

The Leibniz Institute for Solid State and Materials Research Dresden – in short IFW – is a legally and economically independent research institution and a member of the Leibniz Association. The five institutes of the IFW operate in joint research programs (in four fields: functional materials, quantum materials, nanoscale materials, towards products) and have the level of equipment, which befits an internationally leading research facility.

Further information at: <http://www.ifw-dresden.de>

The Institute for Metallic Materials of the IFW Dresden offers a

Position to write a Master thesis (m/f/d)

on the following topic:

Atomic layer deposition of Bismuth alloys

As a candidate (m/f/d) you will work on the atomic layer deposition (ALD) of Bi and Bi alloys, testing different precursor combinations and studying ALD parameters toward the successful deposition of target materials.

The structure and electronic properties of the deposited films will be tailored to establish the best deposition condition and understand the chemistry behind the ALD reactions. Further details on this project:

- Development of new ALD formulations for Bi and Bi alloys based on the necessity in different fields mostly energy materials.
- Structural characterization of developed films using different characterization techniques such as GIXRD, XPS, SEM, ToF-ERDA, etc.

We are seeking highly motivated applicants (m/f/d) with a Bachelor degree with a background in solid states physics or materials science, inorganic or physical chemistry or nanoscience, or a relevant subject, who is interested in interdisciplinary research, who like to be involved in the ALD community and thermoelectric society and creatively contribute their ideas. Good communication skills in English (spoken and written) are expected.

The institute promotes professional equality between all genders. In science, the IFW Dresden would like to increase the proportion of women. Qualified women are therefore explicitly invited to apply. Applications from severely disabled persons are explicitly encouraged.

The position will remain posted until filled. The reference number is **047-23-2506**. Please send the application including your **CV** and **copies of your study documents** as a single pdf file (other formats will not be accepted) to the following email address:

bewerbung@ifw-dresden.de.

The position is open as long as the announcement is online. If you have further questions on the position please contact: Dr. -Ing. Amin Bahrami a.bahrami@ifw-dresden.de

