



WORK OFFER

Ref. No. CH-2021-000035

Employer Information

Employer: Paul Scherrer Institut
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Forschungsstrasse 111
5232 Villigen PSI
Switzerland

Website: www.psi.ch

Location of placement: 5232 Villigen
Nearest airport: Zurich
Working hours per week: 41.0
Working hours per day: 8.2

Number of employees: 2000

Business or products: Research and Development

Student Required

General Discipline: CHEMISTRY AND CHEMICAL ENGINEERING
Field of Study: Chemical Engineering.

Completed years of study: 1
Student status requirements: Yes (EU/EFTA passport holders also between Bachelor and Master)
Language required: English Good (B1, B2)

Required Knowledge and Experiences:

Optional: Matlab, Image

Other requirements:

Work Offered

X-Ray tomographic characterizing polymer electrolyte fuel cells mesoporous layers
The optimization of polymer electrolyte fuel cells (PEFCs) involves understanding of the water distribution in the microporous layers (MPL) during cell operation. Diagnostics of the water distribution and saturation have been developed and shown successful in an ex situ setup by our group. Our next step is to apply the diagnostic method to a fuel cell operated at steady-state, housed in a laboratory computed tomography (lab-CT) scanner. The work involves:

- Testing suitable lab-CT parameters for steady-state fuel cell characterization
- Operate scanner for X-ray tomographic measurements
- Assessing and quantifying the image quality based on different CT parameters

A duration of three months (extension can be considered) is planned for this project, starting from June 2021. The content of work can be adapted to the students profile or eventual time limits.

Internship ideally takes place between 1.6. and 31.8.2021, but there is some flexibility

Number of weeks offered: 12 - 12
Working environment: Research and development

Within the months: 01-JUN-2021 - 30-SEP-2021
Gross pay: 2100 CHF / Month

Or within: -
Deduction to be expected: approx. 10 % Social security AHV/IV

Company closed within: -
Payment method / time of first / payment:

Latest possible start date:

Accommodation

Canteen at work: Yes

Expected type of accommodation: Guest house
Estimated cost of lodging: 900 CHF / Month

Accommodation will be arranged by: Employer
Estimated cost of living incl. lodging: 1750 CHF / Month

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).

Nomination Information

Deadline for nomination: 15-MAR-2021

Date: 18-JAN-2021 **On behalf of receiving country:** Sabine Lenz