

## PhD Candidate

<b>Project Description:</b>	<p><b>Micropollutant Retention Mechanisms in Nanofiltration</b></p> <p>KIT is one of the biggest research institutions worldwide and has access to state-of-the art research facilities within the National Research Centre of the Helmholtz Association and the former Technical University. The IFG-Membrane Technology Department was established in March 2014. As a PhD Candidate you will be responsible to work on a research project in the research group of membrane retention and fouling mechanisms applied to water treatment. As part of this project micropollutant specific retention and polymer interaction mechanisms will be investigated in the context of endocrine disrupting chemicals.</p> <p>This entails the identification of a set of research questions based on detailed literature survey and discussion of research needs with colleagues. Development of a research plan and timetable for the 1+3 year research project, set-up of required equipment and development of relevant analytical methods. Execution of the research plan through conducting of experiments, sample and data analysis and write up of results for scientific publications are part of the PhD process – a journey to become an independent researcher.</p> <p>In addition, cooperation with internal and external partners, bachelor and master student supervision, oral presentations and contribution to teaching within the Faculty of Chemical and Process Engineering are part of the candidate responsibilities. Travel and research funding is sought from national and international funding bodies. The position is not defined by a particular project and hence provides the opportunity for the candidate to develop a project of personal interest (obviously in agreement with the supervisor(s)).</p>
<b>Qualifications:</b>	<p><b>Masters in Chemical/Process/Environmental Engineering/Applied Science or equivalent</b></p> <p>You have completed a diploma / master degree, have a strong interest in research and experience with experimental laboratory work. Practical experience with membrane technology is a required prerequisite for this position.</p> <p>Additional experience with water treatment processes, water chemistry, polymer materials development, analytical chemistry, micropollutant detection and environmental issues will be a good foundation to the position.</p> <p>Excellent English language proficiency is essential, basic German language skills of advantage.</p>
<b>Affiliation:</b>	<p><b>KIT - Institute of Functional Interfaces (IFG) – Membrane Technology</b> c/o KIT Campus North, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Germany</p>
<b>Faculty:</b>	<p><b>KIT - Faculty of Chemical and Process Engineering</b> c/o KIT Campus South, Kaiserstrasse 12, 76131 Karlsruhe, Germany</p>
<b>Deadline:</b>	<p>Applications are open and candidates will be considered continuously until the position is filled. Additional candidates with outstanding proposals and scholarship funding may be recruited on a case by case basis.</p>
<b>Start Date:</b>	<p>Open</p>
<b>Contact:</b>	<p>Prof. Dr.-Ing. Andrea Iris Schäfer, Tel +49(0)721/608-26906, Andrea.Iris.Schaefer@kit.edu Professor of Water Process Engineering - Faculty of Chemical and Process Engineering Head of Membrane Technology Department - Institute of Functional Interfaces (IFG) <a href="https://www.ifg.kit.edu/english/mt.php">https://www.ifg.kit.edu/english/mt.php</a></p>
<b>Applications:</b>	<p>Please send applications with CV, publication list and your contribution to the publication (if relevant), academic transcripts, degree certificates, contact details for three references and a preliminary research proposal.</p>