



## Faculty of Mechanical Engineering : Materials Discovery and Interfaces

In order to fill a **fixed-term position in full-time (39.83 hours/week = 100%)** at the earliest possible date, we are looking for a

### Postdoctoral researcher (m,f,x) in Atom Probe Tomography and Transmission Electron Microscopy of High-Entropy Alloys

The Center for Interface-Dominated High Performance Materials (Zentrum für Grenzflächendominierte Höchstleistungswerkstoffe, ZGH) at the Ruhr-Universität Bochum is looking for a postdoctoral researcher (m/f/x) as soon as possible. ZGH develops new materials through comprehensive understanding and design of material interfaces, exploiting new combinations of structural and functional properties. ZGH is equipped with a set of high-end research equipment for the investigation of surfaces and interfaces of materials, such as atom probe tomography (APT) and high-resolution transmission electron microscope (TEM).

For the Collaborative Research Centre (CRC) 1625 (Atomic-scale understanding and design of multifunctional compositionally complex solid solution surfaces, <https://www.ruhr-uni-bochum.de/crc1625/index.html.en>), we are looking for a postdoctoral researcher for the project B01 (Accelerated atomic-scale exploration of phase evolution in CCSS systems using combinatorial processing platforms). The aim of this project is to investigate the surface composition and the phase stability of compositionally complex solid solution (CCSS) systems by APT and TEM, and to contribute to achieve the goal of the CRC: mastering surface atom arrangements. We are looking for a highly motivated scientist with a strong background in materials science or in a related field with a focus on thermodynamics and kinetics of phase transformations and/or materials characterization. Strong motivation to work independently, effective teamwork, efficient translation of results into scientific publications, and very good communication skills are expected of the future postdoctoral researcher. Please upload your complete and informative application documents (informative letter of motivation, CV with certificates, complete list of publications and your 3 most important own publications) as one pdf document.

#### Your tasks:

- Collaborating with other groups within the CRC1625 to synthesize and characterize CCSS thin films on APT tips.
- Conducting surface and volume chemical characterization using APT.
- Performing phase identification through high-resolution TEM.
- Participation in regular internal CRC meetings and presentation of results.
- Publication of research findings.

#### Your profile:

- Ph.D. degree in materials science, materials physics or a closely related field, with a strong academic record.
- Experience with APT or TEM, preferably both.
- Experience in correlative microscopy, near-atomic scale chemical and structural characterization is appreciated.
- Fluent verbal and written communication skills in English.
- Interest in publications

#### We offer:

- Challenging and varied tasks with a high level of independence
- Employment at one of the largest universities in Germany within the University Alliance Ruhr
- A qualified on-boarding and induction process
- Collaboration in a committed and appreciative team
- Support in combining family life and work (including childcare arrangements/holiday offers)

#### Further information:

The position is salaried and based on the collective agreement of the Länder (TV-L). If the personal and collective agreement requirements are met, the employee will receive pay grade E13 TV-L.

Further information can be found at <https://oeffentlicher-dienst.info/> (in German).

The place of work is Ruhr University Bochum.

If the position is funded by third-party funds the employee has no teaching obligation.

RUB sees itself as a university with an international presence. The campus languages are German and English. Competence in at least one of the two languages and the willingness to learn the other are a prerequisite. RUB provides corresponding free courses for employees.

German language courses are offered by the University Language Center (ZFA) in the field of German as a Foreign Language (DaF). <https://www.daf.ruhr-uni-bochum.de/sbgk/index.html.en>

The Staff Council has the right to participate in all selection interviews. At the request of a candidate (m/f/x), it will ensure its participation in the entire procedure. Please contact [wpr@rub.de](mailto:wpr@rub.de).

#### Contact persons for further information:

Yujiao Li , Tel.: +49 234 32 26160

Travel costs, accommodation costs and loss of earnings or other application costs for job interviews can unfortunately not be reimbursed.

We look forward to receiving your application via our **online application portal by 2026-02-16**. Please make sure to mention the reference number ANR 5286.

[Online application](#)

Scope:	full-time
Duration:	fixed-term, 31.12.2027 (end of project)
Start:	at the earliest possible date
Apply by:	2026-02-16

The Ruhr-Universität Bochum is one of Germany's leading research universities, addressing the whole range of academic disciplines. A highly dynamic setting enables researchers and students to work across the traditional boundaries of academic subjects and faculties. To create knowledge networks within and beyond the university is Ruhr-Universität Bochum's declared aim.

The Ruhr-Universität Bochum stands for diversity and equal opportunities. For this reason, we favour a working environment composed of heterogeneous teams, and seek to promote the careers of individuals who are underrepresented in our respective professional areas. The Ruhr-Universität Bochum expressly requests job applications from women. In areas in which they are underrepresented they will be given preference in the case of equivalent qualifications with male candidates. Applications from individuals with disabilities are most welcome.

