

OPEN POSITION

Early-Stage Researcher (m/f/d) (ESR 9)

The Leibniz Institute for Solid State and Materials Research Dresden, Germany

This ESR position is part of the European Training Network “BIOREMIA” dealing with research on novel biofilm-resistant materials for hard tissue implant applications.

Background information on all ESR projects and BIOREMIA Network is available on www.bioremia.eu

BIOREMIA European project has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie actions (MSCA) grant agreement No. 861046.

Job title	Early-Stage Researcher (m/f/d) / ESR 9
Project title	ESR 9: Corrosion and electrochemical response of new metastable Ti alloys with bacteria-killing oxide-based coatings
Application deadline	15.02.2022
Expected starting date¹	April 2022 (approx.)
Recruiting institution	The Leibniz Institute for Solid State and Materials Research Dresden (IFW Dresden) Helmholtzstrasse 20, 01069 Dresden, Germany Website: https://www.ifw-dresden.de/
City, Country	Dresden, Germany
Job/project description	<p>This project focuses on the fundamental description of mechanisms of metal toxicity and corrosion for new beta-Ti-alloys and/or Ti-based metallic glasses as well as the development of bacteria-killing oxide-based surface coatings and the analysis of their impact on those phenomena.</p> <p>The tasks comprise fundamental electrochemical studies and metal release analyses in simulated body fluids and accompanying surface analytical characterization. By means of electrochemical treatments, nanostructured surface states will be generated and doped with bactericidal agents (e.g. Cu, Ga, Zn or Ag); those coatings will be subjected to surface analytics. In collaboration with BIOREMIA partners <i>in vitro</i> biological studies are planned.</p> <p>The ESR will participate to the Network meetings and will benefit from the training secondments.</p>
Appointment	The appointment will be on a temporary basis for a maximum period of 18 months (regular full-time employment contract for MSCA-ESR), with an attractive salary plus allowances package according to the <i>Marie Skłodowska-Curie / Innovative Training Networks</i> rules.
Eligibility conditions	<p>Applicants (m/f/d) must at the time of recruitment:</p> <ul style="list-style-type: none"> • Be in the first four years (full-time equivalent) of their research careers • Have not resided in Germany for more than 12 months in the last 3 years • Have not been awarded a doctoral degree. <p>Applicants (m/f/d) can be of any nationality. Additional information: https://www.bioremia.eu/job-announcements/eligibility-criteria</p>
Candidate’s profile	<ul style="list-style-type: none"> • Applicants (m/f/d) must hold a Master’s degree or equivalent Materials Science and Engineering or Chemistry and should have experience with experimental research. • Applicants (m/f/d) must have excellent proficiency in written and spoken English. • Applicants (m/f/d) must have strong motivation and ability to collaborate in an

	interdisciplinary and international team.
How to apply ²	<p>Interested candidates (m/f/d) should send an application containing the following documents in English (and, when necessary, a certified translation of official documents):</p> <ul style="list-style-type: none"> • motivation letter (describing research career goals, skills, experience, and highlighting the consistency between the candidate's profile and the chosen ESR position) • a complete Curriculum Vitae with references to past research and training experiences • copies of Bachelor and Master's certificates/diploma & transcripts • two Reference Letters • publications (if available). <p>Applications should be sent by e-mail <u>as a single PDF</u>, quoting the reference number "019-22-3310", to:</p> <p style="text-align: center;">bewerbung@ifw-dresden.de</p>
Further information	<ul style="list-style-type: none"> • Some background material about host institution can be found here: https://www.ifw-dresden.de/ifw-institutes/ikm/chemistry-of-functional-materials and www.bioremia.eu

¹ Employment start date to be mutually agreed

² The recruiting organization may decide to interview only those applicants who appear from the information available, to be the most suitable, in terms of experience, qualifications and other requirements of the position.