

HEAT TRANSFER BIBLIOGRAPHY—JAPANESE WORKS

TAKASHI SATŌ

Department of Mechanical Engineering, Kyoto University, Japan

(Received 3 October 1967)

APPLICATION AND OUTLOOK

- N. ISSHIKI, K. TORIKAI, T. TERANISHI, T. KANAI and M. NAGAI, Developments in thermal and hydraulic design of reactors, (I), *J. Atom. Energy Soc. Japan* 9 (3), 159 (1967).
- Y. OKAMOTO, M. HORI, Y. AOKI and N. ISSHIKI, Developments in thermal and hydraulic design of reactors, (II), *J. Atom. Energy Soc. Japan* 9 (4), 212 (1967).
- I. SAKAI, Analysis of balance-point of refrigerating system for air conditioner, *Trans. Japan Soc. Mech. Engrs.* 33 (246), 249 (1967).
- H. TAKAHAMA, Studies on vortex tubes (4th Report, The effects of wall friction on energy separation), *Trans. Japan Soc. Mech. Engrs* 33 (248), 551 (1967).
- S. KAWAI, T. MACHIYAMA and M. KOIZUMI, Experimental studies on periodic water-swelling in a small steam generator with forced circulation, *Trans. Japan Soc. Mech. Engrs* 33 (249), 787 (1967).
- K. NAGASAKA, M. WATANABE and S. SUGIYAMA, Continuous carbonization of briquettes, *Chem. Engng, Japan* 31 (4), 391 (1967).
- T. YOSHIDA, K. TODA and J. YAMAZAKI, Simultaneous dehydrating and granulating operation for a hydrated material, *Chem. Engng, Japan* 31(5), 474 (1967).
- T. SHIROTSUKA and M. SANO, Analysis of irreversible first-order chemical reaction in laminar boundary layer, *Chem. Engng, Japan* 31 (6), 613 (1967).
- T. SUZUKI, H. HIROSE and T. HAYASHI, Transient temperature measurement of transistor junctions under pulse operation (II), *Proc. Fac. Engng Keio Univ.* 19 (3), 139 (1966).
- T. TAKAMATSU, I. HASHIMOTO and Y. SAWANOI, The effect of fluid mixing on the maximum yield and the optimum temperature profile in a tubular reactor (I-Autocatalytic reaction), *Mem. Fac. Engng Kyoto Univ.* 29 (3), 225 (1967).

CHANNEL FLOW

- W. NAKAYAMA, Study on forced convective heat transfer in curved pipes (3rd Report, Theoretical analysis of uniform wall temperature and practical formulae), *Trans. Japan Soc. Mech. Engrs* 33 (245), 104 (1967).
- Y. MORI and W. NAKAYAMA, Forced convective heat transfer in a straight pipe rotating around a parallel axis (1st Report, Laminar region), *Trans. Japan Soc. Mech. Engrs* 33 (250), 965 (1967).
- T. MIZUSHINA, R. ITO, Y. KURIWAKI and K. YAHIKOZAWA,

Laminar heat transfer to non-Newtonian fluids in a circular tube (constant wall heat flux), *Chem. Engng, Japan* 31 (3), 250 (1967).

- N. MITSUISHI, Y. KITAYAMA and Y. AOYAGI, Non-Newtonian flow in non-circular duct, *Chem. Engng, Japan* 31 (6), 570 (1967).
- T. MIZUSHINA and Y. KURIWAKI, Turbulent heat transfer in non-Newtonian fluids, *Mem. Fac. Engng Kyoto Univ.* 29 (2), 197 (1967).
- K. MATSUMIYA, T. HAYASHI and S. UCHIDA, An analysis of turbulent flow in a two-dimensional channel, *Mem. Fac. Engng Nagoya Univ.* 18 (2), 156 (1966).
- M. YANO, Flow in turbulent boundary layer and combined flow of two-dimensional wakes in wind tunnel, *Mem. Fac. Engng Kobe Univ.* 13, 1 (1967).

CONVECTIVE HEAT TRANSFER

- T. AIHARA, Predicting the performance of free convection heat dissipators with vertical fins, *Trans. Japan Soc. Mech. Engrs* 33 (245), 77 (1967).
- I. MABUCHI and T. TANAKA, Experimental study on effect of vibration on natural convective heat transfer from a horizontal fine wire, *Trans. Japan Soc. Mech. Engrs* 33 (245), 96 (1967).
- K. KATO and H. ITO, On the heat transfer coefficient of elliptic cylinder due to natural convection (2nd Report), *Trans. Japan Soc. Mech. Engrs* 33 (246), 257 (1967).
- I. MABUCHI, T. TANAKA and Y. SAKAKIBARA, Studies on the convective heat transfer from a rotating disk (2nd Report, The effect of Prandtl number on the laminar heat transfer from a disk rotating in uniform forced stream), *Trans. Japan Soc. Mech. Engrs* 33 (248), 626 (1967).
- Y. MORI and H. MIYAZAKI, Heat transfer and flow friction characteristics of matrices, *Trans. Japan Soc. Mech. Engrs* 33 (250), 956 (1967).
- Y. MORI, Forced convective heat transfer in a straight pipe rotating around a parallel axis (1st Report, Spherical bodies), *Trans. Japan Soc. Mech. Engrs* 33 (250), 965 (1967).
- Y. MORI, M. IMABASHI, K. HUIKATA and Y. YOSHIDA, Unsteady heat and mass transfer from small bodies (1st Report, Spherical bodies), *Trans. Japan Soc. Mech. Engrs* 33 (250), 973 (1967).
- S. TONE and T. OTAKE, Heat transfer mechanism in the bed of stirred solids, *Chem. Engng, Japan* 31 (1), 31 (1967).

- O. UEMAKI and M. KUGO, Heat transfers in spouted beds, *Chem. Engng, Japan* **31** (4), 348 (1967).
- T. TSUBOUCHI and H. MASUDA, Natural convection heat transfer from a horizontal circular cylinder with small rectangular grooves, *Rep. Inst. High Sp. Mech. Tohoku Univ.* **18**, 211 (1966/1967).
- R. ISHIGURO, An approximate method to calculate the local heatflux from a nonisothermal flat plate across a turbulent boundary layer, *Mem. Fac. Engng Hokkaido Univ.* **11** (7), 673 (1966).

TWO PHASE FLOW

- M. TAMARI, S. ISHIGAMI and K. NISHIKAWA, The stirring effect of bubbles upon the heat transfer to a liquid (1st Report, The case when air bubbles are injected into water through a nozzle), *Trans. Japan Soc. Mech. Engrs* **33** (245), 87 (1967).
- K. TORIKAI, Heat transmission coefficient in pool boiling, *Trans. Japan Soc. Mech. Engrs* **33** (245), 113 (1967).
- E. ISHIBASHI and K. NISHIKAWA, Boiling heat transfer in narrow space (1st Report, Experiment on distilled water and aqueous solution at atmospheric pressure), *Trans. Japan Soc. Mech. Engrs* **33** (245), 121 (1967).
- T. KUSUI, Liquid jet flow into still gas (1st Report, Structure of jet), *Trans. Japan Soc. Mech. Engrs* **33** (248), 559 (1967).
- T. KUSUI, Liquid jet flow into still gas (2nd Report, The effect of nozzle loss coefficient on the break-up length of jet), *Trans. Japan Soc. Mech. Engrs* **33** (248), 569 (1967).
- T. UEDA, On upward flow of gas-liquid mixtures in vertical tubes (1st Report, Experiment and analysis of the flow state), *Trans. Japan Soc. Mech. Engrs* **33** (248), 601 (1967).
- T. UEDA, On upward flow of gas-liquid mixtures in vertical tubes (2nd Report, Consideration of frictional pressure drop and void fraction), *Trans. Japan Soc. Mech. Engrs* **33** (248), 611 (1967).
- T. UEDA, On upward flow of gas-liquid mixtures in vertical tubes (3rd Report, Heat transfer result and analysis), *Trans. Japan Soc. Mech. Engrs* **33** (248), 619 (1967).
- T. MIZUSHINA, R. ITO and H. MIYASHITA, Experimental study of evaporative cooler, *Chem. Engng, Japan* **31** (5), 469 (1967).
- E. NAITO and I. SINDO, The experimental investigation about heat transfer of the condensing vapors on the outer surface of a circular tube, *Bull. Nagoya Inst. Tech.* **18**, 237 (1966).

MASS TRANSFER

- M. OGASAWARA, T. ADACHI and T. YASHIKI, Study on the drag of a cylinder and a sphere of liquid fuel with flame, *Trans. Japan Soc. Mech. Engrs* **33** (245), 277 (1967).
- A. IGUCHI and R. IZUMI, Heat and mass transfer from a rotating disk, *Trans. Japan Soc. Mech. Engrs* **33** (247), 398 (1967).
- K. ARAI, S. SAITO and S. MAEDA, On the dispersion mechanism in laminar flow through tubes, *Chem. Engng, Japan* **31** (1), 25 (1967).
- A. KIKUCHI, K. OGIWARA, I. SUGIYAMA and S. MAEDA, Gas absorption accompanied with 1st order reaction (Effect of the initial concentration of dissolved gas), *Chem. Engng, Japan* **31** (1), 44 (1967).

- K. KAWAZOE, Y. TAKEUCHI, I. SUGIYAMA and T. HASHIMOTO, Mass transfer in ion exchange (24 Na-Na exchange in resin bed), *Chem. Engng, Japan* **31** (1), 49 (1967).
- K. KAWAZOE, On intraparticle diffusion rate in adsorption, *Chem. Engng Japan* **31** (4), 354 (1967).
- S. OHTANI and S. MAEDA, The way factor of water movement in moist granular bed, *Chem. Engng, Japan* **31** (5), 463 (1967).
- T. KATAOKA, N. MAEDA, M. SATO and K. UYEYAMA, Ion exchange kinetics on liquid phase diffusion (Exchange of ion with equal valence), *Chem. Engng Japan* **31** (5), 491 (1967).
- K. FUJINAWA, M. MOGI and T. HANZAWA, States of surface and mass transfer rates in gas-liquid system, *Chem. Engng, Japan* **31** (6), 584 (1967).
- K. FUJINAWA, T. TSUKAGOSHI and H. ABE, States and properties of water surface from the viewpoint of mass transfer in gas-liquid system, *Chem. Engng, Japan* **31** (6), 577 (1967).
- K. FUJINAWA, T. HANZAWA and H. ABE, Rates of gas absorption by various solvents and dependence on their surface tension, *Chem. Engng, Japan* **31** (6), 590 (1967).
- Y. SUZUKI and H. SHINOZAKI, Absorption of hydrogen sulfide by aqueous ammonia in packed columns, *Chem. Engng, Japan* **31** (6), 594 (1967).
- N. WAKAO, Difference in effective diffusivity under reactive and non-reactive diffusion conditions, *Bull. Fac. Engng Yokohama Nat. Univ.* **16**, 101 (1967).

RADIANT HEAT TRANSFER

- H. TANIGUCHI, Temperature distributions of radiant gas calculated by Monte Carlo method, *Trans. Japan Soc. Mech. Engrs* **33** (247), 406 (1967).

PROPERTIES OF GASES AND LIQUIDS

- T. SATO, T. MINAMIYAMA and J. YATA, A formulation of the thermodynamic properties of ordinary water substance, *Mem. Fac. Engng Kyoto Univ.* **29** (1), 16 (1967).
- M. HIRATA, S. SUDA and Y. ONODERA, Vapor pressure of methanol in high pressure regions, *Chem. Engng, Japan* **31** (4), 339 (1967).

MEASURING METHOD

- Y. IIDA, K. KOBAYASHI and S. KUMAGAI, A study on the measurement of void fraction by probe method, *J. Atomic Energy Soc. Japan* **9** (1), 2 (1967).
- K. KOBAYASHI and T. TOKUDA, A method of measuring thermal diffusivity by heating of step function change, *J. Atomic Energy Soc. Japan* **9** (2), 58 (1967).
- J. YAMAGA and S. SHIBATA, Gas temperature measurement using ultrasonic waves (3. Some considerations about principle for measuring transient gas temperature), *Trans. Japan Soc. Mech. Engrs* **33** (245), 71 (1967).
- S. SATO, T. OKU, S. YUHARA and T. HONDA, Studies of carbon thermocouple, *Trans. Japan Soc. Mech. Engrs* **33** (247), 390 (1967).
- A. HIRATA and T. SHIROTSUKA, A new method of measuring instantaneous and local mass transfer rate, *Chem. Engng, Japan* **31** (5), 507 (1967).