# INTERNSHIP OFFER
# CH-2025-000222

St. Gallen, Switzerland | ON-SITE

## INTERNSHIP HOST

Name of Company
Empa
-

Website
https://www.empa.ch/

Address of Company
Dübendorf
Switzerland

Number of Employees
1000

Business or Product
Research

## STUDENT REQUIRED

General Discipline
Biology;Microbiology

Field of Study

Completed Years of Study
2

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

Required Qualifications and Skills
Studying Biology / Microbiology with previous laboratory experience

Student Status Requirements
Must be enrolled during entire internship (company rule)

Other Requirements/Information

## INTERNSHIP OFFER

40 - 52 weeks

Latest Possible Start Date
01-Apr-2025

Within Months
Jan-2025 - Mar-2026

Company Closed WIthin
-

2300 CHF per Month

Deductions Expected
approx. 10 % Social security AHV/IV

Payment Method
Bank Transfer

600 CHF per Month

Arranged by
Employer

Estimated Cost of Living including Lodging
1650 CHF / Month

Working Environment: Research and development

Working Hours / Week: 42.0

Empa is a national research laboratory and part of the ETH Domain. We conduct cutting-edge materials and technology research, generating interdisciplinary solutions to major challenges faced by industry, and create the necessary scientific basis to ensure that our society develops in a sustainable manner.

Wood decay fungi play an important role as recyclers of organic matter in the nutrient cycle. The risks of wood degradation by fungi are widely discussed, but little attention is given to the opportunity to apply wood decay fungi for wood functionalization, modification and/or wood protection. These techniques can make otherwise inexpensive and fast-growing types of wood, such as ash and beech, more attractive for furniture and other applications.
We develop sustainable approaches to produce a hybrid living material with both living (fungi)) and nonliving elements (wood) that adds complexity and functionality to wood. We have shown that with knowledge of the co-evolutionary adaptation of a wood decay fungus to a wood substrate and by manipulating environmental conditions, we made it possible to trigger and standardize emission of bioluminescence. Energy savings and a decrease in $CO_2$ emissions would arise from the sustainable production and use of bioluminescent wood to light up our houses and neighborhoods. You will be working in this field of research.

Benefit: Half fare card

## 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 - 27-Oct-2024

Date - 22-Oct-2024

On Behalf of Receiving Country - IAESTE Switzerland