Leibniz-Institut
für Festkörper- und
Werkstoffforschung
Dresden

The Leibniz Institute for Solid State and Materials Research Dresden (IFW Dresden) conducts modern materials research on a scientific basis for the development of new and sustainable materials and technologies. The institute employs an average of 500 staff members from over 40 nations and, alongside its scientific work, is committed to promoting young scientists and engineers. The IFW supports its employees in reconciling work and family life and regularly undergoes the audit berufundfamilie® and beruf&vielfalt. Further information at: http://www.ifw-dresden.de.

Within the Institute for Materials Chemistry, in the Department of Metal Physics at IFW Dresden, a position as

Research Associate (m/f/div)

is to be filled from 1 November 2026 (expected), at 80% of standard working hours. Within the framework of project collaboration, an increase in working hours by 20% is possible at the project partner's site. The appointment is subject to project approval and is initially limited to one year, with an extension of the project being sought.

Main duties:

- Carrying out mechanical materials testing on titanium alloys across a wide range of strain rates
- Microstructural characterisation of the various material states using light and scanning electron microscopy (SEM/EBSD) and, where appropriate, transmission electron microscopy (TEM), for the analysis of microstructure and deformation mechanisms
- Quantitative evaluation of flow curves, work-hardening behaviour and failure mechanisms as a function of strain rate and microstructure
- Description and modelling of strain-rate-dependent material behaviour using established material models from physical metallurgy
- Correlating microstructure, deformation mechanisms and mechanical properties to identify structure–microstructure–property relationships
- Documentation and preparation of results for internal reports, scientific publications and technical exchange with industry partners
- Publishing research findings in peer-reviewed journals and presenting at national and international conferences

Your Profile:

- A completed university degree (Diplom/Master's) in materials science, an engineering discipline, physics or a comparable field of study with a strong focus on materials science
- Relevant practical experience in physical metallurgy
- Very good knowledge in the field of materials science, particularly in microstructural and mechanical materials characterisation, is an advantage
- Enjoyment of technical exchange with industry partners

As an internationally oriented research institution, we further expect:

- Ability to work in a team and to network with partners at scientific institutes as well as industry partners
- Confident use of standard software (Office) and of evaluation software for microstructural and mechanical analysis methods; strong motivation to become familiar with, and build expertise in, the control software of the characterisation methods
- Very good written and spoken command of German and English (at least C1 level)

We offer:

- A modern workplace on the campus of Technische Universität Dresden
- Flexible, family-friendly working hours
- 30 days of annual leave
- Company pension scheme (VBL)
- Discounts on job ticket/Deutschlandticket
- Annual special payment
- Capital-forming benefits (Vermögenswirksame Leistungen)
- Company health management (back-care training, health day with various offerings)
- Discounted sports programmes at the Dresden University sports centre
- Job-related further training opportunities as well as language courses
- Staff restaurant offering varied breakfast and lunch options
- A future-oriented environment with a workplace featuring modern research infrastructure
- Working with international and interdisciplinary scientists from various fields
- Support for further scientific qualification
- Involvement in current research fields

The employment relationship, including remuneration, is governed by the collective agreement for the public sector of the German federal states (TV-L) and is based on the duties involved, up to pay grade 13 TV-L.

Note on applications:

IFW Dresden is committed to achieving a balanced gender ratio in all areas. In the scientific field, we would like to increase the proportion of women. Qualified women are therefore particularly encouraged to apply. Applications from individuals with severe disabilities, or those of equivalent status under Section 2(3) of Book IX of the German Social Code (SGB IX), are expressly welcomed. Appropriate evidence should be enclosed with the application documents.

Please submit your application with meaningful documents (cover letter, CV, certificates of education, references, etc.) exclusively in electronic form and as a single PDF file (other formats will not be considered), quoting reference number 051-26-3920, by 30 September 2026, to:

bewerbung@ifw-dresden.de.

For further information, please contact Prof. J. Freudenberger (j.freudenberger@ifw-dresden.de), who will be happy to assist you.