

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>

The research group “Functional Oxides and Superconductors” of the Institute for Metallic Materials (Prof. K. Nielsch) of the IFW Dresden offers a

PhD position (m/f/d) in the area of superconducting magnetic bearings

on a part-time basis with a weekly working time of 26 hours.

The main emphasis of the work is the application of superconducting tape stacks in rotating superconducting magnetic bearings. The tasks include the preparation and characterization of the tape stacks as well as the study of the bearing properties including these components. Furthermore, a numerical description of the stack properties and the interaction between magnet and superconductor in this bearing is targeted.

We are seeking highly motivated applicants (m/f/d) with a university degree (Master / Diploma) Materials Science, Physics, Mechatronics or related topics and must show strong knowledge in solid state physics and experimental research. Preferably, the applicant (m/f/d) has also experience in one or more of the following topics: superconductivity, magnetism, cryogenic technology, electric measurement techniques, materials and property simulation (i.e. COMSOL), computer-based data analysis. We are looking for a candidate (m/f/d) with pronounced initiative, creativity, ability to work effectively in a team, as well as fluency of written and spoken English.

Remuneration is based on the TV-L (EG 13, 65 %). The first contract is limited to 1 year, an extension for another 2 years is possible. Doctoral students (m/f/d) are facilitated to participate in the doctoral program in order to successfully complete their dissertation. We offer an attractive workplace with excellent facilities and surroundings in Dresden.

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.

Application including a CV, a motivation letter describing the research career goals, skills and experience, copies of all certificates should be sent citing the reference number **022-23-2105** no later than **May 12, 2023** online as a single pdf-file to:

bewerbung@ifw-dresden.de.

For further information, please contact: Dr. Ruben Hühne (r.huehne@ifw-dresden.de).

