



On October 1, 2013, the

Research Training Group (Graduiertenkolleg) “Hydrogel-based Microsystems”

(GRK 1865), funded by the German Research Foundation (DFG), starts its operation at the Technische Universität Dresden, Departments of Electrical and Computer Engineering, Mechanical Engineering and Chemistry, and the IPF Leibnitz-Institute for Polymer Research Dresden e.V. The Research Training Group offers several **PhD Positions**. PhD positions are provided for up to three years.

The Research Training Group GRK 1865 aims at the scientific fundamentals for particular hydrogel materials and properties essentially required for their usage in sensors and actuators. To achieve this goal many shortcomings have to be solved which hinder or even avoid the application of hydrogels in technical applications yet. On the one hand, particular materials and manufacturing processes are required which make the hydrogels suitable for these purposes (relevant functionality; high sensitivity, selectivity and long-term stability; fast response time). On the other hand, these materials and processes will be used for dedicated microsystems (e.g. long-term-stable pressure-compensated pH sensors, biochemical sensors, chemical transistors, microfluidic synthesis processors). With its aspects of microsystem technology, structural mechanics, fluid mechanics, and chemistry the research program of our RTG requires scientists educated interdisciplinary within all of these many scientific fields. For details, please, visit our website at <http://tu-dresden.de/forschung/dfg1865>.

Highly qualified candidates with academic education in electrical engineering, mechanical engineering, chemistry, physics or related disciplines are invited to apply. Degrees such as Diploma Degree, M.Sc. or equivalent qualifications are required for PhD studies.

Please send your application (including a covering letter describing your research interests and indicating the preferred project, curriculum vitae, scanned certificates, letters of recommendation) to application_grk1865@mailbox.tu-dresden.

The TU Dresden is committed to the compatibility of family and career. Women are explicitly encouraged to apply. Severely disabled applicants are given preference in instances where applicants demonstrate an equal level of qualification.

Program start: October 1, 2013

Application deadline: July 31, 2013

