

The Erich Schmid Institute of Materials Science (ESI) of the Austrian Academy of Sciences (ÖAW), Austria's leading non-university research and science institution, is offering a

Praedoc (f/m/x)

(40 hours per week / full time)

in the project **“Rare earth element-free hard magnetic alloys”** for a **3-year term of employment**.

The aim of the project is to develop a combined computational/experimental workflow for the AI-supported design of sustainable magnets free of rare earth elements. The activities focus on MnBi-based magnets with the goal to improve α -phase content and magnetic saturation by means of optimized processing and doping/alloying. In addition, some novel magnetic systems with reduced critical raw material contents will be researched. The project will be carried out in collaboration with research partners (Materials Center Leoben Forschung GmbH).

Your tasks

The successful candidate will be part of a team whose research activities focus on synthesis of magnetic materials starting with powder materials, identification of processing-structure-property relations for dopant/ alloying elements, and characterization of new material states. You will have the opportunity to enhance your scientific career, including participation in international conferences and dissemination of results in scientific journals.

Your profile

- Completed Master study in Materials Sciences, Physics, Engineering or equivalent.
- Background in materials science, solid-state physics or related subjects.
- Practical laboratory experience, background in powder processing and material characterization techniques are an advantage.
- We are seeking independent, responsible and team-oriented candidates.
- Excellent communication skills in spoken and written English are mandatory.

Our offer

We offer an international, ambitious environment for basic research-oriented candidates who want to perform cutting-edge research with access to world-class synthesis and characterization facilities. We have a friendly and dynamic research environment and strong collaborations with many international academic partners.

The appointment begins as at the earliest possible date (ca. June 2026). We offer an annual gross salary of € 52.278,38 according to the collective agreement of the Austrian Academy of Sciences.

Please send your application including a CV, a motivation letter and degree certificates and transcripts (including grade scale)

Evaluation of candidates will begin immediately and will continue until the position is filled. Please note that only complete applications will be processed.

The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. Individuals from underrepresented groups are particularly encouraged to apply.