



## INTERNSHIP OFFER

Ref. No. CH-2024-000036

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### Internship Host Information

<b>Internship Host:</b>	Paul Scherrer Institut	Website: <a href="http://www.psi.ch">www.psi.ch</a>
	Forschungsstrasse 111	Location of placement: Villigen PSI
	5232 Villigen PSI	Nearest airport: ZRH - Zuerich
	Switzerland	Working hours per week: 42.0
		Working hours per day: 8.4

*Number of employees: 2200*  
*Business or products: Research*

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### Student Required

<b>General Discipline:</b>	PHYSICAL SCIENCES, Other;CHEMISTRY AND CHEMICAL ENGINEERING;MATERIAL SCIENCES AND ENGINEERING	<b>Completed years of study:</b>	3
<b>Field of Study:</b>	Physical Sciences.;Physical Chemistry.;Materials Science.;Materials Science.	<b>Student status requirements:</b>	Enrolled during internship; with EU/EFTA passport also possible between BSc and MSc
		<b>Language required:</b>	English Good (B1, B2) Or German Good (B1, B2)

**Required Qualifications and Skills:**

**Other requirements:**  
Scientific curiosity and scientific problem solving skills  
Team work

Master student in materials science, physics, physical chemistry or a related field. An interdisciplinary background is of advantage.

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### Internship Offered

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 2200 people.

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/surface-science-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.

<b>Number of weeks offered:</b>	10 - 16	<b>Working environment:</b>	Research and development
<b>Within the months:</b>	01-APR-2024 - 31-DEC-2024	<b>Gross pay:</b>	2100 CHF / Month
<b>Or within:</b>	-	<b>Deduction to be expected:</b>	approx. 10 % Social security AHV/IV
<b>Company closed within:</b>	-	<b>Payment method / time of first / payment:</b>	

**Latest possible start date:** 01-OCT-2024

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### Accommodation

<b>Canteen at work:</b>	Yes		
<b>Expected type of accommodation:</b>	Guest house	<b>Estimated cost of lodging:</b>	900 CHF / Month
<b>Accommodation will be arranged by:</b>	Employer	<b>Estimated cost of living incl. lodging:</b>	1750 CHF / Month

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### Additional Information

Students with any NON-EU/EFTA nationality need for the visa and work permit an official letter from their university, confirming that the internship is compulsory (IAESTE Switzerland will apply for them).

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### Nomination Information

**Deadline for nomination:** 05-MAY-2024

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**Date:** 18-APR-2024      **On behalf of receiving country:** IAESTE Switzerland