



UNIVERSITÄT  
LEIPZIG

**The Semiconductor Physics Group at Felix Bloch Institute for Solid State Physics of University Leipzig** is looking for a **PhD student / doctoral candidate** with scientific work on the **growth and characterization of copper iodide thin films for applications in optically transparent devices.**

Copper iodide is a promising transparent p-type semiconductor with surprisingly high hole mobility. The position is embedded in the DFG-funded Research Unit FOR 2857 „Copper Iodide as Multifunctional Semiconductor“ (2019-2025). There is a fruitful interaction with the other projects of the research unit and with external partners.

**Area of responsibility:** Growth of epitaxial CuI thin films on amorphous and crystalline substrates using Pulsed Laser Deposition (PLD). The structural and electronic properties are characterized using X-ray scattering, various microscopic techniques and the Hall effect. There is successful preliminary on which the candidate can build. The eventual goal is the demonstration of CuI-based electronic devices for transparent, complementary thin-film electronics.

**Requirements:** Very good master's degree in physics, crystallography, materials science or a comparable field, as well as positive and creative attitude towards finding new solutions, and ability to work with a high degree of independence in a large communicative work group. Previous experience with the growth of thin films and some of the mentioned characterization methods is advantageous, as well as a good English language speaking and writing abilities.

**Duration and start date:** The 50% TVL E13 position is initially limited until December 31, 2025 and can be filled immediately.

**Applications** including the usual documents shall be sent by Email to:  
Prof. Dr. Marius Grundmann and Prof. Dr. Michael Lorenz  
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