



Current positions

Head of Division Experimental Thermal Fluid Dynamics at Institute of Fluid Dynamics, HZDR (since 2006)

Professorship at Technische Universität Dresden (since 2012)

Previous positions (two selected)

Scientist at Forschungszentrum Dresden-Rossendorf (2002-2011)

Scientist at Technische Universität Dresden (1994-2002)

Scientific degrees

PhD in Electrical Engineering / Technische Universität Dresden (1998)

Habilitation Technische Universität Dresden (2005)

Recent research topics

Thermal fluid dynamics, measurement and imaging techniques

Awards, honors, memberships

Doctor Honoris Causa, Université de Liège (2019)

Publications/Patents (5 most important)

- **W. Ding, T. Geißler, E. Krepper, U. Hampel**, Critical heat flux as a mass flux dependent local or global phenomenon: Theoretical analysis and experimental confirmation, *Int. J. Therm. Sci.* 130, 200 (2018) [doi:10.1016/j.ijthermalsci.2018.04.040](https://doi.org/10.1016/j.ijthermalsci.2018.04.040)
- **M. Haghnegahdar, S. Boden, U. Hampel**, Experimental analysis of Taylor bubble behavior and mass transfer during lateral oscillation of a vertical milli-channel, *Chem. Eng. J.* 326, 308 (2017) [doi:10.1016/j.ces.2017.05.138](https://doi.org/10.1016/j.ces.2017.05.138)
- **A. Döb, M. Schubert, A. Bieberle, U. Hampel**, Non-invasive determination of gas phase dispersion coefficients in bubble columns using periodic gas flow modulation, *Chem. Eng. Sci.* 171, 256 (2017) [doi:10.1016/j.ces.2017.05.019](https://doi.org/10.1016/j.ces.2017.05.019)
- **J. Zalucky, M. Wagner, M. Schubert, R. Lange, U. Hampel**, Hydrodynamics of descending gas-liquid flows in solid foams: Liquid holdup, multiphase pressure drop and radial dispersion, *Chem. Eng. Sci.* 168, 480 (2017) [doi:10.1016/j.ces.2017.05.011](https://doi.org/10.1016/j.ces.2017.05.011)
- **T. Schäfer, C. Meitzner, R. Lange, U. Hampel**, A study of two-phase flow in monoliths using ultrafast single-slice X-ray computed tomography, *Int. J. Multiphase Flow* 86, 56 (2016) [doi:10.1016/j.ijmultiphaseflow.2016.07.008](https://doi.org/10.1016/j.ijmultiphaseflow.2016.07.008)