Prof. Dr.-Ing. habil. K. Wozniak - Publikationen

1. J.A. Szymczyk, Ch.-H. Chun, J. Siekmann und K. Wozniak: Liquid Crystal Tracers as a Method for Thermocapillary Flow Diagnostics, Archives of Mechanics, 41, 2-3, pp. 351-360, Warschau, 1989.
2. K. Wozniak, G. Wozniak, T. Roesgen:Particle-image-velocimetry applied to thermocapillary convection, Experiments in Fluids, 10, 12-16, 1990.
3. T. Roesgen, K. Wozniak, G. Wozniak:Image processing for Laser speckle velocimetry using the 2-D fast Fourier transform,Applied Optics, Vol. 29, No. 35, 5298-5302, 1990.
4. G. Wozniak, K. Wozniak:Simultaneous Measurement of Temperature and Velocity Fields in Thermo-Convective Liquid Flows - Development of a New Measuring Technique, Adv. Space Research. Vol. 11, No. 7, pp. (7)33-(7)38, 1991.
5. G. Wozniak, K. Wozniak:
Simultaneous Measurement of the Temperature and Velocity Field in the Thermo- capillary Convection of a Bubble, *Microgravity sci. technol*. IV/2, 93-94, 1991.
6. G. Wozniak, K. Wozniak:
Entwicklungsstand bei Meßverfahren zur Charakterisierung strömender Fluide, *MM Maschinenmarkt*, Wochenjournal für die Industrie, 49 , p. 16-19 (1993).
7. G. Wozniak, K. Wozniak:Buoyancy and Thermocapillary Flow Analysis by the Combined Use of Liquid Crystals and PIV, Experiments in Fluids 17, pp. 141-146 (1994)
8. K. Wozniak, J. Becker:Liquid crystals for flow analysis in space experiments, ESA's Technology Programme Quaterly, Vol. 4 No 3, p.6, September 1994.
9. A. Himmel, U. Bozian, K. Wozniak, J. Siekmann:Thermoconvective Flow Analysis of a Double Layer Fluid System using Liquid Crystals, S. 11-14. ZAMM, Z. angew. Math. Mech. 75 (1995).
10. K. Wozniak, J. Siekmann:Bénard-convection analysis using a new interferometer. Journal of Flow Measurement and Instrumentation. Vol. 6, No. 3, pp. 181-186 (1995)
11. A. Himmel, U. Bozian, K. Wozniak, J. Siekmann:Flow and Temperature Measurements of two imiscible liquid layers. Journal of Flow Measurement and Instrumentation. Vol. 6, No. 4, pp. 295-299 (1996)
12. K. Wozniak:Thermocapillary Flow of Two Bubbles in a Close Proximity. Gamm Jahrestagung, Prag, ZAMM; Z. angew. Math. Mech. (1996)
13. G. Wozniak, K. Wozniak, J. Siekmannn: Non-isothermal Flow Diagnostics Using Microencapsulated Cholesteric Particles. Applied Scientific Research, Vol. 56, 2 - 3, S. 145 - 156 (1996)
14. B. Skarmann, J. Becker, K. Wozniak: Simultaneous 3D-PIV and temperature measurements using a new CCD-based holographic interferometer. Journal of Flow Measurement and Instrumentation, Vol. 7, Nr. 1, pp. 1-6 (1996)
15. G. Wozniak, K. Wozniak, H. Bergelt: On the influence of buoyancy on surface tension driven flow of a bubble. Experiments in Fluids 21, pp.181-186 (1996)
16. K. Wozniak, G.Wozniak: Temperature gradient driven flow experiments of two interacting bubbles. Journal of Heat- and Mass Transfer 33, pp. 363-369 (1998)
17. B. Skarman, K. Wozniak, J. Becker: Digital in-line holography for the analysis of Bénard-convection. Journal of Flow Measurement and Instrumentation 10, pp. 91-97 (1999)
18. G. Wozniak, T. Richter, K. Wozniak: Temperaturfeldanalyse in Strömungen. *Chemie Anlagen Verfahrenstechnik* 6/98, 74-75 (2000)
19. E. Koukan, G. Wozniak, K. Wozniak, J. Siekmann: Experimental study of flow fields around small gas bubbles under the combined action of buoyancy and thermocapillarity. Journal of Heat and Mass Transfer 37, 437-441 (2001)
20. H. Shalaby, K. Pachler, K. Wozniak, G. Wozniak: Straight Square Channel. PAMM, Proc. Applied. Math. Mech., Volume 4, Issue 1, 652-653, ISSN 1617-1706 (2004)
21. H. Shalaby, K. Pachler, K. Wozniak, G. Wozniak: Comparative Study of the Continuos Phase Flow in a Cyclone Seperator Using Different Turbulence Models. International Journal for Numerical Methods in Fluids, 48, 1175-1197 (2005)
22. H. Shalaby, K. Wozniak, G. Wozniak: Numerical investigation of secondary turbulent flow in a straight square channel using LES. *Fluids Engineering (ASME)* , Zur Publikation eingereicht

23. H. G. Heiland, K. Wozniak, G. Wozniak: Ein Particle-Image-Velocimetry/Thermography System (PIV/T) zur Untersuchung thermischer Konvektionsströmungen. GALA, 13. Fachtagung „Lasermethoden in der Strömungsmesstechnik“, BTU Cottbus, 6.-8. September, 17.1 – 17.8, ISBN 3-9805613 2-1 (2005)

24. H. Shalaby, K. Wozniak, G. Wozniak: Particle-Laden Flow Simulation in a Cyclone Seperator. *PAMM*, *Proc. Applied. Math. Mech.*, 6, 547-548, DOI 10.1002 (2006)

25. G. Wozniak, D. Rubes, H. G. Heiland, K. Wozniak: Experimente mit flüssigkristallinen Tracerteilchen in einem engen vertikalen Spalt. *Forschung im Ingenieurwesen*, 70, 221 – 229 (2006)

26. G. Wozniak, K.-P. Schade, K. Wozniak, H. Shalaby: Über die Auslegung und den Entwicklungsstand von Zyklon-Abscheidern. Forschung im Ingenieurwesen. 71: 171-180 (2007)

27. H., G. Heiland, K. Wozniak, G. Wozniak: Flow and temperature field measurements of thermal convection in a small vertical ap using liquid crystals. Journal of Heat and Mas Transfer, 43, 63-870 (2007)

28. H. Shalaby, K. Wozniak, G. Wozniak: Numerical calculation of particle laden cyclone seperator flow using LES. *Engineering Applications* of Computational Fluid Mechanics, Vol.2, No 4, pp.382 -392 (2008)