

Technische Universität Darmstadt
FB Material- und Geowissenschaften
FG Materials and Resources
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TECHNISCHE
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Join Our Team as a HiWi student

Are you a motivated and enthusiastic student eager to dive into practical research? We are currently seeking a HiWi student to join our FLAIR-A03 project team. Our focus is on researching oxygen transport membranes, with a primary emphasis on doped barium indium oxide ceramics. These materials will be prepared through solid-state reactions, and our investigations will encompass a variety of characterizations such as powder X-ray diffraction, Scanning Electron Microscopy, UV–VIS spectrophotometry, X-ray Photoelectron Spectroscopy, Impedance spectroscopy, and more.

Responsibilities:

Assist with laboratory experiments involving sample preparation, including:

- Chemical weighing, grinding, and solid-state reactions for synthesizing new materials
- Utilizing high-energy planetary ball milling machines to homogenize powder mixtures
- Compacting powder samples into dense bulk samples using isostatic presses and conventional sintering processes
- Polishing sintered bulk samples to achieve highly smooth surfaces using polishing machines

Qualifications:

Bachelor's or Master's student with a practical background in chemistry, physics, materials science, or related fields.

How to Apply:

Interested candidates should submit a resume/CV and a brief cover letter outlining their interest in the position and relevant experience to xingxing.xiao@mr.tu-darmstadt.de before **8 May 2024**.