

Job ID: ESI107PD224

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

POSTDOC POSITION (F/M/X)

(full-time, 40h per week)

in the FWF 1000 ideas project “**Bulk rare-earth free magnet material**” for a fixed term appointment until March 31st, 2026 (project end date).

Permanent magnets are crucial components for (green) energy technologies. This project aims to develop a new processing technology for rare-earth element free magnets by combining an innovative manufacturing technology (severe plastic deformation) and advanced microstructural and functional characterization techniques.

Your tasks:

The successful candidate will be part of a team whose research activities focus on the synthesis of bulk nanostructured magnetic materials by severe plastic deformation. The focus of the work will be on the synthesis of rare-earth free magnetic materials. The research activities of the postdoctoral research assistant will comprise the entire process from the synthesis to the in-depth microstructural characterization in combination with simultaneous measurements of functional properties. The candidate is expected to present the findings at international conferences and to disseminate the results in international scientific journals.

Your profile:

- PhD Degree in materials science or physical sciences.
- A demonstrable ability to conduct research in line with the objectives of the project.
- Demonstrated practical laboratory experience including synthesis of magnetic materials.
- Background in material characterization techniques such as SEM, EBSD, TEM, XRD etc. as well as functional characterization techniques (PPMS, SQUID, etc.).
- Evidence of the ability to actively engage in and contribute to writing and publishing research papers, particularly for refereed journals.
- Excellent communication skills in spoken and written German or English.

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 could begin as early as October 01st, 2024. We offer an annual gross salary of € 66.501,40, according to the collective agreement of the OeAW.

Please send your application including a motivation letter, a CV, a full academic record and at least 2 contacts of scientists as references in pdf format via email to: andrea.bachmaier@oeaw.ac.at (mentioning Job ID: ESI107PD224) **no later than September 15th, 2024.**

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.