Leibniz-Institut für Festkörper- und Werkstoffforschung Dresden

Leibniz Gemeinschaft

The Leibniz Institute for Solid State and Materials Research Dresden – in short IFW Dresden – is a non-university research institute and a member of the Leibniz Association. The IFW employs approximately 600 people and one focus is on the training of young scientists besides enhancing fundamental and applied research development. At the highest international level, the IFW operates modern materials science on a scientific basis and makes the obtained results useful for the economy. The complex and interdisciplinary research work is carried out within the IFW by five scientific institutes, which are supported by a highly developed technical infrastructure. The IFW supports its employees in reconciling work and family life and regularly submits to the berufundfamilie® audit. Further information at: http://www.ifw-dresden.de

Postdoctoral Associate / Young Investigator (female/male)
Microstructured Devices for Energy Harvesting

We are searching for a young investigator at the Institute for Metallic Materials (IMW) at the Leibniz Institute for Solid State and Materials Research (IFW Dresden) focusing on the development of MEMS based devices for energy harvesting and thermal management on the microscale. We offer collaborations with various research teams working on energy materials and devices: magneto-caloric materials, thermoelectric materials, Piezo- and Pyro-electric Materials, magneto-ionic materials and ALD growth of 3D films. In the future, he or she should give significant contributions to at least one of the following research activities:
(a) thermoelectric materials, (b) magnetic and ferroic materials (nanograined bulk and thin films), or
(c) layered/quantum materials and devices.

Therefore, we are considering applicants, who have a profound knowledge in the development of Power MEMS, flexible microstructured devices, microfluidic devices, LIGA technology or microsystem technology in general, as well as a PhD in the field of electrical, mechanical or chemical engineering. Applicants having additional research experience in industry are encouraged to apply.

The young investigator might potentially work on one or more of the following MEMS based energy conversion devices in order to expand the research profile of the Institute for Metallic Materials at the IFW Dresden:

- Thermomagnetic Generators
- Pyro- or Piezoelectric Generator
- (Flexible)-Thermoelectric Generators
- Microstructured Peltier Coolers
- Thermo-Electrochemical-Generator
- Thermo-ionic Energy Conversion
- Thermal Switches

The most promising candidates will be invited to a selection workshop at the IFW Dresden, which is scheduled for the 15 of January 2019. If you have further questions on the position please contact: Prof. Kornelius Nielsch (K.Nielsch@ifw-dresden.de).

The salary will be based upon the TV-L rules (TV-L E13, 100 %). The first contract will be limited to 3 years (Science Employment Law), in which the young scientist shall establish her/his own research actives, apply for additional third-party funded projects and contribute to research initiatives at the IFW. In case of a successful evaluation showing significant publications as well as a third party funded project the young investigator will be upgraded to a junior research leader including the contract extension by up to 3 years. In this second phase, the focus will be on the further qualification of the junior group leader, which might lead to the habilitation and/or to the successful acquisition of an ERC Starting Grant or a comparable project.

The institute is keen to foster the professional equality of women and men, and thus welcomes applications from qualified women. Disabled applicants will be preferably considered given the same qualification.

The application for this position should include a cover letter, the CV, copies of the master and PhD certificates and a complete list of publications with the selection of 3 highlight publications (or the Ph.D. thesis).
Most importantly, a concept on the planned research activities should be included (2- 4 pages).
Please send your application documents citing the reference number **P111-1/19** as a single pdf-file **not later than 10 of December 2018** exclusively to: bewerbung@ifw-dresden.de.