



Postdoctoral position on multilayer thin film devices

A two-year post-doctoral position is available at the Laboratory for Processing of Advanced Composites (LPAC, Institute of Materials, EPFL), a world leading laboratory in the science of composite and multilayer materials.

The objective is to develop parylene-based multilayer barrier films for the encapsulation of future active implants that are minimally invasive, durable and biointegrated, in close collaboration with the Laboratory for Soft Bioelectronic Interfaces (LSBI-EPFL) and the Swiss company Comelec. Focus of the postdoctoral activity will be on the development of a robust accelerated aging protocol based on a novel ultrasensitive permeation measurement method. The research work will also include detailed analyses and modeling of the process-structure-property relations for the multilayer film architectures.

The candidate must possess a solid background in physical chemistry and/or materials science, with an excellent knowledge of transport phenomena, interfacial chemistry and corrosion of metals, and a genuine interest for multiphysics modeling. He or she will integrate and actively collaborate with a team of specialists in processing and characterization of flexible thin film devices and will be responsible for:

- the development and implementation of a novel permeation measurement method;
- the creation of a robust protocol for accelerated testing of soft implantable electronics;
- the experimental characterization of the microstructure of the multilayer films and their mechanical and diffusion barrier properties using state of the art methods;
- the optimization of the multilayer structure in view of its application to soft bioelectronic devices.

Mastering of the English language is also required.

We offer excellent working conditions in a young, stimulating, dynamic, interdisciplinary and international working environment at the forefront of research. EPFL is an international and world-class engineering university. It offers state-of-the-art facilities, scientific events and training and hosts a vibrant entrepreneurial community. EPFL is an equal-opportunity employer. Candidates will be recruited on merit only. We also offer a competitive salary commensurate with skills and experience, and subject to EPFL salary scale.

Please send your application with the subject line «Postdoctoral position on multilayer thin film devices» to yves.letterier@epfl.ch in a single pdf file containing all the required information (incomplete applications will not be considered). It shall include a motivation letter, a detailed CV and the names and contact details of three reference persons.