

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 *Transport at Nanoscale Interfaces Laboratory* pioneers the heterogeneous integration of novel nanomaterials in devices by mastering 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 quantum technology, energy conversion, and biochemical sensing.

In the context of a Swiss National Science Foundation Sinergia project coordinated by the University of Basel and in collaboration with EPFL and IBM Zürich, we have an opening for a

PhD student

on

Hydrodynamic transport in engineered 2D materials

We are looking for a highly motivated PhD student with a master degree in condensed matter physics, materials science, nanoscience or a related discipline and a strong interest for 2D materials, nanofabrication and interdisciplinary research. Excellent communication skills and fluency in English (both written and oral) are expected.

The research will take place at the Laboratory for Transport at Nanoscale Interfaces in Dübendorf, next to Zurich (www.empa.ch/web/empa/transport-at-nanoscale-interfaces). The successful candidate will work on devices design, materials integration & patterning and the characterization of hydrodynamic transport in 2D materials. Empa offers a highly stimulating research environment with state-of-the-art facilities and a broad interdisciplinary surrounding. The successful candidate will also have access to state-of-the-art cleanroom facilities at the Center for Micro- and Nanofabrication (ETH Zürich, www.first.ethz.ch) and at the Binnig and Rohrer Nanotechnology Center located at IBM Zürich laboratories (www.brnc.ethz.ch). The work will be carried out under the supervision of Prof. Dr. Michel Calame. The position is funded for up to 4 years, the foreseen starting date is June 1, 2020.

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

For further information about the position, you can contact Prof. Dr. Michel Calame, michel.calame@empa.ch, +41 58 765 4260 and visit our website www.empa.ch/web/empa/transport-at-nanoscale-interfaces and [Empa-Video](#).

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