

Selected Publications on the Research Focus Heat Transfer Processes

- ▶ Attalla, M.; Specht, E.: Heat Transfer Characteristics from in-line Arrays of Free Impinging Jets. *Heat and Mass Transfer* (2009) 5, 537-543.
- ▶ Woche, H.; Specht, E.; Schmidt, J.: Wärmeübergang im Einlaufbereich von Rohren. *Kälte, Luft, Klimatechnik* 1/2 (2007), 3-41.
- ▶ Woche, H.; Specht, E.; Schmidt, J.: Local Heat Transfer in Tubes after Sudden Change of Diameters. *Chemical Engineering and Technology* 28 (2005) 677-683.
- ▶ Díaz, M.C.; Woche, H.; Schmidt, J.; Specht, E.: Measurement of Local Heat Transfer Coefficients of Developing Flows Using IR-Thermography. 7th Int. Conference on Quantitative Infrared Thermography. 5.-8. July 2004, von Karman Institute, Rhodé St. Genese, Belgium. D.6.1-6.6.
- ▶ Puschmann, F.; Specht, E.: Transient Measurement of Heat Transfer for Metal Quenching with Atomized Sprays. *Experimental Thermal and Fluid Science* 28 (2004) 607-615.
- ▶ Woche, H.; Specht, E.; Schmidt, J.: Messung des lokalen Wärmeübergangs im Einlaufbereich von Rohren nach Querschnittsänderungen. *Chemie Ingenieur Technik* 74 (2002), 1711-1714.
- ▶ Puschmann, F.; Specht, E.; Schmidt, J.: Measurement of Spray Cooling Heat Transfer Using an Infrared-Technique in Combination with the Phase-Doppler Technique and a Patternator. *Int. J. of Heat and Mass Transfer* 19 (2001) 51 - 56.
- ▶ Wadewitz, A.; Specht, E.: Limit Value of Nusselt Number for Particle of Different Shape. *Int. J. of Heat and Mass Transfer* 44(2001), 967-975.
- ▶ Kaiser, R.; Specht, E.; Jeschar, R.: Gebrauchsgleichungen für die Guterwärmung bei Strahlung - ermittelt mit einem genetischen Algorithmus. *Gaswärme Int.* 49 (2000) 355-358.
- ▶ Specht, E.; Jeschar, R.; Heidt, V.: An Analytical Model for Free Convection Film Boiling on Immersed Solids. *Chemical Engineering and Processing* 31 (1992), 137-146.
- ▶ Köhler, Chr.; Specht, E.; Jeschar, R.: Heat Transfer with Film Quenching of Vapourizing Liquids. *Steel research* 61 (1999) 553-559.
- ▶ Specht, E.; Alt, R.: Temperature Compensation in Heated Solids. *Steel research* 61 (1990), 569-575.
- ▶ Specht, E.: Simplified computation of heat conduction in solids. *Ceramic forum int.* 67 (1990), 518-527.

Research Focuses

- ▶ Dynamic Simulation of Heat Treatment Processes
- ▶ Intensive Cooling of Metals with Hardness and continuous casting Processes
- ▶ Cumulative Energy and CO₂ Balances
- ▶ Heat Transfer Processes
- ▶ Influence of Surface Roughness on secondary Cooling in continuous Casting of non-ferrous Metals
- ▶ Analysis and Modeling of Heat Transfer in Rotary Pipes with Lifting Blades