

The **Interdisciplinary Center for Scientific Computing (IWR)** of the University of Heidelberg will appoint **2 University Professors (W3)** specialized in modeling and simulation of complex molecular systems, starting at the earliest convenience. Candidates should be experts in Computational Science. Their research is expected to be in the design and implementation of new and efficient algorithms for complex processes in close cooperation with the specialists for computational methods at the IWR, and in the development and validation of new models in close cooperation with experimenters.

The subject areas are

Position (1): **Modeling and simulation of complex chemical networks and processes** (member of IWR, and the Faculty of Chemistry and Geosciences, formerly J. Warnatz)

Position (2): **Scientific Computing in the Biosciences (Biocomputing)** (member of IWR, and the Faculty of Biosciences, formerly J. Smith).

The IWR (www.iwr.uni-heidelberg.de) is a research center in Computational Sciences dedicated to basic research and its transfer to science and technology. The main general topics of its program are mathematical modeling, designing new algorithms and computational methods for simulation, optimization, calibration and validation of models. The new colleagues and their teams are expected to play an essential role in the interdisciplinary research and educational program of IWR, in particular its new *Graduate School of Mathematical and Computational Methods for the Sciences* funded by the German Excellence Initiative, and in the curricula of the corresponding faculties. A cooptation by the Faculty of Mathematics and Informatics, or the Faculty of Physics and Astronomy is possible.

There are plenty of further possibilities of research cooperation with institutes and networks at the university, e.g., with several DFG-funded Collaborative Research Centers (SFB), Graduate Colleges such as the *Hartmut Hoffmann-Berling International Graduate School of Molecular and Cellular Biology (HBIGS)* and Schools, Excellence Clusters such as *Cellular Networks*, the *Center for Modeling and Simulation in Bioscience (BIOMS)*, the *BIOQUANT* Center and the *Catalysis Research Laboratory (CaRLa)*, as well as with non-university research institutions such as the *German Cancer Research Center (DKFZ)*, the *European Molecular Biology Laboratory (EMBL)*, the *European Media Lab Research (EML)*, the *MPI for Medical Research* and the BMBF cluster *Forum Organic Electronics*.

Candidates should have an excellent performance in their discipline, and a proven record of experience in interdisciplinary research collaboration.

Prerequisites for application are a university degree and (in accordance with Article 47, paragraph 2 of the Higher Education Law of the state of Baden-Württemberg) a Habilitation, a successfully evaluated junior professorship or equivalent qualifications.

The University of Heidelberg seeks to increase the number of qualified women in teaching and strongly encourages applications of women. Handicapped persons with equivalent qualifications will be given preference.

Applications should contain a scientific CV, a report on the previous achievements and future plans in research and teaching, on the funding acquired for projects, and a list of interdisciplinary and disciplinary cooperation projects. They should be sent as both a paper version and an electronic version on CD-Rom before **30st October 2009** to the

Position 1: Dean of the Faculty of Chemistry and Earth Sciences, Prof. Dr. H.F. Schöler, Im Neuenheimer Feld 234, D-69120 Heidelberg

Position 2: Dean of the Faculty of Biosciences, Prof. Dr. T. Holstein, Im Neuenheimer Feld 234, D-69120 Heidelberg