

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.

PhD Student (f/m/d) In-situ detection of airborne pathogens

to further develop a real-time in-air pathogen surveillance solution. The solution relies on the integration of a biosensor into an aerosol sampler. This interdisciplinary project brings together excellent research teams from fluid dynamics, bioengineering and biotechnology.

City: Dresden; Starting date (earliest): 01/09/25; Duration: 3 years; Remuneration: TVöD Bund; Reference number: 2025/82; Closing date: 30/06/25

Working field

- Further development of the sensor based on aerosol separation technique and field effect transistor
- Use aerosol measurement technique, electron-beam lithography and cleanroom equipment
- Design of an experimental measurement campaign
- Publication of the results in scientific journals
- Participations at international conferences
- Strengthening research cooperation between involved institutes

Requirements

- Completed university studies (Master/Diploma) in the field of mechanical engineering, physics of related disciplines
- Enjoy experimental work in international and multidisciplinary teams
- Communicative, structured and target oriented way of working
- Knowledge in English and German

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=74895>

More information at <https://stellenticket.de/194946/HTWB/>
Offer visible until 27/06/25

