## **POST-DOCTORAL POSITION - NUMERICAL MODELING**

A new Junior Research Group funded within the framework of the Emmy-Noether excellence program of the German Research Foundation (DFG) seeks a highly motivated researcher for the development of advanced finite-element models. The Junior Research Group will be based at the Institute of Geology, Mineralogy and Geophysics at the Ruhr-University, Bochum, Germany and will start in spring 2006.

The Junior Research Group is dedicated to the question how seismogenic faults respond to changes in loads on Earth's surface. The successful candidate will work on the implementation of anthropogenic changes (water reservoirs, mines) and of natural processes (evolution of ice sheets, glaciers and lakes; erosion and sedimentation) into finite-element models of fault mechanics. Goals are to evaluate the response of different fault types to surface changes in terms of slip rates and displacement/stress fields. A comparison the modelling results with natural case studies worldwide (paleoseismology, GPS) is envisaged.

Applicants must have a doctoral degree or PhD in geosciences, physics, or engineering sciences. Knowledge of UNIX, the finite-element technique, experience with commercial finite element codes and their application to geologic problems are preferable. A strong interest in geology, in particular in tectonic geomorphology, neotectonics, and mechanics of faulting, is expected. Willingness of interdisciplinary, collaborative research is a precondition.

Employment will be for 3 years starting February 2006 or later with a salary according to the German Civil Service salary level BAT IIa (West).

Applications including a CV, statement of research, and contact information of two referees should be send to:

Dr. Andrea Hampel Institute of Geology, Mineralogy und Geophysics Ruhr-University Bochum Universitaetsstr. 150 D-44801 Bochum, Germany Phone: +41 (0) 234 3223230 Email: Andrea.Hampel@ruhr-uni-bochum.de Homepage: http://homepage.ruhr-uni-bochum.de/Andrea.Hampel/

For further information please contact Dr. Andrea Hampel. Applications should be received by January 15, 2006, although applications will be considered until the position is filled.

Ruhr-University Bochum is committed to equal opportunity in employment and gender equality in its working environment. Applications from appropriately qualified handicapped persons are also encouraged. 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.