

Call for applications

Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

The Faculty of Engineering invites applications for a

Tenure Track Professorship Computational Materials Microscopy (W2 / Associate Professor)

at the Department of Materials Science and Engineering. The professorship is to be filled at the earliest possible starting date for an initial period of six years. FAU offers the long-term perspective of a permanent appointment to a W2 professorship if the requirements of the tenure evaluation are met. After a minimum of three years, the appointment can be converted into a permanent position pending a positive evaluation of the candidate's performance in research and teaching as well as his or her personal aptitude and if all legal conditions are met.

We seek to appoint an expert who will develop an internationally visible research and teaching profile. Candidates should have excellent research qualifications in the area of advanced microscopy of materials with a strong focus on computational methods and data science. The research focus should be on computational approaches for designing/guiding experiments and extracting materials properties from large microscopy datasets, originating, e.g., from multimodal acquisitions, correlative microscopy studies and *in situ* observations. Candidates should ideally have experience applying artificial intelligence approaches such as neural networks and deep learning to scientific studies. Experience in research data management and in working with large datasets, especially those generated from electron microscopy experiments, is appreciated.

The position is based at the Cluster of Excellence Engineering of Advanced Materials (EAM), Center for Nanoanalysis and Electron Microscopy (CENEM, www.cenem.fau.de). CENEM is FAU's central facility and interdisciplinary research centre for high-resolution microscopy and nanoanalytics of materials based on complementary techniques using electrons, X-rays and scanning probes. CENEM runs two world-class aberration-corrected TEMs as well as advanced instrumentation for X-ray scattering/diffraction and atom probe tomography (APT) and has developed strong research activities in the fields of *in situ* microscopy and scale-bridging 3D characterization. At CENEM, the candidate will have the opportunity to collaborate with world experts in microscopy and nanoscale characterization on a wide range of materials science projects.

Applicants are expected to have experience in interdisciplinary research and the necessary skills to develop an internationally recognized fundamental research programme in close collaboration with the experimental groups at CENEM and the widespread research activities of FAU's key research priority 'New Materials and Processes'. The successful candidate will further be expected to play an active role in the 'Interdisciplinary Center for Nanostructured Films' (IZNF) at FAU.

The position also includes teaching in the curricula of the Department of Materials Science, including courses for students of computational engineering as well as data science. Candidates with experience in computational materials science methods are of particular interest for developing curricular topics in this area.

Highly qualified early-career scholars are especially encouraged to apply. Prerequisites for this position are a university degree and an outstanding doctoral degree as well as a passion for education and teaching. Successful candidates demonstrate initial academic achievements and the capacity for independent research at the highest international standards.

More advanced candidates demonstrate excellent academic achievements in research and teaching at the highest international standards. You have substantial research experience abroad as well as experience in managing research projects and in raising third-party funding. A university degree and an outstanding doctoral degree as well as a passion for education and pertinent teaching experience are prerequisites. Candidates who are able and willing to teach in both English and German are desired. The position also requires additional postdoctoral qualifications. These should be in the form of a habilitation (postdoctoral thesis) or equivalent academic qualifications. You may also have acquired the necessary qualifications in a non-university context or through a junior faculty position (for example as W1 Professor or Assistant Professor).

FAU expects applicants to become actively involved in administering academic affairs and in developing strategic initiatives. FAU pursues a policy of intense student mentoring and therefore expects its teaching staff to be present during lecture periods.

FAU offers career development and an attractive initial package. Based on international standards and transparent performance agreements, FAU ensures a fair tenure track evaluation process.

In its pursuit of academic excellence, FAU is committed to equality of opportunity and to a proactive and inclusive approach, which supports and encourages all under-represented groups, promotes an inclusive culture and values diversity. FAU is a family-friendly employer and is also responsive to the needs of dual career couples.

Please submit your complete application documents (CV, list of publications, list of lectures and courses taught, copies of certificates and degrees, list of third-party funding) with a brief summary of research interests online at <https://berufungen.fau.de> by **15.06.2021**, addressed to the Dean of the Faculty of Engineering. Please contact tf-dekanat@fau.de with any questions.

