

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 Department of Quantum Technologies is looking for a

Postdoc (f/m/d) / Scientific Employee (f/m/d) Engineering and spectroscopy of integrated quantum emitters

City: Dresden; Starting Date: 01/06/25; Remuneration: TVöD-Bund; Reference number: 2025/25; Closing date: 31/03/25

Working field

- Develop and lead cutting-edge experiments in the spectroscopy of quantum emitters, utilizing advanced methodologies and state-of-the-art techniques
- Work closely with the Ion Beam Center and Clean Room facilities to enhance research capabilities and enable on-chip control of quantum emitters
- Supervise and mentor PhD students, fostering a collaborative, innovative and productive research environment
- Prepare and submit research funding proposals and manage projects to align with organizational objectives
- Publish high-impact research articles in peer-reviewed journals and present findings at national and international conferences

Requirements

- Completed PhD in the field of Physics, Engineering or comparable natural sciences
- Relevant professional experience in the specified area
- Demonstrated experience in quantum optics, including but not limited to single-photon spectroscopy, entangled photon pairs or optical cavity systems
- Hands-on experience with low-temperature microscopy techniques
- A strong scientific track record in the study of quantum emitters, evidenced by publications in peer-reviewed journals or contributions to leading research projects
- Proven ability to manage research activities effectively, including organizing experimental setups, coordinating timelines and mentoring team members
- Knowledge in Python and/or LabVIEW
- Fluent 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=73895>

More information at <https://stellenticket.de/191341/>
Offer visible until 23/02/25

