



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 matter and materials, energy and environment and human health. 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.

The structural integrity group investigates the influence of material ageing phenomena on the lifetime and structural integrity of (nuclear) power plant components. To strengthen our activities, the structural integrity group is looking for a

Postdoctoral Fellow in Warm Pre-Stress and Crack Arrest Fracture Mechanics

100%

Your tasks

- To modify and instrument an existing thermal shock testing system to include a mechanical loading component equivalent to internal pressure
- Design and execution of thermal shock laboratory experiments approximating specific loading conditions as can exist in a nuclear reactor pressure vessel
- Analysis and interpretation of the experiments within the framework of nuclear safety criteria as used in international standards. This may include finite element analyses
- Publication of results in scientific journals and at international conferences
- Collaboration within other service tasks & international projects

Your profile

You hold a PhD degree in Mechanical Engineering (or closely related field) and have a solid background in mechanical testing of materials. Good English communication skills are a requirement, knowledge of German a clear advantage.

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.

Your employment contract is initially limited to 2 years with a possible extension of 1 year.

For further information please contact Koen Freytag, phone +41 56 310 41 37, e-mail: koen.freytag@psi.ch

Please submit your application online via the application button on this page. (including addresses of referees) by **25 May 2025** for the position as a Postdoctoral Fellow (index no. 4603-01).

Paul Scherrer Institut Human Resources Management, Serdal Varol, 5232 Villigen PSI, Switzerland,