

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) Optical Pump-Probe diagnostics for nano-structured targets

City: Dresden; Starting date (earliest): At the earliest possible; Remuneration: TVöD-Bund; Reference number: 2026/58; Closing date: 18/06/26

Tasks

- Experiments at the high power laser facility Draco at the HZDR to study, control and optimise the nano-accelerator concept
- Implementation and commissioning of the optical pump & probe concepts using optical light in the visible and EUV range
- Use and development of complementary plasma and particle diagnostics

Requirements

- Completed PhD in the field of Physics or comparable natural sciences with the focus on high-power lasers and plasma science
- Relevant professional experience in the specified area
- Interested to work on experiments in a laboratory with experience in working with optical setups and high power lasers
- Ideally, background on optical pump-probe experiments, techniques and diagnostics
- Deep knowledge of laser plasma interaction by high intensity lasers
- Enjoy autonomous scientific work as well as project activities
- Excellent communication skills for the work in larger international teams
- Very good command of English and are able to present results convincingly, both orally and in writing

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=77639>

More information at <https://stellenticket.de/204385/TUB/>
Offer visible until 18/06/26

