The **Technical University Munich** operates the high flux Neutron Source Heinz Maier-Leibnitz (FRM II) located at the scientific campus in Garching, Germany. The neutron source itself, its research instruments as well as the irradiation facilities provide unique possibilities for the scientific and industrial use of neutron beams.

One key among others for the outstanding performance of the FRM II neutron scattering instruments are the neutron-optical beamlines using most modern neutron guides and innovative concepts for beam polarization and focusing of neutron beams at the instruments.
As leader of our central group neutron optics, which is working on the development, design, production and improvement of neutron optical components and guide systems, we look for a

Group Leader Neutron Optics (m/w/d)

Responsibilities

Leading the central service group neutron optics at the FRM II with following tasks:

- Development and design of polarizing and non-polarizing neutron super-mirrors
- Development of innovative multi-layer systems for neutron super-mirrors
- Operation and further development of a ^{3}He gas polarization station
- Optimization of ^{3}He spin filter cells and related magnetically shielded apparatus
- Contact and driving force for design projects and new developments for the instruments at FRM II
- Neutron ray tracing simulations using Monte-Carlo based methods
- Collaboration with other research facilities in the field of neutron optics

Qualification and Experience

- PhD in physics or engineering science with equivalent qualification.
- Knowledge in thin film physics, optics and / or neutron instrumentation are required
- Experience with beamline simulation and optimization using Monte-Carlo methods (for example McStas) are advantageous
- Experience in human resource management are desirable
- You communicate excellent orally and written in German and English

Further information is given by Dr. Peter Link, phone +49 89 289 14622

The high safety standard of our facility requires the reliability of the employees under nuclear law. Appropriate checks are carried out for this.

Perks

At the FRM II there is a flexible working time model with electronic time recording in which overtime is fully compensated. Further advantages are the company pension scheme and, in addition to 30 days of vacation, two more days off (December 24th & 31st), as well as a supporting staff council.

Contact

We are looking forward to your application via our portal https://karriere.frm2.tum.de until the 8.01.2023. There you will also find other job advertisements.

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