



In the Department of Materials and Geosciences there are several positions available in the Physical Metallurgy group (Prof. Dr.-Ing. K. Durst) for

Research Assistants/Ph.D.Students (all genders)

with an initial term of 3 years.

You will work on research projects within the framework of DFG and EU projects (ultrafine-grained alloys, hard magnetic materials and solder materials) and investigate the thermomechanical properties of different material systems using in-situ micromechanical methods. You will prepare your research results for scientific publications, develop ideas for future research projects and actively participate in the preparation of research proposals. Furthermore, you will actively participate in joint events and cooperate with project partners and PhD students in the context of the different research projects within and outside the research group. Furthermore, your tasks include the participation in institute tasks as well as the organizational and technical supervision of courses in the subdivision of material sciences including the accompanying practical courses in the bachelor and master area (master in English language).

For microscopic analysis, modern metallography/microscopy (CLSM, Tescan FEG-REM with EBSD) is available in the department. For the characterization of mechanical properties, the department has extensive equipment for classical material testing (static/cyclic loading), as well as state-of-the-art nanoindentation methods (Keysight iNano and G200 with laser heating) and a high-temperature nanoindenter for operation in the SEM for in-situ observation of deformation processes. Furthermore, the department has high pressure torsion presses (HPT) for deformation of alloys and powder samples at RT and high temperatures.

Your profile

You have a university degree in materials science or in a comparable field of study. You have extensive prior knowledge in the areas of mechanical test methods (nanoindentation, tensile/compression testing) and microstructural characterization (SEM, EBSD, CLSM) as well as the mechanical and magnetic properties of materials. Knowledge in the area of severe plastic deformation as well as experience in teaching, e.g. in supervising courses or laboratory practicals, is also an advantage. You are communicative, enjoy working in an interdisciplinary team, have a very good command of English and are willing to spend time with projects partners as part of your job.

Opportunity for further qualification (doctoral dissertation) is given. The fulfillment of the duties likewise enables the scientific qualifications of the candidate.

The Technische Universität Darmstadt intends to increase the number of female employees and encourages female candidates to apply. In case of equal qualifications applicants with a degree of disability of at least 50 or equal will be given preference. Wages and salaries are according to the collective agreements on salary scales, which apply to the Technische Universität Darmstadt (TV-TU Darmstadt). Part-time employment is generally possible.

Applications with the usual documents should be sent to the following address, quoting the identification number k.durst@phm.tu-darmstadt.de.

By submitting your application, you agree that your data may be stored and processed for the purpose of filling the vacancy. You can find our → [privacy policy](#) on our webpage.

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