

The Interdisciplinary Centre for Advanced Materials Simulation (ICAMS) is a new research centre at the Ruhr-University Bochum, Germany. At ICAMS an interdisciplinary team of scientists from engineering, materials science, chemistry, physics and mathematics is working on the development and application of a new generation of simulation tools for multi-scale materials modelling.

In the department "Micromechanical modeling of macroscopic material behaviour" at the Ruhr-University Bochum the group "Discrete Micromechanics and Fracture" is expanding in the direction of fatigue of metals. In this area, the atomic behavior and the interaction of atomic-lattice effects plays a dominant role. Modeling both effects in a combined model is a significant scientific step. We therefore are looking for a person to work on the project: **"Development of a discrete Multiscale model and its application to dislocation nucleation at propagation cracks."**

We are looking for a PhD student or Postdoc to work on the further development of multiscale methods. We welcome the application of candidates with expertise in mechanical metallurgy and engineering who have a strong commitment to research on multiscale methods for the design of materials. Experience in working with Linux environments and code development in C or C++ is required. Familiarity with atomistic- or dislocation based techniques is a prerequisite for PostDoc application.

Qualified candidates are asked to submit their Curriculum Vitae before **September 1st, 2010**. Initially, the position is limited to two years, but there will be the possibility for extension. For further information and submission of your application, please contact:

Dr. Steffen Brinckmann

ICAMS

Ruhr-University Bochum

44780 Bochum

Germany

email: steffen.brinckmann@rub.de.

web: www.icams.de

Ruhr-University Bochum is committed to equal opportunity in employment and gender equality in its working environment. To increase gender distribution in all job categories and at all levels, we strongly encourage applications from qualified women. Female applicants will be given preferential consideration when their level of qualification, competence and professional achievements equals that of male candidates, unless arguments based on the personal background of a male co-applicant prevail. Applications from appropriately qualified handicapped persons are also encouraged.

