

Postdoctoral Fellow in Polymer Electrolytes for Advanced Battery Systems

100 %

Your tasks

You will contribute to cutting-edge research on ion transport in multilayer polymer electrolytes within a jointly funded SNF collaboration between the Paul Scherrer Institute (PSI) and the Luxembourg Institute of Science and Technology (LIST). In this interdisciplinary project on multilayer polymer electrolytes, you will primarily focus on polymer design, synthesis, processing and characterization, contributing to the development of next-generation solid-state battery materials. Your main responsibilities include:

- Developing and optimizing polymer electrolyte formulations
- Designing and fabricating multilayer polymer electrolyte architectures
- Evaluating ionic transport and performance by integrating polymer design tasks with electrochemical measurements
- Publishing results in scientific journals and presenting findings at international conferences
- Actively contributing to a collaborative research environment involving PSI and international partners

Your profile

You have:

- A PhD in Polymer Science, Materials Science, Chemistry, Electrochemistry, or a closely related field
- Strong background in polymer synthesis, polymer modification, polymer physics, polymer electrolyte development
- Experience with polymer processing techniques and understanding of polymer structure–property relationships
- Interest in applying polymer science to solid-state battery materials
- Familiarity with electrochemical testing or materials characterization is an advantage
- Strong problem-solving skills and the ability to work both independently and within interdisciplinary collaborations
- Excellent communication skills in English

We offer

Our institution is based on interdisciplinary, innovative, and dynamic collaboration. You will profit from:

- Systematic on-the-job training and access to state-of-the-art electrochemical and materials characterization facilities
- Personal development opportunities and a strong vocational training culture
- Modern working conditions and on-site infrastructure supporting a healthy work-life balance

Your employment contract is limited to 2 years, with the possibility of extension depending on project development and funding.

Contact: Dr. Sigita Trabesinger sigita.trabesinger@psi.ch