

Job ID: ESI060PD220

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)

(full-time / 40 hours per week)

in the framework of the project “Using hydrogen as a reversible alloying element to unravel fundamental questions of nanoplasticity” for a fixed term appointment until September 15, 2022 (project end date).

Nanostructured materials have been in the research focus over the past decades. However, as their properties depend not only on grain size but especially on the defect content and chemistry of the grain boundaries, many aspects of their deformation and failure behavior remain controversially debated. This prevents a general improvement of their deformability and damage tolerance, hence applications. This multivariable problem is tackled in this project using hydrogen as a releasable alloying element, what will allow to separate grain size from alloying effects. Besides that, the potentially detrimental effect of hydrogen on high strength nanomaterials will be in the center of the research focus.

The successful candidate will be part of a team whose research activities focus on the synthesis of bulk nanostructured materials and composites and the in-depth microstructural characterization in combination with simultaneous measurements of their mechanical properties. You will be working in a dedicated team and have the opportunity to enhance your scientific career, including participation in international conferences.

Your profile

- PhD in Materials Sciences, Physics or equivalent.
- Background in plasticity of nanostructures, electron microscopy and (small scale) mechanical testing and hydrogen embrittlement
- We are seeking independent, responsible and team-oriented candidates.
- Excellent communication skills in spoken and written English are mandatory.

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. The annual gross salary will be € 46.285,12 (before taxes) according to the scale of the Austrian Academy of Sciences.

Please send your application including a motivation letter, a CV, a sample of scientific work and degree certificates and transcripts (including grade scale) via email to Oliver.Renk@oeaw.ac.at (mentioning Job ID: ESI060PD220) no later than **August 15, 2020**.

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. The OeAW lays special emphasis on increasing the number of women in senior and in academic positions. Given equal qualifications, preference will be given to female applicants.