POST-DOCTORAL RESEARCHER

X-ray computed tomography/microscopy



In the MAPEX Center for Materials and Processes at the University of Bremen is offering - under the condition of job release

one position for a post-doctoral researcher initially limited to 36 month / salary group 13 TV-L / full-time

The employment is fixed-term and governed by the Act of Academic Fixed-Term Contract, §2 (1) (Wissenschaftszeitvertragsgesetz – WissZeitVG). Therefore, candidates may only be considered for appointment if they still have the respective qualification periods available in accordance with § 2 (1) WissZeitVG.

The research tasks will comprise in particular:

- The independent work on research projects in the MAPEX laboratory for X-ray microscopy (XRM), equipped with a XRM Zeiss Versa 520.
- To establish a university strategy across the STEM faculties for non-destructive 3D materials analyses.
- The in-situ investigation of the thermo-mechanical behaviour of materials of all classes using XRM, including data evaluation and providing data for subsequent materials modelling.
- To apply and establish a routine for laboratory-based diffraction contrast tomography.
- The usage and further development of the correlative workflow for 3D chemical imaging in combination with FIB and SEM.
- Instructing and training XRM users as well as students.
- Actively contributing to the preparation of proposals for third-party funding in the area of nondestructive materials testing and materials analyses.
- Scientific advice and support for research projects of internal and external cooperation partners.
- The independent publication of research results in peer-reviewed scientific journals and active participation in international conferences.

We expect a close cooperation with the non-university research institutes, especially the IWT, IFAM, BIAS, and FIBRE as well as with the running collaborative research centres and research training groups in the high-profile research area Materials Science and Technologies at the University of Bremen.

Required skills and experience:

- A completed PhD in the field of natural science or engineering.
- Experience using computed tomography (CT) for non-destructive testing and analyses of
 materials, documented by a solid publication record and, if applicable, the acquisition of
 third-party funding.
- Experience in the analyses and visualisation of CT data using common software.
- Excellent written and spoken English language skills.

Advantageous is

- The qualification as a radiation protection commissioner 'Fachkundegruppe R 3 (RöV)'.
- Experience in proposing and working within publicly funded research projects (DFG, AiF, ZIM, EU).

• Good knowledge of the German language.

We offer:

- Excellent research facilities.
- Ideal conditions for the own further scientific qualification.
- Great flexibility and freedom within timely and ambitious research activities.
- A well-established platform for the scientific exchange and interdisciplinary cooperation within the MAPEX consortium.
- An environment characterised by equal opportunity, diversity, and family friendliness according to highest international standards.

For further information, please contact Prof. Dr.-Ing. Lucio Colombi Ciacchi, Tel. 0421 218 64570, or Dr. Hanna Lührs, Tel. 0421 218 64580.

The University is committed to a policy of gender equality for employment opportunities. Therefore, women are encouraged to apply for the offered position. Persons with disabilities will be considered preferentially in case of equal qualifications and aptitudes. The University of Bremen explicitly invites persons with a migration background to apply.

Please send your electronic application including a cover letter, curriculum vitae, list of publications and a one-page summary of your main previous research findings until 15 July 2019 to:

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E-mail: colombi@hmi.uni-bremen.de (one single pdf document)

