



The Helmholtz Institute Mainz (HIM) is an institutional cooperation of the Johannes Gutenberg-Universität Mainz and the GSI Helmholtz Centre for Heavy Ion Research GmbH in Darmstadt. It links the academic world of a university with the scientific possibilities of an internationally renowned unique large-scale accelerator center for ions. In the coming years the new international accelerator facility FAIR (Facility for Antiproton and Ion Research), one of the largest research projects worldwide, will be built at Darmstadt.

The HIM **research section Superheavy Element Physics** invites outstanding candidates to apply for a

Postdoctoral Researcher Position in Laser Spectroscopy
Reference number: 21.02-4314

for a two-year contract starting at the earliest possible date. The position will be located in Darmstadt.

The position is embedded in the project on laser spectroscopy of heavy and superheavy elements at the velocity filter SHIP at the GSI Helmholtzzentrum in Darmstadt. The project aims at the development and implementation of novel approaches in laser spectroscopy in combination with gas-stopping techniques and includes experiments with heavy actinides.

Tasks:

The successful candidate is expected to

- develop laser spectroscopic methods for the study of exotic nuclides in the region of the heaviest elements
- participate in experiments for the investigation of actinides and transactinide by resonance-ionization laser spectroscopy
- set up, develop and optimize customized laser systems (dye- und solid state, pulsed and cw)
- develop software for experiment control, data acquisition and data analysis
- contribute to the supervision of Bachelor-, Master- und Doctoral students

Requirements:

We expect

- a PhD or equivalent degree in experimental atomic physics, nuclear physics, or nuclear chemistry,
- sound experience in the field of laser spectroscopy, ideally with radionuclides,
- experience in the operation of laser systems (dye- und solid state, pulsed and cw),
- good communication skills in English (both verbal and written).

Knowledge in software development for experiment control, data acquisition and data analysis is desirable.

We offer you:

A fixed-term 2-year postdoc position with the salary and benefits based on the Collective Agreement for the German Public Service (TVöD-Bund) effective at GSI.

GSI and HIM encourage the professional development of women and welcome women to feel particularly addressed by the call for applications.

Severely disabled persons are given preference when equally qualified.

Information about FAIR and GSI is available at www.gsi.de and www.fair-center.eu.

Inquiries concerning the position can be sent to Prof. Dr. Michael Block (m.block(at)gsi.de).

If you find this position interesting, please send us your full application documents, stating the **Posting ID** (21.02-4314), to the following address by **12. February 2021** at the latest:

bewerbung(at)gsi.de

or to

GSI Helmholtzzentrum für Schwerionenforschung GmbH
Abteilung Personal
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64291 Darmstadt
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