

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 Institute for Metallic Materials (Prof. K. Nielsch) of the IFW Dresden offers a

PhD position (m/f/d)

on the following topic:

Additive Manufacturing of high-performance thermoelectric devices

They will employ additive manufacturing, based on the selective laser melting (SLM) process, to optimize thermoelectric materials and fabricate thermoelectric devices for higher performance in terms of energy conversion efficiency, cooling performance, and thermal long-term stability. Traditional methods will also be used for references. A deepened understanding of the interrelations among manufacturing, microstructure, material properties and device performance will be applied. This Ph.D. thesis will take part in the IFW excellence project on thermoelectric modules.

We are seeking highly motivated applicants (m/f/d) with a university degree (Master/Diploma) with a background in materials science and engineering, solid state physics, nanotechnology, mechanical engineering or a relevant subject. Good communication skills in English (spoken and written) are expected.

The project duration is limited to 3.5 years and will start as soon as possible. The salary is based upon the TV-L rules (EG 13, 65%). PhD candidates (m/f/d) are facilitated to participate in the PhD program to successfully complete their dissertation. We offer an attractive work place with excellent facilities and environment 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. The promising candidates will be invited to an interview (most likely online due to the covid-19 pandemic).

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 **042-22-2503** no later than **July 31st, 2022** online as a single pdf-file to:

bewerbung@ifw-dresden.de.

For further information, please contact: Dr. Pingjun Ying (p.ying@ifw-dresden.de)

