to work in an interdisciplinary research environment

Funding is secured for one year with the intention to prolong another 1-2 years.

For further information about the position please contact Dr. Peter Zolliker peter.zolliker@empa.ch. Visit our website https://www.empa.ch/web/empa/transport-at-nanoscale-interfaces and watch the Empa-Video.

We look forward to receiving your online application including a letter of motivation, CV, diplomas with English transcripts and contact details of two referees. Please upload the requested documents through our webpage. *Applications via email will not be considered.*

Empa, David Heusser, Human Resources, Ueberlandstrasse 129, 8600 Dübendorf, Switzerland.