

Three Ph.D. Positions in Computational Atomistic Modeling

The Department of Materials Science and Engineering of the Friedrich-Alexander-Universität (FAU) Erlangen-Nürnberg is inviting applications for three doctoral research positions to begin immediately. The successful applicants will work together with Prof. Erik Bitzek on studying the atomistic origins of materials failure in the context of (1) semi-brittle fracture in the ERC-funded Project microKlc: Microscopic Origins of Fracture Toughness; (2) nanomechanics and small-scale plasticity within the research training group GRK 1896 "In Situ Microscopy with Electrons, X-rays and Scanning Probes"; (3) properties of defects in complex intermetallic phases within the Collaborative Research Center SFB 1394 "Structural and Chemical Atomic Complexity: From Defect Phase Diagrams to Material Properties".

Applicants should have a master's degree with good to excellent marks in Physics, Material Science, Mechanical Engineering, Chemistry, or a related field. Experience in performing numerical simulations, preferably using Molecular Dynamics, and in scientific programming are advantageous. In addition, a solid background in mechanical behavior of materials, physical metallurgy and thermodynamics is highly desirable. Excellent oral and written communication skills and the ability to work well in a dynamic and collaborative research environment are essential.

The position is full-time, and payment follows the German TV-L 13 scale. The starting date is as soon as possible. The FAU Erlangen-Nürnberg intends to increase the number of women in research and teaching positions and, therefore, strongly encourages female researchers to apply. Disabled applicants will be preferentially considered in case of equivalent qualification.

Please send your application (including a cover letter describing your research interests, curriculum vitae, transcript of records as well as contact information of two references) to comp-mat-sci-jobs@ww.uni-erlangen.de.

About FAU: The FAU is Germany 10th largest university and has been ranked Germany's most innovative university in the 2019 Reuters Innovation Ranking. It is located in the metropolitan area of Nuremberg (3.5 Mio inhabitants), in the northern part of Bavaria. The FAU is home to Germany's largest and oldest Materials Science and Engineering Department, which is consistently ranked amongst the top 2 according to the German Science Foundation (DFG).