



The **Research Training Group (GRK) "Hydrogel-based Microsystems"**, funded by the German Research Foundation (DFG) since 2013 at the Technische Universität Dresden and the IPF Leibniz Institute of Polymer Research Dresden e.V. (<a href="https://tu-dresden.de/ing/elektrotechnik/ife/graduiertenkolleg">https://tu-dresden.de/ing/elektrotechnik/ife/graduiertenkolleg</a>) welcomes applications for several positions as

## **Research Associates / PhD Students**

(subject to personal qualifications, employees are remunerated according to salary group E 13 TV-L)

starting in **October 2019**, for a three-year program (max. until 30.09.2022). The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position aims at obtaining further academic qualification (e.g. PhD).

**Tasks**: The Research Training Group 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 challenges 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, micro fluidic synthesis processors).

Requirements: University degree (Diploma, M.Sc. or equivalent qualification) in electrical engineering, mechanical engineering, chemistry, physics or related disciplines. With its aspects of micro system technology, structural mechanics, fluid mechanics, and chemistry the research program of our GRK requires scientists educated interdisciplinary within these scientific fields. Applications from women are particularly welcome. The same applies to people with disabilities. Please send your application including a covering letter describing your research interests and preferred project dresden.de/ing/elektrotechnik/ife/graduiertenkolleg/projekte-der-3-phase), curriculum scanned certificates, letters of recommendation by 01.07.2019 (stamped arrival date of the university central mail service applies) preferably via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf document to info.ife@mailbox.tudresden.de or to TU Dresden, GRK 1865, Herrn Prof. Gerlach, Helmholtzstr. 10, 01069 **Dresden, Germany.** Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

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