



Post-Doctoral Researcher Workflows and (meta)data storage for materials physics

About us:

We are looking for a post-doctoral researcher who is keen to work in a team of experimental material physicists located at the Institute of Metallurgy and Materials Physics at RWTH Aachen University and in very close collaborations with the teams of the Collaborative Research Centre 1394 and the NFDI4MatWerk consortium for Research Data Infrastructure in Materials Science. Our research focuses on fundamental and applied materials physics and for this, materials are characterised, modelled and improved in interdisciplinary collaborations at national and international level and using state-of-the-art equipment. A key challenge is to integrate the underlying workflows and the resulting research data into a sustainable research data management strategy.

We are looking for:

An enthusiastic candidate who

- holds (or will soon hold) a doctoral degree in Materials Science, Physics or Computer Science
- is interested in working on enabling sustainable experimental practices to make data collection and its storage efficient enough to be implemented on a daily basis in materials science labs
- is keen to apply programming and data management skills to provide functionality for automated (meta)data recording and connections between workflows (including electronic lab notes) and final FAIR data storage.
- has a very good command of English (and preferably but not necessarily also German) and enjoys working in a team

Your responsibilities and the project:

The vast majority of experimental data is still collected based on manual data labelling and connections established manually between linked datasets and the underlying specimens and their physical hierarchies. In order to achieve FAIR data and benefit from re-using data recorded elsewhere, scientists need to be put into a position to integrate the collection of relevant metadata and introduction of formal links between samples and datasets from different types of experiments. It would be your job to begin enabling this for SFB1394 as part of the NFDI4MatWerk consortium with many others working on challenges close by.

Challenges immediately relevant to colleagues involved in SFB1394 are the practical implementation to enable experimentalists to adopt these practices without too many demands on their time and ideally by bringing an immediate benefit to their workflows at the data collection or data analysis stages. In this, it would be your responsibility to interact closely with members of SFB1394 to integrate the different employed experimental methods and to achieve a direct coupling to the data infrastructure developed within SFB1394.

For more information on NFDI4MatWerk, SFB1394 (called PP02 in NFDI4MatWerk) and the IMM please see: <https://nfdi-matwerk.de/> www.sfb1394.rwth-aachen.de www.imm.rwth-aachen.de

We offer:

The position is offered on a temporary contract for a fixed term of initially 12 months (full-time, extendable to a maximum of 36 months) starting **as soon as possible**. The salary is based on the German public service salary scale (TV-L E13). RWTH Aachen University is certified as a "Family-Friendly University". We particularly welcome and encourage applications from women, disabled persons and ethnic minority groups, recognizing that they are underrepresented across RWTH Aachen University. The principles of fair and open competition apply and appointments will be made on merit.

Your contact person:

Prof. Dr. Sandra Korte-Kerzel (korte-kerzel@imm.rwth-aachen.de).

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