

8 Ph.D. positions on “Droplet Interaction Technologies”

Faculty/department:	Aerospace Engineering and Geodesy
Level:	M.Sc.
Maximum employment:	Maximum of 39.5 hours per week
Duration of contract:	
Ph.D. positions:	Three years (extendable by one year)
Salary scale:	TV-L statutory salary scale
Start of employment:	The earliest possible start would be 01.11.2019

Eight positions are open for doctoral researchers in the experimental and numerical investigation of droplet interaction phenomena with different media. The selected candidates will participate in the International Research Training Group (IRTG): DROPIT. DROPIT is led by the University of Stuttgart and envisage a partnership among the University of Stuttgart, Bergamo and Trento. The objective is to understand how micro-scale transport processes affect macroscopic flow properties. The research programme is organised in three thematic research areas (TAs): drop-gas interaction (TA-A), drop-wall interaction (TA-B) and drop-liquid interaction (TA-C). A key feature is the interdisciplinary approach, which envisages the synergic integration of experimental (X-ray micro-CT, micro-PIV), numerical (DNS, discontinuous Galerkin schemes, Direct Simulation Monte Carlo), and analytical methods (heat and mass transfer models for evaporation, interactions). A detailed description of the project can be found at: <https://www.project.uni-stuttgart.de/dropit/>.

DROPIT is expected to have a significant impact on a wide range of environmental and industrial applications as well as academic aspects. Thus, the selected candidates are likely to be in an exceptionally good starting position at the end of their post for future academic work and/or industrial tasks. DROPIT includes an extensive qualification programme to promote the early independence of doctoral researchers. All vacancies for Ph.D. positions include a full-time position for an initial period of 3 years, with the possibility of extension for another year. Remuneration is based on the TV-L statutory salary scale and its associated public sector benefits.

Desired skills and experience

The successful candidate has a M.Sc. degree in engineering, physics or mathematics. Additionally, candidates should have excellent writing skills. Fluency in English is required; command of German would be appreciated.

Information and application

For more information, please contact Dr. Anne Geppert, phone: +49 (0)711-685-62173. To apply, please e-mail a detailed CV, publications list, two references, and a letter of application by 31.08.2019 to dropit-application@itlr.uni-stuttgart.de.