

Doctoral Positions in the Laboratory of Renewable Energy Sciences and Engineering

The Laboratory for Renewable Energy Sciences and Engineering (http://lrese.epfl.ch/) at École Polytechnique Fédérale de Lausanne (EPFL) has an opening for a *doctoral* position in the field of modeling of degradation in photoelectrochemical material systems and devices. The project is part of LRESE's Sinergia project DegPEC - Degradation mechanisms in photoelectrochemical devices. The subproject goal is to develop advanced multiphysical multi-scale models of degradation in particle-based photoelectrochemical solar fuel devices.

We offer a challenging and fun work environment in collaboration with Swiss and Austrian academic partners in a young and dynamic research group. We pay highly competitive salaries (around 50k\$ for doctoral positions) with full benefits.

Requirements:

Ideal candidates should possess a Bachelors and Masters in mechanical engineering, applied physics, chemical engineering, material science, or related disciplines and have a **strong background in electrochemistry** and experience **in one or more** of the following areas: photoelectrochemistry; corrosion science; semiconductor physics; heat, mass and charge transfer; and advanced numerical methods. Knowledge of any programming language (Fortran, C++), Matlab and commercial/open source computational multi-physics software (Ansys, Fluent, Comsol, OpenFoam) are required. Experience in experimental measurements are desired.

The ability to work within a collaborative environment, good communication and organizational skills, and scientific initiative are paramount.

Starting date: As soon as possible

Application:

An application letter including curriculum vitae, a list of publications if any, a statement of interest, transcripts, and contact details for three references should be sent via email to Prof. Sophia Haussener (sophia.haussener@epfl.ch).

Prof. Sophia Haussener

Laboratory of Renewable Energy Sciences and Engineering

E-mail: sophia.haussener@epfl.ch School of Engineering Station 9
Phone: +41 21 693 38 78 Institute of Mechanical Engineering 1015 Lausanne