

With more than 7,000 employees in research, teaching and administration and its unique profile, TU Dortmund University shapes prospects for the future. The cooperation between engineering and natural sciences as well as social and cultural studies promotes both technological innovations and progress in knowledge and methodology. It is not only the more than 29,000 students who benefit from this.

The Institute of Mechanics, Department of Mechanical Engineering, is looking for an

Assistant Professor (W1) „Computational Mechanics“

to start work from the next possible date. This professorship does not include a tenure track option.

The assistant professorship shall establish its own research group in the field of computational mechanics, focussing on the computer-based simulation and prediction of material behaviour. In particular, an essential focus is on the multi-scale modelling of materials, taking into account size effects and the effects of material interfaces. Following the strategic goals of the Department of Mechanical Engineering, the material models should finally be transferred to the macroscopic scale by means of newly developed numerical homogenisation approaches, in order to be able to simulate technologically relevant processes, such as forming methods.

The candidate should have fundamental expertise in several of the following areas:

- Simulation of different classes of materials at finite deformations
- Simulation of coupled problems
- Multi-scale approaches, homogenisation theories and their implementation
- Description of size effects

Active participation in teaching and the development of lectures and/or courses in the field of mechanics in the bachelor and master degree programs at TU Dortmund, as well as the ability and willingness to teach in German and English, is a prerequisite. The applicant's international experience should be backed by international project collaboration, related publications or longer research periods abroad.

Preconditions for employment are specified

in § 36 HG of the state of NRW. TU Dortmund University is striving to increase the percentage of woman in science and therefore encourages woman to apply. Disabled candidates with essentially equal qualifications will be given preference.

TU Dortmund University supports the compatibility of family and work and promotes gender equality in science. TU Dortmund University is a family-friendly university and has been awarded the certificate *audit familiengerechte Hochschule*.

Applications should include the usual documents and can be submitted within 6 weeks after the advertisement of this position to

The Dean
Prof. Dr.-Ing. Andreas Menzel
Department of Mechanical Engineering
Technische Universität Dortmund
44221 Dortmund

