# Student Assistant (m/f/d) at the Institute for Solid State Research in the research team "Functional crystals on the nanoscale"



### At the Leibniz Institute for Solid State and Materials Research Dresden

The Leibniz Institute for Solid State and Materials Research Dresden - IFW Dresden for short - is a non-university research institute. It conducts materials science on a scientific basis, spanning a range from the advancement of knowledge in the fields of physics and chemistry to the technological preparation of new materials and products. The institute is located on the central campus area of the TU Dresden, at the corner of Nöthnitzer Straße and Helmholtzstraße in Dresden-Südvorstadt and opposite the "Alte Mensa".

## Topic:

- Focus: Synthesis of heteroanionic solid-state materials via chemical vapour phase transport (CVT) or solid-state reaction
- Preparation of experiments in the glovebox
- Characterization of samples by XRD, SEM/EDX, AFM, TEM, SQUID

### **Motivation**

The field of activity comprises scientific investigations in the research area of functional solid state materials. The focus is on the synthesis of mixed anion compounds. The combination of several anions offers a novel and versatile method for the further development of inorganic materials. In the current interdisciplinary project, the fundamental understanding between structure and material properties will be broken down. Due to the innovative material design, improved material properties are expected (e.g. superconductors), which will open up exciting application-oriented research areas or lead directly to an application (e.g. photocatalysis).

### What we offer:

- Research and work experience in a renowned international research institution
- Collaboration in the DFG research project "mixed anion compounds"
- an open and friendly work atmosphere
- flexible hours that allow you to balance your work and study activities
- leeway to develop your own interests and skill

# Your profile:

- (basic) knowledge of the above-mentioned methods of analysis or motivation to learn them
- conscientious performance and evaluation of experiments
- students in the field of: chemistry, physics or materials science

### **Contact:**

If you are interested, please send a short email (+ CV) to:

Dr. Nico Gräßler, E-Mail: n.graessler@ifw-dresden.de