

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 of Radiation Physics conducts research for states of matter under extreme conditions and in very small dimensions. The Department of Laser Particle Acceleration is looking for a Postdoc (f/m/d) / Scientific Assistant (f/m/d) Research and development of novel high-performance laser components and diagnostics. With appropriate funding and suitability, employment beyond 31.12.2026 will be sought. The position is embedded in the TechLab Novel Compact Laser Plasma Accelerators of the "Helmholtz Innovation Platform for Accelerator-based Technologies and Solutions" (Hi-Acts), an innovation platform with the aim of bringing accelerator technologies into industrial and medical applications. Strengthening cooperation between research and industry and building a strong industrial network are particularly relevant.

Postdoc (f/m/d) / Scientific Assistant (f/m/d) Research and development of novel high-performance laser components and diagnostics

City: Dresden; Starting date (earliest): At the earliest possible; Remuneration: TVÖD-Bund; Reference number: 2025/51; Closing date: 14/04/25

Working field

- Development and supervision of scientific and technical topics in the field of laser development, e.g. diagnostics, components, technologies
- Cooperation and joint work with optics and laser manufactures
- Participation in the Draco laser team using the results achieved to continuously improve the laser system

Requirements

- Completed university studies (PhD) in the field of Physics, Physical Engineering, Optics, or related field
- Experience with ultrashort pulse lasers and chirped pulse amplification
- Ideally experience on titanium:sapphire based lasers
- Knowledge of the application of measurement principles for the characterization of ultrashort laser pulses
- Professional communication skills
- Independent, goal-oriented work as well as the ability to work in an intercultural team, locally and internationally
- Willingness and desire to familiarize yourself with new issues, technologies, etc.
- Experience in data evaluation and programming with Python, or similar
- Confident handling of Windows, Linux and corresponding programs
- Fluent written and spoken German and English

What we offer

- A vibrant research community in an open, diverse and international work environment
- Scientific excellence and extensive professional networking opportunities
- 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=74358>

More information at <https://stellenticket.de/192468/TUBS/>
Offer visible until 03/04/25

