

Helmholtz-Zentrum Dresden-Rossendorf e.V.



With cutting-edge research in the fields of ENERGY, HEALTH and MATTER, around 1,500 employees from more than 70 nations at Helmholtz-Zentrum Dresden-Rossendorf (HZDR) are committed to mastering the great challenges facing society today. The Institute for Ion Beam Physics and Materials Research is dedicated to the study of materials and their nanostructures that can be considered for future applications in information technology and are based on electrical, magnetic or optical functionalities. The Group Ion Beam Analysis is looking for a PhD Student (f/m/d) Temporally and spatially focused ion beam irradiation of living cells.

PhD Student (f/m/d) Temporally and spatially focused ion beam irradiation of living cells

City: Dresden; Starting Date: 01/03/25; Renumeration: TVöD-Bund; Reference number: 2025/32; Closing date: 14/02/25

Working field

- Conception and testing of an experimental setup for the generation of micro-second short ion pulses at beam lines 4 and 8 at the 6MV accelerator of the IBC
- Modification of the experimental set-up (in particular dosimetry) at beam line 4 of the 6MV tandem accelerator at the IBC for use with pulsed ion beams
- Accompanying the development of an experimental setup for the fine-focused irradiation of living cells, with a focus on the realization of temporally pulsed ion beams
- Accompanying cell biological irradiation experiments of the project partners at the IBC with the aim of testing the developed methods and adapting them to the specific needs of the respective experiments

Requirements

- Completed university studies (Master/Diploma) in Physics, Materials Science, Engineering, Mechanical Engineering or similar natural sciences degree program
- Experience in at least one of the following fields: Ion Beam Physics, Accelerator Physics, Dosimetry, Ion Detection
- Very good teamwork skills and willingness to work cooperatively with other scientists
- Very good written and spoken German and English skills

What We Offer

- A vibrant research community in an open, diverse and international work environment
- Scientific excellence and extensive professional networking opportunities
- A structured PhD program with a comprehensive range of continuing education and networking opportunities - more information about the PhD program at the HZDR can be found here
- Salary and social benefits in accordance with the collective agreement for the public sector (TVöD-Bund) including 30 days of paid holiday leave, company pension scheme (VBL)
- We support a good work-life balance with the possibility of part-time employment, mobile working and flexible working hours
- Numerous company health management offerings
- Employee discounts with well-known providers via the platform Corporate Benefits
- An employer subsidy for the "Deutschland-Ticket Jobticket"

Application

We look forward to receiving your application documents (including cover letter, CV, diplomas/transcripts, etc.), which you can submit via our online-application-system: <https://www.hzdr.de/db/Cms?pNid=490&pLang=en&pOid=73960>

More information at <https://stellenticket.de/191374/>
Offer visible until 14/02/25

