

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 Center for Advanced Systems Understanding (CASUS) is a German-Polish research center for data-intensive digital systems research. CASUS is looking for a

Postdoctoral Researcher (f/m/d) in Theoretical Chemistry / Electronic Structure Methods

City: Görlitz; Starting date (earliest): 15/05/26; Duration: 2 years; Remuneration: TVöD Bund; Reference number: 2026/43; Closing date: 16/04/26

Tasks

- Development of high-accuracy atomistic models using efficient electronic structure methods, particularly for large-scale systems
- Deepening the understanding of strongly correlated electron systems and real-space correlation techniques
- Development and implementation of modern theoretical approaches
- Application of high-performance computing (HPC) in quantum chemistry and materials science

Requirements

- Completed university studies (PhD) in the field of Physics, Chemistry or a related field
- Advanced and in-depth knowledge of electronic structure theory
- Strong and highly developed expertise in density functional theory (DFT), including the development and analysis of modern functionals
- Solid background in electronic structure theory and quantum chemical methods
- Extensive and specialized experience with advanced real-space correlation techniques
- Advanced and practical competencies in high-performance computing (HPC) for applications in quantum chemistry
- Independent and structured working style, as well as the ability to work in a team
- Programming skills in Fortran, Python, and/or C
- Experience with common scientific software e.g. CP2K
- Experience working with HPC systems
- Excellent fluency in 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=77377>

More information at <https://stellenticket.de/203127/TUBS/>
Offer visible until 16/04/26

