


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.

For the Reactor Physics and Thermal-Hydraulics Laboratory we are looking for a

PhD Student in High-fidelity LWR dosimetry simulations

24.10.2024 • Doctoral • 4102-01 • 100% 

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Your tasks

- PhD project on advanced high-fidelity / high-resolution LWR dosimetry simulations
- Core-follow simulations with deterministic codes and neutron transport calculations with Monte Carlo codes
- Upgrading PSI conventional calculation scheme for LWR dosimetry applications
- Developing higher resolution neutron source methodology for neutron transport calculations
- Enhancing uncertainty quantifications and participation in validation studies with advanced multi-physics models
- Support teaching activities generally at the institution of the thesis advisor and/or perform specific maintenance tasks

Your profile

- Master degree or equivalent in reactor physics, nuclear engineering or physics
- Programming and scripting skills, specifically under Linus/Unix environment
- Familiarity with LWR neutronics modelling
- Background in data analysis methods
- Fluency in spoken and written English
- Obtaining the MCNP® code US RSICC single user license will be required

We offer

Our institution is based on an interdisciplinary, innovative and dynamic collaboration. You will profit from a systematic training on the job, in addition to personal development possibilities and our pronounced vocational training culture. If you wish to optimally combine work and family life or other personal interests, we are able to support you with our modern employment conditions and the on-site infrastructure.

For further information, please contact Dr Alexander Vasiliev, phone +41 56 310 27 02.

Please submit your application online by **1 December 2024** (including addresses of referees) for the position as a PhD Student (index no. 4102-01).

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