

## **Jun.-Prof. Dr.-Ing. Jeanette Hussong**

Born 1979 in Lüdenscheid, Germany  
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### **Professional Preparation**

09/12 - now	Junior Professor, Ruhr-University Bochum, Germany
7/06 - 10/11	Ph.D. Thesis, Technical University Delft, Netherlands Dissertation title: "Flow induced by beating artificial cilia: An experimental and numerical study"
08/99 -06/06	Diploma thesis, Ruhr-University Bochum, Germany Study of Mechanical Engineering, Major: Applied Mechanics Thesis title: "The critical layer and the influence of nonlinearities in swirling annular flow"

### **Appointments**

09/12 - now	Junior Professor at Chair of Hydraulic Fluid Machinery, Ruhr-University Bochum, Germany Head of working group „Laser Measurement Techniques in Multiphase Flows“
10/11 - 08/12	Postdoc at Laboratory of Aero- and Hydrodynamics, Technical University Delft, Netherlands
7/06 - 10/11	Ph.D. student at Laboratory of Aero- and Hydrodynamics, Technical University Delft, Netherlands

### **Memberships/ Chairman**

Since 2010	Member of consortium Vietnamese German University (VGU) Member of Deutscher Hochschulverband (DHV)
Since 2012	Referee for the following journals: <ul style="list-style-type: none"><li>• Journal of Fluid Mechanics</li><li>• Physics of Fluids B</li><li>• Experiments in Fluids</li><li>• Micro- and Nanofluidics</li><li>• Meccanica</li><li>• Chemical Engineering Science</li><li>• Proceedings of the ASME-JSME-KSME</li></ul>

## Important Publications

1. Kowalski, K., Pollak, S., Skoda, R., & **Hussong**, J. (2018). Experimental Study on Cavitation-Induced Air Release in Orifice Flows. *Journal of Fluids Engineering*, 140(6), 061201.
2. Kazerooni, H. T., Fornari, W., **Hussong**, J., & Brandt, L. (2017). Inertial migration in dilute and semidilute suspensions of rigid particles in laminar square duct flow. *Physical Review Fluids*, 2(8), 084301.
3. Schröer, K., Kurzeja, P., Schulz, S., Brockmann, P., **Hussong**, J., Janas, P., Wolf, D. E. (2017). Dilute suspensions in annular shear flow under gravity: simulation and experiment. In *EPJ Web of Conferences* (Vol. 140, p. 09034). EDP Sciences.
4. Kowalski, K., Pollak, S., & **Hussong**, J. (2017). Experimental investigation of cavitation induced air release. In *EPJ Web of Conferences* (Vol. 143, p. 02054). EDP Sciences.
5. Kordel, S., Nowak, T., Skoda, R., & **Hussong**, J. (2016). Combined density gradient and velocity field measurements in transient flows by means of Differential Interferometry and Long-range  $\mu$ PIV. *Experiments in Fluids*, 57(9), 138.
6. Kordel, S., Nowak, T., Skoda, R., & **Hussong**, J. (2016, October). Combined Differential Interferometry and Long-range  $\mu$ PIV measurements of a temperature driven boundary layer flow. In *Journal of Physics: Conference Series* (Vol. 760, No. 1, p. 012008). IOP Publishing.
7. **Hussong**, J., Lindken, R., Faulhammer, P., Noreikat, K., Sharp, K. V., Kummer, W., & Westerweel, J. (2013). Cilia-driven particle and fluid transport over mucus-free mice tracheae. *Journal of biomechanics*, 46(3), 593-598.
8. Khaderi, S., **Hussong**, J., Westerweel, J., den Toonder, J., & Onck, P. (2013). Fluid propulsion using magnetically-actuated artificial cilia—experiments and simulations. *Rsc Advances*, 3(31), 12735-12742.
9. **Hussong**, J., Breugem, W. P., & Westerweel, J. (2011). A continuum model for flow induced by metachronal coordination between beating cilia. *Journal of fluid mechanics*, 684, 137-162.
10. **Hussong**, J., Schorr, N., Belardi, J., Prucker, O., Rühle, J., & Westerweel, J. (2011). Experimental investigation of the flow induced by artificial cilia. *Lab on a Chip*, 11(12), 2017-2022.