

## IFW Dresden e.V.



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>

### **PhD Position (m/f/div) 032-25-2506**

on the following topic: Atomic Layer Deposition (ALD) of transition metals for biomedical application

City: Dresden; Starting date (earliest): 01/07/25; Duration: 1 year; Remuneration: TV-L 13, 70 %; Reference number: 032-25-2506; Closing date: 31/05/25

#### **Working field**

- ALD Process Development: Design and optimize novel ALD formulations for transition metals, as well as modify existing ALD processes, in collaboration with our research partners. A particular focus will be on low-temperature ALD processes with high conformality, tailored to the needs of biomaterial development.
- Thin Film Characterization: Perform comprehensive structural and chemical characterization of the deposited films using advanced techniques such as XRD, XPS, SEM, TEM, and ToF-ERDA to evaluate their properties and suitability for biomedical applications.

This project offers a unique opportunity to work at the intersection of thin film technology and biomaterials science, contributing to advancements in biomedical coatings and implant technologies.

#### **Requirements**

We are looking for highly motivated candidates (m/w/div) with a Master's or Diploma degree in Materials Science, Inorganic or Physical Chemistry, Nanoscience, or a related field. Applicants (m/w/div) should have a strong interest in interdisciplinary research, a willingness to engage with the ALD and biomaterials communities, and a creative mindset for generating new ideas. Prior experience with ALD is highly desirable. Fluency in spoken and written English is required.

## What we offer

- employment in accordance with the collective agreement for the public service of the federal states (TV-L),
- A modern, well-equipped workplace on the campus of the Technische Universität Dresden,
- Flexible, familyfriendly working hours,
- 30 days vacation per year,
- Company pension scheme (VBL),
- Benefits for job ticket/Germany ticket,
- Special annual payment,
- Capitalforming benefits,
- Cooperation agreements with daycare centers to help with childcare shortages,
- Company health management (back training, health day with various offers),
- discounted sports offers from the Dresden University Sports Center,
- job-related further training opportunities and language courses,
- Company restaurant with a variety of breakfast and lunch dishes.

## Application

The salary is based upon the TV-L rules (EG 13, 70 %). Ph.D. candidates (m/w/div) are facilitated to participate in the Ph.D. program to complete their dissertation. After the first year evaluation the contract can be extended for another two years. The anticipated start date is July or August, 2025. We offer an attractive workplace 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.

Please send your application with informative documents (letter of motivation, CV, relevant transcripts, training certificates, and contact details for at least two professional references) exclusively in electronic form and in a PDF file (other formats will not be considered), citing the reference number 032-25-2506, no later than May 31th 2025 to [bewerbung@ifw-dresden.de](mailto:bewerbung@ifw-dresden.de).

For further information, please contact: Dr. Amin Bahrami ([a.bahrami@ifw-dresden.de](mailto:a.bahrami@ifw-dresden.de)).

More information at <https://stellenticket.de/193272/TUBS/>

Offer visible until 30/04/25

