

The Ruhr-Universität Bochum (RUB) is one of Germany's leading **research universities**. The University draws its strengths from both the diversity and the proximity of scientific and engineering disciplines on a single, coherent campus. This highly **dynamic setting** enables students and researchers to work across traditional boundaries of academic subjects and faculties.

JUNIOR PROFESSOR (W1) FOR MODELLING AND SIMULATION FOR MATERIALS DESIGN

The Ruhr-Universität Bochum – **Faculty for Mechanical Engineering and Interdisciplinary Centre for Advanced Materials Simulation (ICAMS)** – invites applications for the position of a HEAD OF A YOUNG INVESTIGATOR GROUP to start as soon as possible. The head of the Young Investigator Group will hold the title of a JUNIOR PROFESSOR (W1) FOR MODELLING AND SIMULATION FOR MATERIALS DESIGN.

The Interdisciplinary Centre for Advanced Materials Simulation (ICAMS) at Ruhr-Universität Bochum focuses on the development and application of a new generation of simulation tools for multi-scale materials modelling with the aim of reducing development cost and time for new materials (www.icams.de). The research focus of the Young Investigator Group should be on predictive scale-bridging modelling and simulation towards specific design targets and should cover at least one of the following topics:

- Thermomechanical processing and microstructure design
- Grain-boundary engineering and texture design
- Microstructure-based property prediction and inverse methods
- Atomistic design of interface dominated materials in close collaboration with experiment
- First-principles based high-throughput materials discovery and design
- Design of functional interfaces or thin film microstructures

Applicants must hold a PhD in Materials Science and Engineering, Physics, Chemistry or a related field and fulfill all qualifications for a junior professorship. A close collaboration with experimental groups at the ZGH (Center for Interface-Dominated High Performance Materials, see <http://zgh.rub.de>) and the Institute for Materials at the Ruhr-Universität Bochum is expected. The Young Investigator Group will be equipped with two scientific staff positions for doctorate candidates and an annual budget for travel costs, etc. Furthermore, the Young Investigator Group will be entitled to use the infrastructure of ICAMS and ZGH.

The Ruhr-Universität Bochum is an equal opportunities employer.

Complete applications including full CV, publication list, 5 most important papers (in electronic form), as well as a research and teaching concept (2 pages) should be sent until **27 August 2018** to the **Managing Director of ZGH, Professor A. Ludwig, Ruhr-Universität Bochum, 44780 Bochum** or in electronic form to alfred.ludwig@rub.de

