

Leibniz-Institut für Festkörper- und Werkstofforschung Dresden (IFW Dresden e.V.)



The Leibniz Institute for Solid State and Materials Research Dresden e. V. (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 people from over 40 nations and, in addition to its scientific tasks, is dedicated to promoting young scientists and engineers. Further information at: <http://www.ifw-dresden.de>

Research Associate (m/f/d) 028-25-2001

The Institute of Metallic Materials (IMW) is seeking to fill the position of a Research Associate (m/f/d) on the following topic: Geothermal applications of thermoelectric modules to be filled full-time or part-time (min. 70%), initially for 2 years, starting in October 2025.

City: Dresden; Starting date (earliest): 01/10/25; Remuneration: TV-L; Reference number: 028-25-2001

Working field

Thermoelectric modules are used for cooling in electronics, telecommunications and medicine, but also for power generation in geothermal energy and for residual heat recovery as thermoelectric generators. The IFW-Dresden concentrates on the development of highly efficient tellurium-free thermoelectric materials. This position as a research associate with an application-oriented focus will deal with the design and development of thermoelectric modules for geothermal discharges and system integration up to testing in real environments together with scientific partners.

Main tasks:

- COMSOL simulations of thermoelectric modules with real material parameters
- Development of prototypes of thermoelectric modules made of sustainable materials and their testing.
- Development of thermoelectric generator systems together with cooperation partners and their testing in the laboratory and in real environments.
- Collaboration in the creation of third-party funded projects, patents and publications
- literature studies on {thermoelectric} power generation from geothermal sources

Requirements

You are involved in experimental work in the laboratory and are interested in technology transfer issues in cooperation with partner groups, possibly industry. You have a Master's degree or doctorate in engineering, e.g. mechanical engineering, electrical engineering and materials science. This position requires good teamwork skills, a strong interest in transfer-oriented research and a willingness to travel. A very good knowledge of English is required to work with the international project team at the IFW and with national

partners. With very good final grades, this position can enable further qualification through habilitation or doctorate after an induction phase. Applicants with a completed doctorate are cordially invited to apply.

What we offer

- employment in accordance with the collective agreement for the public service of the federal states (TV-L),
- A modern, well-equipped workplace on the campus of the Technische Universität Dresden,
- Flexible, family-friendly working hours,
- 30 days vacation,
- Company pension scheme (VBL),
- Benefits for job ticket/Germany ticket,
- Special annual payment,
- Capital-forming benefits,
- Cooperation agreements with daycare centers to help with childcare shortages,
- Company health management (back training, health day with various offers),
- discounted sports offers from the Dresden University Sports Center,
- job-related further training opportunities and language courses,
- Company restaurant with a variety of breakfast and lunch dishes.

The contract of employment, including remuneration, is based on the collective bargaining law for the public service of the federal states TV-L EG 13. The position is initially limited to 2 years as a research assistant. If suitable, an extension via a scientific qualification position (docotor/postdoc/research group leader) or third-party funded project is planned. This is a full-time position and part-time employment (min. 70%) is possible by arrangement.

Application

IFW Dresden strives for a balanced gender ratio in all areas. In science, IFW Dresden would like to increase the proportion of women and therefore explicitly invites suitably qualified female scientists to apply. The application of severely disabled persons is explicitly welcome.

Please send your application with informative documents (letter of motivation, CV, relevant transcripts, training certificates, and contact details for at least two professional references) exclusively in electronic form and in a PDF file (other formats will not be considered), citing the reference number 028-25-2001, no later than May 21th 2025 to

bewerbung@ifw-dresden.de.

More information at <https://stellenticket.de/192928/HTWB/>
Offer visible until 18/04/25

