The Helmholtz - Zentrum Dresden - Rossendorf e.V. (HZDR) is a nonprofit research organisation and a member of the "Helmholtz Association". It is jointly funded by German Federal government (90%) and by the state of Saxony (10%). HZDR pursues application-oriented as well as basic research, focussing on the fields of matter, energy, and health. Around 1100 people are employed at HZDR. For additional information please visit: https://www.hzdr.de.



The Institute for Resource Ecology (IRE) conducts applied basic research to protect humans and the environment from the effects of radioactive radiation.

The Department of Molecular Structures is looking for a

Beamline Operations Manager (BLOM) (f/m/d) (2 years) at the Rossendorf Beamline of ESRF

The Rossendorf Beamline (ROBL) is one of 12 Collaborating Research Group (CRG) beamlines, located at SBM port 20 of the EBS ring of ESRF. It is owned and operated by IRE at HZDR, and is dedicated to actinide sciences and radioactive waste disposal research. The beamline consists of four experimental stations in an alpha-lab environment, named XAFS, XES, XRD-1, XRD-2. https://www.esrf.fr/UsersAndScience/Experiments/CRG/BM20

Your tasks:

As the Beamline Operations Manager, your key responsibility will be to ensure the efficient operation and timely maintenance of the Rossendorf Beamlines. You will be responsible for coordinating and implementing technical advancements on the beamlines while actively contributing to ongoing research projects. Additionally, this role involves acting as the local contact for external users, providing them with necessary support.

Your valuable contributions will include developing methods for the beamlines, such as EXAFS, XES/HERFD/RIXS, and XRD, aligned with the IRE program of HZDR. You'll work in close collaboration with scientists and engineers at ROBL. Your tasks include:

- Developing and maintaining the beamline, including the complete control systems and control software at ROBL in an alpha-nuclide environment, ensuring a smooth operation of the four experimental stations (XAFS, XES, XRD-1 and XRD-2). The majority of the control software is developed using Python. You will also be actively involved in the upcoming transition of the beamline control software from Spec to BLISS
- Integrating detection systems and other equipment in complex measurement process, including the installation/adjustment of new and maintenance of old equipment at the beamline
- Providing support to user operation at ROBL, particularly in areas related to software, electronics, and automation
- Collaborating with support groups at ESRF, including mechanical, electronic, and detector teams, to accomplish the tasks outlined above
- Serving as the local contact to assist international research groups

Your profile:

- A Ph.D. in physics, materials science, engineering, or a related field is required
- Essential experience with X-ray instrumentation, particularly in X-ray spectroscopy and/or X-ray diffraction, along with strong experimental skills
- Proficiency in computing, mechanics, electronics, and vacuum equipment is necessary

- Previous experience in the design, installation, and/or operation of synchrotron radiation beamlines
- Strong problem-solving skills to identify and address issues that may prevent beamline operation
- Basic programming skills
- Excellent organizational and communication abilities
- Capability to work both independently and collaboratively within a multi-disciplinary team
- Proficiency in English, as it is the working language at the ESRF

Our offer:

- A vibrant research community in an open, diverse and international work environment
- Scientific excellence and extensive professional networking opportunities
- The employment contract is limited to two years with the possibility of a permanent engagement
- 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

If you have any questions, please contact Kristina Kvashnina, tel.: +33 476 88 23 67 kristina.kvashnina@esrf.fr.

Kindly submit your completed application (including cover letter, CV, diplomas/transcripts, etc.) only via our Online-application-system. <u>https://www.hzdr.de/db/Cms?pNid=490&pLang=en&pOid=70369</u> by **20 November 2023**.