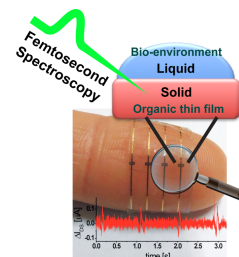


Post-Doctoral Position in SFG Spectroscopy

at the University of Bern, Switzerland

Earliest start date June 1st, 2024



The Research

We search for a **Post-Doctoral Researcher** to complete the multidisciplinary research team of Prof. Natalie Banerji at the Department of Chemistry and Biochemistry of the University of Bern. The global research goal is to understand fundamental material properties (light-matter interactions, electron transfer processes, charge transport, structure) of organic/hybrid semiconductors, with applications in new generation solar cells, transistors and (biological) sensors. In particular, the aim of the post-doctoral research will be to apply ultrafast spectroscopic techniques to those fascinating materials.

The objective of this postdoctoral work is to investigate organic and perovskite thin films as well as devices, with special focus on the interface with air, other semiconductors, metals or electrolytes. The main tool will be Sum Frequency Generation (SFG) spectroscopy. A setup currently exists in the group but needs to be optimized. Additionally, our multiple experimental setups (transient absorption, terahertz spectroscopy, spectroelectrochemistry, device characterization...) can yield complementary insights for the project.

Your Profile

We are seeking an outstanding and highly motivated candidate with a PhD degree in physical chemistry, physics or photonics. Thorough experience with ultrafast spectroscopy is required. You are expected to develop the SFG experiment independently and to construct the corresponding setup, including optics, electronics and programming. Knowledge about organic or hybrid electronic devices is an additional asset and you should be ready to work with a variety of samples. The training of PhD and/or Master students is anticipated. You should have an independent and solution-driven work attitude, as well as the ability to evolve in an interdisciplinary environment. We generally enjoy group members with an open personality, and excellent communication/social skills.

We Offer

A 1-year contract that can be extended for a maximum of 3 years is offered. You will join an enthusiastic international research group, participate in exciting projects, enjoy excellent research facilities, and receive attractive employment conditions. The project benefits from numerous collaborations with renowned groups in the same institute, in Switzerland and at international level.

Please Provide (deadline March 31st 2024)

- A curriculum vitae
- A letter of motivation

By e-mail to Natalie.banerji@unibe.ch (with Subject: "PostDoc_YourName").

Interviews will be conducted the week of April 8th 2024 (online or on site).