



(Post-doctoral) Researcher or Technical Officer (f/m/d)
**Workflows and (Meta)Datamanagement in Materials
Science**

We are looking for a new team member to join the research group “Data Science & Artificial Intelligence in Materials” at RWTH Aachen University in close collaboration with the teams of the Collaborative Research Centre 1394 and the German NFDI4MatWerk consortium for research data infrastructure in materials science. Our research focuses on fundamental and applied materials physics. To this end, materials are characterised, modelled and developed further in interdisciplinary collaboration at national and international level using state-of-the-art equipment.

In addition to traditional experimental methods, data-intensive approaches from the field of data science and artificial intelligence are becoming increasingly important. A prerequisite for this is comprehensive data management, that enables recording and storing a wide variety of data from diverse measurement processes and experiments and preparing these data for further data analysis. Furthermore, in a cooperation project with an industrial partner, Calphad are linked to the research data of the Collaborative Research Centre and used in commercial applications.

We are looking for an expert to set up and operate the required data infrastructure, support the researchers, and develop, refine and maintain relevant software components.

Your profile:

- STEM degree (bachelor, master, PhD or equivalent)
- Technical knowledge in using and administrating Linux-based systems
- Good knowledge in at least one modern programming language such Python, Java or Kotlin, as well as working with git and relevant software documentation systems.
- Knowledge of modern data infrastructure like S3 object store, docker, etc., as well as relational databases would be a plus.
- Ideally, working knowledge in using and administering electronic lab notebooks, in particular openBIS.
- Fluent in English (B2 or above)
- Willingness to dive into new subject areas, task, and technologies.

Your Responsibilities

- You are responsible for developing, operating, and maintaining the data infrastructure (openBIS with S3 object store at the ITC of RWTH Aachen University) of the Collaborative Research Centre and the Institute of Physical Metallurgy and Materials Physics, as well as supporting the researchers using the data infrastructure.
- Engaging with all stakeholders, you will extend the metadata schema for recording all relevant research data and implementation in the data infrastructure.
- You are responsible for the development and maintenance of software components and plug-ins to extend the functionality of the data infrastructure (openBIS).
- Your responsibilities include the development and maintenance of software components for the automatic collection of measurement data and associated metadata, as well as their integration into the data infrastructure.
- Engaging with all members of the Collaborative Research Centre, as well as the Institute, you are responsible for user support, onboarding and training of new users of the research data infrastructure.
- Additionally, you are responsible for the integration of central services of the ITC of RWTH Aachen University into the data infrastructure of the Collaborative Research Centre.
- Engaging with other projects of the collaborative research centre, you are responsible for developing automated and reproducible workflows that use the capabilities of the data infrastructure.

Our offer

The successful candidate will be employed under a regular employment contract. The position is to be filled at the earliest possible date and offered for a fixed term of 2 years. An extension of 2 years is envisioned (until the end of 2027). The fixed-term employment is possible as it constitutes one of the fixed-term options of the Wissenschaftszeitvertragsgesetz (German Act on Fixed-term Scientific Contracts). This is a full-time position with the possibility of a part-time contract upon request.. The salary is based on the German public service salary scale TV-L. The position corresponds to a pay grade of EG 13 TV-L.

About us

RWTH is certified as a family-friendly university. We support our employees in maintaining a good work-life balance with a wide range of health, advising, and prevention services, for example university sports. Employees who are covered by collective bargaining agreements and civil servants have access to an extensive range of further training courses and the opportunity to purchase a job ticket.

RWTH is an equal opportunities employer. We therefore welcome and encourage applications from all suitably qualified candidates, particularly from groups that are underrepresented at the University. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of national or ethnic origin, sex, sexual orientation, gender identity, religion, disability or age. RWTH is strongly committed to encouraging women in their careers. Female applicants are given preference if they are equally suitable, competent, and professionally qualified, unless a fellow candidate is favored for a specific reason.

As RWTH is committed to equality of opportunity, we ask you not to include a photo in your application.

Information on the collection of personal data in accordance with Articles 13 and 14 of the European Union's General Data Protection Regulation (GDPR) can be found at <https://www.rwth-aachen.de/dsgvo-information-bewerbung>.

Your contact person:

Prof. Dr. Ulrich Kerzel (kerzel@fb5.rwth-aachen.de)

Applications (cover letter, CV and any supplementary information) should be submitted **as soon as possible**.