

INTERNSHIP OFFER CH-2025-000047



Villigen PSI, Switzerland



INTERNSHIP HOST



Name of Company Paul Scherrer Institut



Website www.psi.ch



Address of Company Villigen PSI Switzerland



Number of Employees 2300



Business or Product Research

STUDENT REQUIRED



General Discipline Chemistry and Chemical Engineering; Material Engineering and Sciences; Physics and Physical Sciences

Field of Study

Completed Years of Study

Language Required English Good (B1, B2) Or German Good (B1, B2)

Required Qualifications and Skills

Ideally you are or will be enrolled in a Master program in materials science, physics, physical chemistry or a related field. An interdisciplinary background is of advantage. Good skills in experimental physics and/or physical chemistry required.

Student Status Requirements Enrolled during whole internship; with EU/EFTA passport also possible between BSc and MSc

Other Requirements/Information You enjoy working in a small team of scientists with different backgrounds. High curiousity for natural sciences on the quantum and nanoscale.

INTERNSHIP OFFER



10 - 16 weeks

Latest Possible Start Date 20-Oct-2025

Within Months Mar-2025 - Dec-2025

Company Closed WIthin

2100 CHF per Month

Deductions Expected approx. 10 % Social security AHV/IV

Payment Method



Arranged by **Employer**

Estimated Cost of Living including Lodging 1750 CHF / Month

Working Environment: Research and development

Working Hours / Week: 42.0

The Paul Scherrer Institute PSI is the largest research institute for natural and engineering sciences within Switzerland. We perform cutting-edge research in the fields of future technologies, energy and climate, health innovation and fundamentals of nature. By performing fundamental and applied research, we work on sustainable solutions for major challenges facing society, science and economy. PSI is committed to the training of future generations. Therefore, about one quarter of our staff are post-docs, post-graduates or apprentices. Altogether, PSI employs 2300 people.

Project Description

We investigate the exciting physical and chemical properties of atoms and molecules assembled into novel surface-supported low-dimensional materials. We learn about the assembly of 2D layers and 1D chains with atomic precision by on-surface supramolecular engineering. You will study the structural, electronic and magnetic properties of such supramolecular assemblies made from different organic compounds coordinated by coordination ad-atoms on surfaces. The work shall be performed in the surface science laboratory at PSI (https://www.psi.ch/lmn/surfacescience-lab). We will use spectro-microscopy correlation to explore and exploit the electronic/magnetic structure of these specifically synthesized on-surface layers or chains. This will be performed via scanning tunneling / scanning force microscopy and spectroscopy (STM/S SFM/S) in combination with the more spatially averaging techniques of photoelectron (XPS/UPS). You will learn to prepare samples and analyze them both at ambient conditions and in ultra-high vacuum using these techniques.

ADDITIONAL INFORMATION

Any student with Non-EU/EFTA nationality needs an official letter from their university, confirming that the internship is compulsory (required for visa/work permit).

Deadline for Nomination - 15-Mar-2025