

Postdoc Position in Atomistic Simulations of Thermally Activated Processes

The Institute for General Materials Properties of the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) is seeking outstanding candidates for a collaborative research project with the Ruhr-Universität Bochum (SFB/Transregio 103) on high-temperature deformation of superalloys.

The aim of this project is to provide the scientific foundation for a new generation of single-crystalline superalloys. For this purpose, atomistic simulations of the interaction mechanisms between dislocations and γ/γ' -interfaces, and of the processes during dislocation climb will be performed. This requires modeling the complex interplay between dislocations, stress fields, diffusion and the local chemical composition at interfaces. The atomistic simulations will be part of a multiscale modeling approach in close collaboration with experimental groups. For more information on the project see <http://www.sfb-transregio103.de>

The successful candidate will hold a PhD in Materials Science, Physics, Chemistry or a related discipline and have a solid background in physical metallurgy and mechanical behavior of materials. Experience in atomistic simulations of rare events and scientific programming is required. In addition, experience in the simulation of crystal defects at the atomistic scale 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 the salary 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.