

Instrument Scientist

About us:

The beam-line RESEDA is a high-resolution neutron resonance spin echo spectrometer, located at the high flux neutron source Heinz Maier-Leibnitz (FRM-II) in Garching, Germany. RESEDA is optimized for scientific studies in hard and soft condensed matter, comprising magnetism and superconductivity in systems featuring strong electronic correlations, as well as polymer dynamics, liquids and solvents. In recent years the instrument has become world-leading in studies on depolarizing samples or with depolarizing sample environments using the MIEZE technique.

Description of position:

You will play a leading role in the development of methods and instrumentation in the area of high-resolution neutron spin-echo spectroscopy, taking also responsibility for the user operation of the spectrometer RESEDA at the FRM II. In particular, you will be engaged in the optimization of RESEDA for studies requiring small angle scattering geometries. This includes the project management, simulations, planning, and, in close cooperation with engineers and technicians, design, construction and commissioning of new instrument components. In addition, you will be encouraged to pursue your own research projects based on neutron scattering with a penchant on neutron spin echo spectroscopy. All activities will be carried out in close collaboration with the Chair for Experimental Physics on the Topology of Correlated Systems at the Physik-Department of TUM (Prof. Pfeleiderer).

Qualification and Experience:

You have a degree in physics, chemistry, material science or related fields. Research experience equivalent to a PhD is expected. You have knowledge and experience in the application of neutron scattering or other scattering techniques in the investigation of the dynamical properties of condensed matter systems. Knowledge on simulation tools using Monte-Carlo methods will be helpful. Communication skills and the ability to work in a team at an international research center are mandatory. Good oral and written English skills are required, German language skills are an asset.

The high safety standard of our facility makes an additional background check based on nuclear law mandatory.

The tasks include access to radiation protection areas.

The appointment is limited to 3 years. The payment is based on the German pay scale TV-L.

The Technical University Munich is an equal opportunity employer. As part of their efforts to create equal opportunities and to increase the diversity of scientists, the Technical University Munich encourages, in particular, applications from women as well as from those bringing in additional diversity.

Further information is given by Dr. Christian Franz:

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Applicants should send a letter of interest describing relevant experience including a detailed curriculum vitae by regular or electronic mail (merged to a pdf file) to:

Technische Universität München

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