



Universität Stuttgart
Institut für Kernenergetik
und Energiesysteme

Prof. Dr.-Ing. Jörg Starflinger
Chair of Nuclear Technology
and Reactor Safety

**Doctoral
Student
(experimental)**

**Passive cooling of
innovative micro
nuclear reactors –**

Project MISHA

Description

As soon as possible, preferably by 1 September 2022, we are looking for a **research assistant (m/f/d) (doctoral student)** for a limited period of 4 years.

Within the framework of the BMBF-funded joint project "MISHA", the passive cooling of innovative micro nuclear reactors is to be investigated. IKE is responsible for the design as well as the experimental and numerical investigations of heat pipe prototypes, which are operated with liquid potassium as the working medium. The heat is transferred via the heat pipes to a Joule circuit, which is operated with air or with supercritical CO₂.

The IKE work will be carried out by two doctoral students who will work closely together. One person will mainly work experimentally, the other mainly numerically.

Doctoral student (experimental): Supported by a technician this person will design an experimental rig to measure the heat transfer performance of potassium-filled heat pipes. After procuring the components, the experimental test section will be set up. The measurement data acquisition is to be programmed. The experiments will be carried out after consultation with the project partners. An error analysis rounds off a good experimental data basis. The person to be hired has experimental skills and has already worked experimentally during his or her studies.

Close cooperation with the code developers at GRS and with other PhD students of the joint project is a prerequisite for success.

Requirements & qualifications

We are looking for an engineer (M.Sc.) in nuclear engineering, mechanical engineering, energy technology, process engineering or related fields of study with a very good degree. Fluency in English and knowledge of the German language is a prerequisite for successful communication with national and international partners. Ability to work in a team is expected.

We offer:

- an open and exciting working environment
- a varied and responsible job
- payment up to EG 13 TV-L
- a wide range of further education and training opportunities

The doctoral students are integrated into a doctoral college, which the members organise themselves. A professional exchange at project meetings and national and international conferences is planned. If suitable, there is the prospect of a doctorate degree.

Applications to be sent to:

Universität Stuttgart
Institut für Kernenergetik und
Energiesysteme (IKE)
Prof. Dr.-Ing. Jörg Starflinger

bewerbung@ike.uni-stuttgart.de



The University of Stuttgart would like to increase the proportion of women in the academic field and is therefore particularly interested in applications from women. Severely disabled persons are given priority in the case of equal suitability.



15.07.2022