

Empa - the place where innovation starts

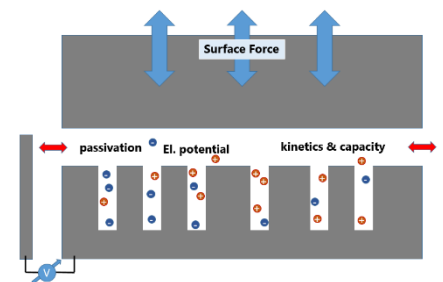
Empa is the research institute for materials science and technology of the ETH Domain and conducts cutting-edge research for the benefit of industry and the well-being of society.

In this SNF project we fundamentally investigate the surfaces of porous materials, as they occur in many modern applications such as energy storage, water treatment, tribology, biology, chromatography or generally at aqueous interfaces. Therefore, we offer the position of a

PhD Student (SNF / ETHZ)

Your tasks

- Establish porous model surfaces using "track etch" or plasma-based procedures
- Characterize model surfaces using surface analytics and namely AFM (CPM)
- Instrumental adaptations of an extended Surface Forces Apparatus (eSFA)
- Measurement of dynamics and forces of model surfaces in defined aqueous solutions
- Data evaluations and theoretical description of the observations
- Publication of at least 3 scientific articles
- Presentation of results at national followed by international conferences



Your profile

- Finished Master studies in materials science, physics, physical chemistry or the like
- Wish to scrutinize things at the nanometer level and daring to question schoolbook wisdom
- Enthusiastic for detailed experimental work utilizing world-unique equipment
- Wish to become an active researcher in Nanotechnology

This PhD thesis will be enrolled at the Department of Materials (D-MATL) of ETHZ and supervised by promoting Prof. M. Heuberger. Due to an established Empa/ETHZ collaboration ca. 80% of the work is in St. Gall and 20% at ETH Zürich.

The position is available as of now. We offer modern working conditions and a challenging job in a very interdisciplinary environment.

For further information about the position please contact Prof. Dr. Manfred Heuberger, manfred.heuberger@empa.ch.

We look forward to receiving your online application including a letter of motivation, your CV, diplomas with transcripts and contact details of two referees. Please upload the requested documents through our webpage www.empa.ch/jobs.