

LIST OF PUBLICATIONS

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This list of publications is not complete or fully up-to-date. It includes listings of refereed journal papers, conference papers (partial), book chapters as well as books authored or edited by Professor Mujumdar. Please visit the websites noted above for additional details about current research areas, teaching interests, academic and professional service contributions, etc.

Publications of Dr. Arun Mujumdar (1978- present, partial list)

1. Publications in refereed journals

2006

- Wu, Z.H. and Mujumdar, A.S., Simulation of spouted bed drying of spherical particles, submitted to *Drying Technology*, July 2006.
- Suvarnakuta, P., Devahastin, S. and Mujumdar, A.S., A mathematical model for low pressure superheated steam drying of a biomaterial, *Chemical Engineering and Processing*, accepted for publication, September 11, 2006.
- Wu, Z.H. and Mujumdar, A.S., A parametric study of hydrodynamics of a spouted bed, submitted to *Power Technology*, July 2006
- Wang Xiangqi and Mujumdar, A.S., Heat transfer characteristics of nano-fluids: A Review, accepted for publication in *International Journal of Thermal Sciences* (June 26, 2006)
- Devahastin, S. and Mujumdar, A.S., Recent developments in drying technologies for carrot and sweet potato, *Acta Horticulture*, 703, 2006, pp 89-96.
- Huang, L., Kumar, K. and Mujumdar, A.S., A comparative study of a spray dryer with rotary disc atomizer and pressure nozzle using computational fluid dynamic simulations, accepted for publication in *Chemical Engineering and Processing*, 2006.
- Mujumdar, A.S., An overview of innovation in industrial drying: Current status and R&D Needs, accepted for publication in *Transport in Porous Media*, 2006.
- Ravi Kandasamy, Wang, X.Q. and Mujumdar, A.S., Application of phase change materials in thermal management of electronics, to be submitted to *Applied Thermal Engineering*, March 2006.
- Wang, X-Q., and Mujumdar, A.S., Heat transfer characteristics of nano-fluids, *Int. Journal of Thermal Sciences*, January 2006 available on-line.
- Wang X.-Q., Mujumdar, A.S. and Yap, C., A parametric study of phase change material (PCM) based heat sinks, *Int. Journal of Heat and Mass Transfer*, submitted, 2006.
- Wang X.-Q., Mujumdar, A.S. and Yap, C., Effect of orientation for phase change material (PCM) – based heat sinks for transient thermal management of electronic components, *Int. Communication of Heat and Mass Transfer*, submitted, 2006.

- Kandasamy, R., Wang, X.-Q. and Mujumdar, A.S., Application of phase change materials in thermal management of electronics, submitted to Applied Thermal Engineering, 2006.
- Zhonghua Wu and A.S, Mujumdar, A parametric study of spray drying of a solution in a pulsating high –temperature turbulent flow , Drying technology 24(6), 2006, pp751-761.
- Cao, H., Min, Z., Mujumdar, A.S., Du, W.-H., Sun, J.-C., Optimization of osmotic dehydration of kiwifruit, Drying Technology, vol. 24., no.1, 2006, pp 89-94.
- Wanjari, A.N., Thorat, B.N., Baker, C. G. J. and Mujumdar, A.S., Design and modeling of plug flow fluid bed dryers, Drying Technology, Vol. 24, no. 1, 2006, pp 147-158
- Birchal, V.S., Huang, L., Mujumdar, A.S. and Passos, M.L., Spray dryers: Modeling and Simulation, Drying Technology, vol. 24, no. 3, 2006, pp 359-372.
- Wang, X-Q., Mujumdar, A.S. and Yap, C. Laminar Heat Transfer in Constructal Micro-channel Networks with Loops, Accepted for publication in ASME Trans., Journal of Electronics Packaging, 2006.
- Mujumdar, A.S. and Law, Chung Lim, Filter dryers in process industries, Chemical Industry Digest, Vo. XIX, No. 4, 2006, pp 54-62
- Mujumdar, A.S. and Wu, Zhonghua, Pulse combustion dryers, Chemical Industry Digest, vol. XIX, No.4, 2006, pp 58-65.
- Waje, S.S., Thorat, B.N. and Mujumdar, A.S., An experimental study of the thermal performance of a screw conveyor dryer, Drying Technology, vol. 24, no. 3, 303-314, 2006.
- Ravi Kandasamy and Mujumdar A.S., Interface Thermal Characteristics of Flip Chip Packages - A Numerical Study, Submitted for review IEEE Transactions on Components and Packaging in January 2006.
- Ravi Kandasamy, Wang Xiangqi and Mujumdar A.S., Application of Phase Change Material in Thermal Management of Electronics, Currently paper to be submitted to Applied Thermal Engineering. 2006.
- Fan, L.P., Zhang, Min and Mujumdar, A.S., Effect of various pretreatment methods on the quality of vacuum-fried carrot chips, Drying Technology, vol. 24, No. 10, 2006.
- S. J. Wang, S. Devahastin and A. S. Mujumdar, Effects of Temperature Difference on Flow and Mixing Characteristics of Laminar Confined Opposing Streams, Applied Thermal Engineering, Vol. 26, pp. 519-529, 2006.

- Zhang, M., Tang, J., Mujumdar, A.S. and Wang, S., Trends in microwave-related combination drying of fruits and vegetables, Trends in Food Science & Technology Journal, vol.17, pp 524-534, 2006.
- Hu, Q.-G., Zhang, M., Mujumdar, A.S., Xiao, G.-N., Sun, J.-C., Performance evaluation of vacuum microwave drying of edamame in deep-bed frying, Technical note, accepted for publication in Drying Technology, Vol. 24, No. 5, 2006.
- Yong, C.K., Islam, Md. SR. and Mujumdar, A.S., Mechanical means of enhancing drying rates: effect on drying kinetics and quality, Drying Technology, vol. 24, no. 3, 2006. pp397-404
- Wang, S.J. and Mujumdar, A.S., Three dimensional analysis of flow and mixing characteristics of a novel in-line Opposing-Jet Mixer, Submitted to Ind. Eng. Chem. Res. 2006
- Hu Qing-guo, Zhang Min, Arun S. Mujumdar, Du Wei-hua and Sun Jin-cai, Effects of different drying methods on the quality changes of granular Edamames, Drying Technology, Vol.24, No9 ,pp 1025-1032
- Basu, S., Shivhare, U.S. and mujumdar, A.S., Models for sorption isotherms for foods: A Review, Drying Technology, Vol. 24, no. 8, 2006, pp 917-930

2005

- Poh, H.J. and Kumar, K., and Mujumdar, A.S., Heat Transfer from a Pulsed Laminar Impinging Jet, /International Communication of Heat and Mass Transfer/, Vol. 32, Issue 10, pg. 1317–1324, (Nov 2005).
- Wang, S. J. and Mujumdar, A. S., A Numerical Study of Flow and Mixing Characteristics of Three-Dimensional Confined Turbulent Opposing jets: Unequal Jets, Chemical Engineering and Processing, Vol. 44, pp. 1068-1074, 2005.
- Passos, M.L. and Mujumdar, A.S., Mathematical models for improving spray drying processes for foods, Stewart Postharvest Review, on line ISSN 1945-9656, 2005. U.K. www.stewartpostharvest.com (refereed paper)
- Lou, Z.Q., Mujumdar, A.S. and Yap, C., Effects of geometric parameters on confined impinging jet heat transfer, Applied Thermal Engineering, Volume 25, Issues 17-18, Pages 2687-2697, December 2005.
- Sun, L., Islam, R.M., and Mujumdar, A.S., A diffusion model for drying of heat sensitive solid under multiple heat input modes, Bioresource Technology, 96, no. 14, 1551-1560, U.K., 2005.

- Sablani, S.S., Kacimov, A., Perret, J. and Mujumdar, A.S., Non-iterative estimation of the heat transfer coefficients using artificial neural network models, *Int. Journal of Heat and Mass Transfer*, 48, No. 3, pp. 665-679, 2005.
- Wang, X.-Q., Yap, C.R. and Mujumdar, A.S., Effects of two-dimensional roughness in flow in microchannels, *Journal of Electronic Packaging*, Transactions of the ASME, Vol. 127, No. 3, pp. 357-361, 2005.
- Suvarnakuta, P., Devahastin, S., Soponronnarit, S. and Mujumdar, A.S., Drying kinetics and inversion temperature in a low-pressure superheated steam drying system, *Industrial & Engineering Chemistry Research*, 44, No. 6, pp. 1934-1941, 2005.
- Fan, L.-P., Zhang, M. and Mujumdar, A.S., Vacuum frying of carrot chips, *Drying Technology*, vol. 23, No. 3, pp. 645-656, 2005.
- Birchal, V.S., Passos, L.M., Wildhagen, G.R.S., Mujumdar, A.S., Effect of spray dryer operating variables on the whole milk powder quality, *Drying Technology*, Vol. 23, no. 3, pp. 611-636, 2005.
- Lou, Z.Q., Yap, C. and Mujumdar, A.S., Biot number effect on conjugate heat transfer under a confined impinging jet, *Journal of Applied Thermal Engineering*. Accepted for publication.
- Lou, Z.Q., Yap, C. and Mujumdar, A.S., Numerical Investigation of Baffle Effect on Micro-Impinging Jet Heat Transfer, *International Journal of Thermal Sciences*. Submitted for publication.
- Wang, X.-Q., Mujumdar, A.S. and Yap, C., Thermal characteristics of tree-shaped microchannel nets for cooling of a rectangular heat sink, accepted for publication in the *Int. J. Thermal. Sci.*, 2005.
- Wang, X.-Q., Mujumdar, A.S. and Yap, C., Effect of bifurcation angle in tree-shaped microchannel networks, submitted to *Int. Comm. Heat Mass Transfer*, Nov. 2005.
- Wang, X.-Q., Mujumdar, A.S. and Yap, C., Thermal characteristics of tree-shaped microchannel nets with/without loops, submitted to *Int. J. Heat Mass Transfer*, Dec. 2005.
- Wang, X.-Q., and Mujumdar, A.S. Review on heat transfer characteristics of nanofluids, submitted to *Int. J. Thermal Sci.*, Jan. 2006.
- Wang, X.-Q., Mujumdar, A.S. and Yap, C., Laminar heat transfer in fractal-like microchannel networks with loops, submitted for publication in *Journal Electronic Packaging*, ASME Journal, 2005.

- Wu, Z., Mujumdar, A.S. and Liu, X., Influence of flapper valve design on pulse combustor performance, *Combustion Science and Technology*, 2005, in press.
- Devahastin, S. and Mujumdar, A.S., Drying kinetics and beta-carotene degradation in carrot undergoing different drying processes, *Journal of Food Science*, 70(8), pp. S520-S526, 2005.
- Wang, X-Q., Mujumdar, A.S. and Yap, Thermal characteristics of fractal-like microchannel nets in a rectangular heat sink, *ASME Journal, Electronic Packaging*, 128, pp. 38-45, 2005.
- Huang, L., and Mujumdar, A.S., Development of a new innovative conceptual design for horizontal spray dryer via mathematical modeling, *Drying Technology*, Vol. 23, No. 6, pp. 1169-1187, 2005.
- Birchal, V.S., Passos, L.M., Wildhagen, G.R.S. and Mujumdar, A.S., Effect of spray-dryer operating variables on the whole milk powder quality, *Drying Technology*, Vol. 23, No. 3, 2005.
- Fan, L.-P., Zhang, M. and Mujumdar, A.S., Vacuum frying of carrot chips, *Drying Technology*, Vol. 23, No. 3, pp 645-656, 2005.
- Wu, Z., Liu, X. and Mujumdar, A.S., Model of a mechanical-valved pulse combustion, accepted to be published in the *Journal of Combustion and Flame*, 2005.
- Wang, S.J., Devahastin, S. and Mujumdar, A.S., A numerical investigation of approaches to improve mixing under laminar confined impinging streams, *Applied Thermal Engineering*, Vol. 25, 253-269, 2005.
- Wang, S.J., and Mujumdar, A.S., A comparative study of five low Reynolds number $k-\epsilon$ models for confined impinging jet streams, *Applied Thermal Engineering*, Vol. 25, 31-44, 2005.
- Li, Hailong, Elias, E. and Mujumdar, A.S., Theoretical simulation of explosive boiling, to appear in *International Communications in Heat and Mass Transfer*, 32(5), pp. 612-619, 2005.
- Lou, Z.Q., Yap, C. and Mujumdar, A.S., Heat transfer from a two-phase impinging jet using the VOF model, submitted to *International Communications in Heat Mass Transfer*, 2005.
- Xu, Y., Zhang, M., Tu, D., Sun, J., Zhou, L. And Mujumdar, A.S., A two-stage convective air and vacuum freeze-drying technique for bamboo shoots, *Int. Journal of Food Science and Technology*, vol. 40, Issue 6, pp. 589-, 2005.
- Huang, L., Kumar, K. and Mujumdar, A.S. A comparative study of a spray dryer with rotary disc atomizer and pressure nozzle using computational fluid dynamic

simulations, Accepted for publication in the Journal of Chemical Engineering and Processing, Nov. 2005.

2004

- Goel, M., Mujumdar, A.S., Ray, M.B., Sonochemical decomposition of volatile and non-volatile organic compounds – A comparative study, *Water Research*, Vol. 38, No. 19, pp. 4247-4261, 2004.
- Huang, L.X., Kumar, K. and Mujumdar, A.S., Simulation of spray evaporation using pressure and ultrasonic atomizer – A comparative analysis, *Russia TSTU Trans (English version)*, 10 (1A), pp 83-100, 2004.
- Huang, L.X., Kumar, K. and Mujumdar, A.S., Spray evaporation of different liquids in a drying chamber – effect on flow, heat and mass transfer performance, *China Journal of Chemical Engineering (English Version)*, 10, pp. 83-89, 2004.
- Wang, B.H., Zhang, W.B., Zheng, W., Mujumdar, A.S. and Huang, L.X., Progress in drying technology for nanomaterials, *Drying Technology*, Vol. 23, No. 1, pp. 1-18, 2004.
- Wang, S. and Mujumdar, A.S., A comparative study of five low Reynolds number $k-\epsilon$ turbulence models for impingement heat transfer, *Applied Thermal Engineering*, Vol. 25, No. 1, pp. 31-44, 2004.
- Zhao, W., Kumar, K. and Mujumdar, A.S., Flow and heat transfer under confined noncircular turbulent impinging jets, *Drying Technology*, Vol. 22, No. 9, pp. 2027-2049, 2004.
- Xu Y., Zhang, M., Mujumdar, A.S., Zhou, L.-Q. and Sun, J.-C., Studies on hot air and microwave vacuum drying of wild cabbage, *Drying Technology*, Vol. 22, No. 9, pp. 2201-2209, 2004.
- Sablani, S.S., Kacimov, A., Mujumdar, A.S., Perret, J. and Campo, A., Non-iterative estimation of the heat transfer using an artificial neural network model, *International Journal of Heat and Mass Transfer*, Nov. 2004, In Press.
- Devahastin, S., Suvarnakuta, P., Soponsonnarit, S. And Mujumdar, A.S., A comparative study of low-pressure superheated steam and vacuum drying of heat-sensitive materials, *Drying Technology*, Vol. 23, No. 3, 2005.
- Ranjan, R., Irudayaraj, J., Reddy, J.N. and Mujumdar, A.S., Finite element simulation and validation of stepwise drying of banana, *Numerical Heat Transfer-Part A*, Vol. 45, No. 10, pp. 997-1001, 2004.
- Mujumdar, A.S., Research and Developments in Drying: Recent Trends and Future Prospects, *Drying Technology*, volume 22, No. 1-2, pp. 1-26, 2004

- Ogura, H., Hamaguchi, N. Kage, H. And Mujumdar, A.S. Energy and cost estimation: application of chemical heat pump dryer to industrial ceramic drying, *Drying Technology*, Vol. 22, No. 1-2, pp. 307-323, 2004.
- Huang, L., Kumar, K. and Mujumdar, A.S., Simulation of a spray dryer fitted with a rotary disk atomizer using a three-dimensional computational fluid dynamic model, *Drying Technology*, Vol. 22, No. 10, pp. 1489-1516, 2004.
- Zhao, L. J., Pan, Y. K., Li, J. G., Chen, G.H. and Mujumdar, A.S., Revolving flow fluidized bed dryer of inert particles, *Drying Technology*, volume 22, No.1-2, pp. 363-376, 2004.
- Yangang, X., Z. Min and Mujumdar, A.S., Studies on hot air and microwave vacuum drying of wild cabbage, *Drying Technology*, Vol. 22, No. 9, pp. 2201-2210, 2004.
- Markowski, A.S. and Mujumdar, A.S., Drying risk assessment strategies, *Drying Technology*, vol. 22, No. 1-2, pp. 495-412, 2004.
- Hee, J.P., Kumar, K., Hock, S.C. and Mujumdar, A.S., Heat transfer from a laminar impinging jet of a power law fluid, *International Communications in Heat and Mass Transfer*, Vol. 31, No. 2: 241-249, 2004.
- Shi, Y.L., Mujumdar, A.S. and Ray, M.B., Effect of large temperature difference on impingement heat transfer under a round turbulent jet, *International Communications in Heat and Mass Transfer*, vol. 31, No. 2, pp. 251-260, 2004.
- Hu, Hongqiang, Mujumdar, A.S. and Ray, M.B., Hydroxyl radical and hydrogen peroxide production in different ultrasonic reactors, *Industrial and Engineering Chemistry Research*, submitted for publication, October 2004.

2003

- Shi Yuling, Ray, M.B. and Mujumdar, A.S., A parametric study of heat transfer in turbulent gas-solid flow in multiple impinging jets, accepted for publication in *Industrial & Engineering Chemistry Research*.
- Huang, L.X., Kumar, K. and Mujumdar, A.S., A parametric study of the gas flow patterns and drying performance of co-current spray dryer: Results of a computational fluid dynamics study, *Drying Technology*, Vol. 21, No. 6, pp. 957-978, 2003.

- Huang, L.X. and Mujumdar, A.S., Classification and selection of spray dryers, *Chemical Industry Digest (India)*, 7-8, pp. 75-84, 2003.
- Huang, L.X. and Mujumdar, A.S., Design of spray dryers, *Chemical Industry Digest (India)*, 11-12, pp. 95-102, 2003.
- Shi Yuling, Ray, M.B. and Mujumdar, A.S., Effects of Prandtl number on impinging jet heat transfer under a semi-confined laminar slot jet, *International Communications in Heat and Mass Transfer*, Vol.30, No.4, 455-464, 2003.
- Chua, K.J., Mujumdar, A.S. and Chou, S.K., Intermittent drying of bio-products – An overview, *Bioresource Technology*, Vol. 90, NO. 3, pp. 285-295, 2003
- Li., Jingtang, Mason, D. J. and Mujumdar, A.S., A numerical study of the heat transfer mechanisms in gas-solids flows in pipes using a coupled CFD and DEM model, *Drying Technology*, Vol. 21, No. 9, pp. 1839-1867, 2003.
- Li, J., Campbell, G.M., and Mujumdar, A.S., Discrete modeling and suggested measurement of heat transfer in gas-solids flows, *Drying Technology – An International Journal*, Vol. 21, No. 6, pp. 979-994, 2003.
- Islam, M.R., Ho, J.C., Mujumdar, A.S., Convective drying with time-varying heat input: Simulation results, *Drying Technology – An International Journal*, Vol. 21, No. 7, pp. 1359-1382, 2003.
- Jia, L.W., Islam, M.R., Mujumdar, A.S., A simulation study on convection and microwave drying of different food products, *Drying Technology-An International Journal*, Vol. 21, No 8, pp. 1551-1576, 2003.
- Huang, Lixin, Kumar, K. and Mujumdar, A.S., Use of Computational fluid dynamics to evaluate alternative spray chamber configurations, *Drying Technology-An International Journal*, Vol. 21, No 3, pp.385-412, 2003.
- Shi Yuling, Mujumdar, A.S. and Ray, M.B., Numerical study on the effect of cross-flow on turbulent flow and heat transfer characteristics under normal and oblique semi-confined impinging slot jets, *Drying Technology*, Vol. 21, No 10, pp. 1909-1923, 2003.
- Huang, Lixin, Kumar, K. and Mujumdar, A.S., Numerical simulation of spray evaporation of organic liquids, to be published in *Drying Technology – An International Journal*, Vol. 21, No. 8, 2003.
- Islam, Raisul Md., Ho, J.C. and Mujumdar, A.S., Simulation of liquid diffusion-controlled drying of shrinking thin slabs subjected to multiple heat sources, *Drying Technology-An International Journal*, vol. 21, No 3., pp. 413-438, 2003.

- Islam, Raisul Md. and Mujumdar, A.S., Role of product shrinkage in drying rate predictions using a liquid diffusion model, *International Communications in Heat and Mass transfer*, vol. 30, no. 3, pp. 391-400, 2003.
- Dedic, A.D., Mujumdar, A.S. and Voronjec, D.K., A three dimensional model for heat and mass transfer in convective wood drying, *Drying Technology – an International Journal*, Vol. 21, No. 1, pp. 1-16, 2003.
- Ogura, H., Ishida, H., Kage, H. and Mujumdar, A.S., Enhancement of energy efficiency of a chemical heat pump-assisted convective dryer, *Drying Technology*, Vol. 21, No. 2, pp. 279-292, 2003.
- Islam, M.R., Sablani, S.S. and Mujumdar, A.S., An artificial neural network model for prediction of drying rates, *Drying Technology*, Vol. 21, No. 9, pp. 1867-1885, 2003.
- Perera, C.O, Jasinghe, V.J., Ng, F.L. and Mujumdar, A.S., The effect of moisture content on the conversion of ergosterol to vitamin D in shitake mushrooms, *Drying Technology*, Vol. 21, No. 6, 1091-1099, 2003.
- Markowski, A., and Mujumdar, A.S., Drying risk assessment strategies, *Drying Technology*, Vol. 21, No., 7-8, 2003.
- Shi Yuling, A.S. Mujumdar and Ray, M. B., Heat transfer under two dimensional multiple turbulent slot impinging jets of gas-particle suspensions, submitted to *Journal of Multi-phase Flow*, April 2003.
- Chua, K.J., Chou, S.K., Mujumdar, A.S., Ho, J.C. and Hon, C. K., Radiant-Convective drying of osmotically treated agro-products: effect on drying kinetics and product quality, *Food Control*, 2003.
- Huang, Lixin, Kumar, K. and Mujumdar, A.S., A parametric study of the gas flow patterns and drying performance of co-current spray dryer: Results of a computational fluid dynamic study, *Drying Technology*, Vol. 21, No 6, 2003, pp. 957-978.

2002

- Jumah, R.Y. and Mujumdar, A.S. Transient Non-Darcy Free Convection Heat and Mass Transfer from a Vertical Flat Plate in a Porous Medium, submitted to *International Journal of Heat and Fluid Flow* (August 2002).
- Mujumdar, A.S. *New Developments in Industrial Drying and Future Trends*, *Chemical Digest (India)*, July/August 2002, pp. 52-61.

- Shi, Y.-L., Ray, M.B. and Mujumdar, A.S. A Computational Study of Impingement Heat Transfer under a Turbulent Slot Jet, *Industrial and Engineering Chemistry Research*, 2002, Vol. 41, pp. 4643-4651.
- Shi, YL.; Ray, M.B. and Mujumdar, A.S. Effect of Large Temperature Differences on Local Nusselt Number Under a Turbulent Slot Impinging Jet, *Drying Tech.-An International Journal*, 2002, Vol. 20, No. 9, pp. 1803-1825.
- Shi, YL.; Ray, M.B. and Mujumdar, A.S. Effect of Prandtl Number on Impinging Jet Heat Transfer Under a Semi-Confined Turbulent Slot Jet, *International Communications in Heat and Mass Transfer*, 2002, Vol. 29, No. 7, pp. 929-938.
- Ogura,H., Yamamoto,T. ,Kage,H., Matsuno,Y. and Mujumdar,A.S., Effects of heat exchange conditions on hot air production by a chemical heat pump dryer using CaO/Ca(OH)₂ reaction, *Chemical Engineering Journal*, Vol.86, no. 1-2, pp 3-10.
- Mujumdar, A.S., *Drying Research- Current State and Future Trends*, *Developments in Chemical Engineering and Mineral Processing*, vol. 10, no 3 / 4, pp 225-246.
- Chen, Guohua and Mujumdar, A.S., Application of electrical fields in dewatering and drying, *Developments in Chemical Engineering and Mineral Processing*, vol 10, no 3 / 4, pp 429-442, 2002
- Sanga, E.M.C., Mujumdar, A.S. and Raghavan, G.S.V., Simulation of convection-microwave drying for a shrinking material. *Chemical Engineering and Processing*, volume 41, no. 6, pp 487-499, 2002.
- Wang, W., Thorat, B. N., Chen, G. and Mujumdar, A.S., Fluidized-bed drying of heat sensitive porous material with microwave heating, Accepted for publication in *Drying Technology – An International Journal*, Vol. 20, No. 9, pp. 1855-1868, 2002.
- Chen, G., Yue, P.-L. and Mujumdar, A.S., Sludge Dewatering and Drying, accepted for publication, *Drying Technology – an International Journal*, Vol. 20, No.4-5, pp. 883-916, 2002.
- Mujumdar, A.S., *Drying Research – current status and future trends*, accepted for publication, *Research Trends in Heat and Mass Transfer*, Trivandrum, India, 2002.
- Elustondo, D.M., Mujumdar, A.S., Urbicain, M.J., Optimum operating conditions in drying foodstuffs with superheated steam, *Drying Technology – An International Journal*, Vol. 20, No. 3, pp 381-402, 2002.
- Nishimura, A., Matsuda, H., Hasatani, M. and Mujumdar, A.S., Heat Transfer Characteristics in a Pulsated Fluidized Bed in Relation to Bubble Characteristics.

Accepted for publication in Heat Transfer- Asian Research, Vol. 31, No. 4, pp. 307-319, 2002.

- Uddin, M.S., Hawlader, M.N.A., Ding, L., Mujumdar, A.S., Degradation of Ascorbic acid in dried guava during storage, *Journal of Food Engineering*, Vol. 1, pp. 21-26, 2002.

2001

- Devahastin, S., Mujumdar, A.S., A study of turbulent mixing of confined impinging streams using a new composite turbulence model, *Industrial & Engineering Research*, 40(22), pp 4998-5004, 2001
- Devahastin, S., Mujumdar, A.S., A numerical study of flow and mixing characteristics of laminar confined impinging streams, *Chemical Engineering Journal*, Vol. 85 (2 & 3), pp. 215-223, 2001.
- Devahastin, S., Mujumdar, A.S., A numerical study of mixing in a novel impinging stream in-line mixer, *Chemical Engineering and Processing*, Vol. 40, No. 5, pp. 459-470.
- Chen, G., Wang, W. and Mujumdar, A.S., Theoretical study of microwave heating patterns on batch fluidized bed drying of porous material, accepted for publication, *Chemical Engineering Science*, Vol. 56, pp. 6823-6835, Elsevier, UK, 2001.
- Zhao, W., Mujumdar, A.S., Ray, M., Collection efficiencies of various designs of the post-cyclone, *Canadian Journal of Chemical Engineering*, vol.79, pp 708-716.
- Ho, J.C., Chou, S.K., Chua, K.J., Mujumdar, A.S., Hawlader, M.N.A., Analytical study of cyclic temperature drying: Effect on drying kinetics and product quality, *Journal of Food Engineering*, Vol. 51, pp 65-75, UK., 2001.
- Ho, J.C., Chou, S.K., Chua, K.J., Mujumdar, A.S., Hawlader, M.N.A., Optimization framework for drying heat-sensitive products, *Applied Thermal Engineering*, Vol. 21, pp. 1779-1798, UK., 2001.
- Chou, S.K., Chua, K.J., Mujumdar, A.S., Tan, M. and Tan, S.L., Study on the osmotic pre-treatment and infrared radiation on drying kinetics and colour changes during drying of agricultural products, *ASEAN Journal on Science and Technology for Development*, Vol. 18, No. 1, pp. 11-23, 2001.
- Hawlader, M.N.A., Chou, S.K., Chua, K.J., Ho, J.C. and Mujumdar, A.S., On the steady state modeling of a two-stage evaporator system, *International Journal of Energy Research*, vol. 25, 859-880, 2001.

- Chua, K.J., Mujumdar, A.S., Hawlader, M.N.A., Chou, S.K., Ho, J.C., Batch drying of banana pieces – effect of stepwise change in drying air temperature on drying kinetics and product colour, *Food Research International*, Vol. 34 pp. 721-731., 2001.
- Jumah, R.Y., Mujumdar, A.S., Natural convection heat and mass transfer from a vertical flat plate with variable wall temperature and concentration to power-law fluids with yield stress in a porous medium, *Chemical Engineering Communications*, Vol. 185, pp. 165-182.
- Devahastin, S., Mujumdar, A.S., Some hydrodynamic and mixing characteristics of a pulsed spouted bed dryer, *Powder Technology*, 117, pp. 189-197, 2001.
- Sanga, E.C., Mujumdar, A.S. and Raghavan, G.S.V., Experimental results of combined MW-convection drying of composite materials, submitted to *CSAE Transactions*, June 2001.
- Sanga, E.C., Mujumdar, A.S. and Raghavan, G.S.V., Principles and applications of microwave drying –a review, *Research Trends*, Trivandrum India, 2001 (in press).
- Tan, M., Chua, K.J., Mujumdar, A.S., Chou, S.K., Osmotic dehydration of potato and pineapple-Effect of intermittent infrared radiation and continuous convection in a heat pump dryer, *Drying Technology – An International Journal*, Vol. 19, No. 9, pp. 2193-2208.
- Rostami, A.A., Mujumdar, A.S., Saniei, N., Liquid flow and heat transfer in micro-channels: A review, *International Journal of Heat and Technology*, 18, pp. 59-68, 2001.

2000

- Nishimura, A., Deguchi, S., Matsuda, H., Hasatani, M., Mujumdar, A.S., Heat transfer characteristics of a pulsated fluidized bed in relation to bubble characteristics, *Kagaku Kogaku Ronbunshu*, 26, pp. 830-836, 2000.
- Chua, K.J., Chou, S.K., Ho, J.C., Mujumdar, A.S., Hawlader, M.N.A., Cyclic air temperature drying of guava pieces: Effects on moisture and ascorbic acid contents, *Transactions of the Institution of Chemical Engineers, Part C*, 78, pp. 72-78, 2000.
- Chou, S.K., Chua, K.J., Hawlader, M.N.A., Mujumdar, A.S., Ho, J.C., On the intermittent drying of an agricultural product, *Transactions of the Institution of Chemical Engineers*, Vol. 78, Part C, pp. 193-203, UK., 2000.
- Nishimura, A., Deguchi, S., Matsuda, H., Hasatani, M., Mujumdar, A.S., Bubble characteristics of a pulsed fluidized bed under intermittent fluidization, *Kagaku Kogaku Ronbunshu*, 26, pp. 88-93, 2000.
- Passos, M.L., Mujumdar, A.S., Effect of cohesive forces on fluidized and spouted beds of wet particles, *Powder Technology*, 110, pp. 222-238, 2000.
- Jumah, R.Y., Mujumdar, A.S., Free convection heat and mass transfer of non-Newtonian power law fluids with yield stress from a vertical flat plate in saturated porous media, *International Communications in Heat and Mass Transfer*, 27, pp. 485-494, 2000.
- Mujumdar, A.S., Hosseinalipour, S.M., Devahastin, S., A two-dimensional superheated steam impinging stream dryer: A computational model, *Bulletin of the Polish Academy of Sciences: Technical Sciences*, 48, pp. 287-299, 2000.
- Pan, Y.K., Li, Z.Y., Mujumdar, A.S., Kudra, T., Analogy of heat and mass transfer for drying hygroscopic particles in vibrated fluid beds, *Bulletin of the Polish Academy of Sciences: Technical Sciences*, 48, pp. 463-474, 2000.
- Devahastin, S., Mujumdar, A.S., Evaluation of some transport and thermodynamic properties of superheated steam: Effects of steam temperature and pressure, *Drying Technology—An International Journal*, 18, pp. 1055-1071, 2000.
- Mujumdar, A.S., Wu, J., Analysis of recent patent literature on drying and dryers, *Drying Technology—An International Journal*, 18, pp. 1147-1156, 2000.
- Ogura, H., Mujumdar, A.S., Proposal for a novel chemical heat pump dryer, *Drying Technology—An International Journal*, 18, pp. 1033-1053, 2000.
- Chua, K.J., Mujumdar, A.S., Chou, S.K., Hawlader, M.N.A., Ho, J.C., Convective drying of banana, guava and potato pieces: Effect of cyclical variations of air

- temperature on drying kinetics and color change, *Drying Technology–An International Journal*, 18, pp. 907-936, 2000.
- Khillarkar, D.B., Gong, Z.-X., Mujumdar, A.S., Melting of a phase change material in concentric horizontal annuli of arbitrary cross-section, *Applied Thermal Engineering*, 20, pp. 893-912, 2000.
 - Nebra, S.A., Silva, M.A., Mujumdar, A.S., Drying in cyclones – A review, *Drying Technology–An International Journal*, 18, pp. 791-832, 2000.

1999.

- Nishimura, A., Deguchi, S., Matsuda, H., Hasatani, M., Mujumdar, A.S., Effects of pulse cycle and bed height on hydrodynamic characteristics of a pulsed fluidized bed, *Kagaku Kogaku Ronbunshu*, 25, pp. 395-399, 1999.
- Ogura, H., Shimojyo, R., Kage, H., Matsuno, Y., Mujumdar, A.S., Simulation of hydration/dehydration of CaO/Ca(OH)₂ chemical heat pump reaction for cold/hot heat generation, *Drying Technology–An International Journal*, 17, pp. 1579-1592, 1999.
- Gong, Z.-X., Devahastin, S., Mujumdar, A.S., Enhanced heat transfer in convection-dominated melting in a rectangular cavity with an isothermal vertical wall, *Applied Thermal Engineering*, 19, pp. 1237-1251, 1999.
- Ng, K.W., Devahastin, S., Mujumdar, A.S., Arai, N., Passive enhancement of free-convection dominated melting of a phase change material in a horizontal cylindrical annulus, *Journal of Chemical Engineering of Japan*, 32, pp. 353-357, 1999.
- Devahastin, S., Mujumdar, A.S., Raghavan, G.S.V., Hydrodynamic characteristics of a rotating jet annular spouted bed, *Powder Technology*, 103, pp. 169-174, 1999.
- Devahastin, S., Mujumdar, A.S., Batch drying of grains in a well-mixed dryer–Effect of continuous and stepwise change in drying air temperature, *Transactions of the ASAE*, 42, pp. 421-425, 1999.

1998

- Khillarkar, D.B., Devahastin, S., Mujumdar, A.S., Effect of flipping on free convective heat transfer during melting of a phase change material in concentric horizontal annuli of different cross-section, *Thermal Science*, 2, pp. 27-43, 1998.

- Shiravi, A.H., Mujumdar, A.S., Kubes, G.J., A mathematical model for drum drying of black liquor slurry using superheated steam impinging jets, *Canadian Journal of Chemical Engineering*, 76, pp. 1056-1068, 1998.
- Jumah, R.Y., Mujumdar, A.S., Raghavan, G.S.V., Aerodynamics of a novel rotating jet spouted bed, *Chemical Engineering Journal*, 70, pp. 209-219, 1998.
- Devahastin, S., Siow, S.L., Mujumdar, A.S., Effect of inclination on free convective heat transfer during melting of a phase change material in a rectangular enclosure, *Applied Mechanics and Engineering*, 3, pp. 491-515, 1998.
- Gong, Z.-X., Mujumdar, A.S., Itaya, Y., Mori, S., Hasatani, M., Drying of clay and nonclay: Heat and mass transfer and quality aspects, *Drying Technology-An International Journal*, 16, pp. 1119-1152, 1998.
- Ng, K.W., Gong, Z.-X., Mujumdar, A.S., Flow and heat transfer of convection-dominated melting of a phase change material in horizontal annulus, *International Communications in Heat and Mass Transfer*, 25, pp. 631-640, 1998.
- Nishimura, A., Deguchi, S., Matsuda, H., Hasatani, M., Mujumdar, A.S., Solid flow patterns and heat transfer characteristics in a pulsated fluidized bed with flowing large bubbles, *Proceedings of the 11th International Heat Transfer Conference, Vol. 4*, Kyongju, South Korea, pp. 485-490, 1998 (refereed).
- Devahastin, S., Gong, Z.-X., Mujumdar, A.S., Arai, N., Free convective heat transfer during melting of a phase change material in a rectangular enclosure: Effect of inclination, *Proceedings of the 11th International Heat Transfer Conference, Vol. 7*, Kyongju, South Korea, pp. 133-138, 1998 (refereed).
- Ng, K.W., Devahastin, S., Mujumdar, A.S., Free convective melting of a phase change material in a horizontal cylindrical annulus, *Tambov State Technical University Transactions*, 4, pp. 40-52, 1998.
- Gong, Z.-X., Mujumdar, A.S., A finite element model for convection-dominated melting and solidification problems, *International Journal of Numerical Methods for Heat and Fluid Flow*, 8, pp. 393-408, 1998.
- Gong, Z.-X., Mujumdar, A.S., Flow and heat transfer in convection-dominated melting in a rectangular cavity heated from below, *International Journal of Heat and Mass Transfer*, 41, pp. 2573-2580, 1998.
- Devahastin, S., Mujumdar, A.S., Raghavan, G.S.V., Diffusion-controlled batch drying of particles in a novel rotating jet annular spouted bed, *Drying Technology-An International Journal*, 16, pp. 525-543, 1998.
- Devahastin, S., Bassila, S., Mujumdar, A.S., A colorimetric technique to quantify wheat grain damage during drying, *Drying Technology-An International Journal*, 16, pp. 341-349, 1998.

- Raghavan, G.S.V., Kalwar, M.I., Mujumdar, A.S., Static vertical pressure of grains on air inlets of two-dimensional non-aerated spouted beds, *Powder Handling and Processing*, 10, pp. 21-26, 1998.

1997

- Gong, Z.-X., Mujumdar, A.S., Convection-dominated melting in a rectangular cavity, *Tambov State Technical University Transactions*, 3, pp. 237-256, 1997.
- Sablani, S.S., Ramaswamy, H.S., Mujumdar A.S., Dimensionless correlations for convective heat transfer to liquid and particles in cans subjected to end-over-end rotation, *Journal of Food Engineering*, 34, pp. 453-472, 1997.
- Gong, Z.-X., Mujumdar, A.S., Finite element analysis of cyclic heat transfer in a shell and tube latent heat thermal storage exchanger, *Applied Thermal Engineering*, 17, pp. 583-591, 1997.
- Ratti, C., Mujumdar, A.S., Solar drying of foods: Modelling and numerical simulation, *Solar Energy*, 60, pp. 151-157, 1997.
- Gong, Z.-X., Mujumdar, A.S., Thermodynamic optimization of the thermal process in energy storage using multiple phase change materials, *Applied Thermal Engineering*, 17, pp. 1067-1083, 1997.
- Gong, Z.-X., Mujumdar, A.S., 1997, Non-convergence versus non-conservation in effective heat capacity methods for phase change problems, *International Journal of Numerical Methods for Heat and Fluid Flow*, 7, pp. 565-579, 1997.
- Gong, Z.-X., Mujumdar, A.S., Finite element analysis of a multi-stage latent heat thermal storage system, *Numerical Heat Transfer, Part A*, 30, pp. 669-684, 1997.
- Grabowski, S., Mujumdar, A.S., Ramaswamy, H.S., Strumillo, C., Evaluation of fluidized versus spouted bed drying of baker's yeast, *Drying Technology-An International Journal*, 15, pp. 625-634, 1997.
- Passos, M.L., Massarani, G., Freire, J.T., Mujumdar, A.S., Drying of pastes in spouted beds of inert particles: Design criteria and modeling, *Drying Technology-An International Journal*, 15, pp. 605-624, 1997.
- Gong, Z.-X., Devahastin, S., Mujumdar, A.S., A two-dimensional finite element model for wheat drying in a novel rotating jet spouted bed, *Drying Technology-An International Journal*, 15, pp. 575-592, 1997.
- Beke, J, Mujumdar, A.S., Giroux, M., Some fundamental attributes of corn and potato drying in microwave fields, *Drying Technology-An International Journal*, 15, pp. 539-554, 1997.

- Parrouffe, J.M., Dostie, M., Navarri, P., Andrieu, J., Mujumdar, A.S., Heat and mass transfer relationship in combined infrared and convective drying, *Drying Technology-An International Journal*, 15, pp. 399-425, 1997.
- Pan, Y.-K., Li, Z.-Y., Mujumdar, A.S., Kudra, T., Drying of a root crop in vibro-fluidized beds, *Drying Technology-An International Journal*, 15, pp. 215-223, 1997.
- Eccles, E.R.A., Mujumdar, A.S., Bubble phenomena in aerated vibrated beds of small particles, *Drying Technology-An International Journal*, 15, pp. 95-116, 1997.
- Hosseinalipour, S.M., Mujumdar, A.S., Flow and thermal characteristics of steady two-dimensional confined laminar opposing jets, Part I: Equal Jets; Part II: Unequal Jets, *International Communications in Heat and Mass Transfer*, 24, pp. 27-38; pp. 39-50, 1997.

1996

- Gong, Z.-X., Mujumdar, A.S., A novel design configuration for a latent heat thermal storage unit, *Thermal Science*, 22, pp. 281-296, 1996.
- Mujumdar, A.S., Innovation in drying, *Drying Technology-An International Journal*, 14, pp. 1459-1475, 1996.
- Chen, H., Mujumdar, A.S., Raghavan, G.S.V., Laboratory experiments on electro-osmotic dewatering of vegetable sludge and mine tailings, *Drying Technology-An International Journal*, 14, pp. 2435-445, 1996.
- Jumah, R.Y., Mujumdar, A.S., Raghavan, G.S.V., Batch drying kinetics of corn in a novel rotating jet spouted bed, *Canadian Journal of Chemical Engineering*, 74, pp. 479-486, 1996.
- Gopalkrishnan, S., Pirkonen, P.M., Mujumdar, A.S., Weber, M.E., Electrokinetically enhanced vacuum dewatering of mineral slurries, *Filtration & Separation*, 33, pp. 929-932, 1996.
- Gong, Z.-X., Mujumdar, A.S., Development of drying schedules for one-side heating drying of refractory concrete slabs based on a finite element model, *Journal of the American Ceramic Society*, 79, pp. 1649-1658, 1996.
- Jumah, R.Y., Mujumdar, A.S., Raghavan, G.S.V., A mathematical model for constant and intermittent batch drying of grains in a novel rotating jet spouted bed, *Drying Technology- An International Journal*, 14, pp. 765-802, 1996.

- Gong, Z.-X., Mujumdar A.S., Enhancement of energy charging/discharging rates in composite slabs of different phase change materials, *International Journal of Heat and Mass Transfer*, 39, pp. 725-733, 1996.
- Gong, Z.-X., Mujumdar, A.S., Exergetic analysis of energy storage using multiple phase change materials, *Transactions of the ASME - Journal of Energy Resources Technology*, 118, pp. 242-248, 1996.
- Etemad, S. Gh., Mujumdar, A.S., Nassef, R., Simultaneously developing flow and heat transfer of non-Newtonian fluid in equilateral triangular ducts, *Applied Mathematical Modelling*, 10, pp. 898-908, 1996.
- Gong, Z.-X., Mujumdar, A.S., Cyclic heat transfer in a novel storage unit of multiple phase change materials, *Applied Thermal Engineering*, 16, pp. 807-816, 1996.
- Gopalkrishnan, S., Mujumdar, A.S., Weber, M.E., Optimal off-time in interrupted electro-osmotic dewatering, *Separation Technology*, 6, pp. 197-200, 1996.

1995

- Etemad, S. Gh., Mujumdar, A.S., Effects of variable viscosity and viscous dissipation on laminar convection heat transfer of a power law fluid in the entrance region of a semicircular duct, *International Journal of Heat and Mass Transfer*, 38, pp. 2225-2238, 1995.
- Hosseinalipour, S.M., Mujumdar, A.S., Comparative evaluation of different turbulence models for confined impinging and opposing jet flows, *Numerical Heat Transfer, Part A*, 28, pp. 647-666, 1995.
- Poirier, N., Crotogino, R.H., Mujumdar, A.S., Douglas, W.J.M., The effect of superheated steam drying on the properties of paper from chemical pulp, *Journal of Pulp and Paper Science*, 21, pp. 374-378, 1995.
- Gong, Z.-X., Mujumdar, A.S., A simultaneous iteration procedure for the finite element solution of enthalpy model for phase change heat conduction problems, *International Journal of Numerical Methods for Heat and Fluid Flow*, 5, pp. 589-600, 1995.
- Gong, Z.-X., Mujumdar, A.S., A new solar receiver thermal store for space-based activities using multiple composite phase change materials, *Transactions of the ASME - Journal Solar Energy Engineering*, 117, pp. 215-220, 1995.
- Tulasidas, T., Raghavan, G.S.V., Mujumdar, A.S., Microwave drying of grapes in a single mode cavity at 2450 Hz, Part I: Drying kinetics; Part II: Quality and

- energy aspects, *Drying Technology -An International Journal*, 13, pp. 1949-1992, 1995.
- Gong, Z.-X., Mujumdar, A.S., A two-dimensional finite element model for kiln-drying of refractory concrete, *Drying Technology-An International Journal*, 13, pp. 585-606, 1995.
 - Hosseinalipour, S.M., Mujumdar, A.S., Flow, heat transfer and particle motion in confined turbulent opposing slot jets, *Drying Technology-An International Journal*, 13, pp. 753-782, 1995.
 - Beke, J., Mujumdar, A.S., Bosisio, R.G., Drying of fresh and rewetted shelled corn in microwave fields, *Drying Technology-An International Journal*, 13, pp. 463-475, 1995.
 - Seyedein, S.H., Hasan, M., Mujumdar, A.S., Turbulent flow and heat transfer for confined multiple impinging slot jets, *Numerical Heat Transfer, Part A*, 27, pp. 35-53, 1995.
 - Ratti, C., Mujumdar, A.S., Simulation of packed bed drying of foodstuffs with air flow reversed, *Journal of Food Engineering*, 26, pp. 259-271, 1995.
 - Gong, Z.-X., Mujumdar, A.S., The influence of an impermeable surface on pore steam pressure during drying refractory concrete slab, *International Journal of Heat and Mass Transfer*, 38, pp. 1297-1303, 1995.
 - Gong, Z.-X., Mujumdar, A.S., Non-iterative procedure for the finite element solution of the enthalpy model for phase change heat conduction problems, *Numerical Heat Transfer, Part B*, 27, pp. 437-446, 1995.

1994

- Rabie, H.R., Mujumdar, A.S., Weber, M.E., Electro-osmotic dewatering of bentonite in thin beds, *Separation Technology*, 4, pp. 180-182, 1994.
- Gong, Z.-X. Mujumdar, A.S., Cyclical heat conduction in melting and freezing of composite slabs of different phase change materials, *Proceedings of the 10th International Heat Transfer Conference, Vol. 4*, Brighton, UK, pp. 231-236, 1994 (referred).
- Shibata, H., Mujumdar, A.S., Steam drying technologies: Japanese R&D, *Drying Technology-An International Journal* 12, pp. 1485-1525, 1994.
- Grabowski, S., Mujumdar, A.S., Ramaswamy, H.S., Osmo-convective drying of grapes, *Drying Technology-An International Journal*, 12, pp. 1211-1234, 1994.

- Bond, J.F., Mujumdar, A.S., van Heiningen, A.R.P., Douglas W.J.M., Drying paper by impinging jets of superheated steam, Part I: Constant drying rate in superheated steam, *Canadian Journal of Chemical Engineering*, 72, pp. 446-451, 1994.
- Bond, J.F., Mujumdar, A.S., van Heiningen, A.R.P., Douglas, W.J.M., Drying paper by impinging jets of superheated steam, Part II: Comparison of steam and air as drying fluids, *Canadian Journal of Chemical Engineering*, 72, pp. 452-456, 1994.
- Poirier, N.A., Crotogino, R.H., Mujumdar, A.S., Douglas, W.J.M., The effect of superheated steam drying on the properties of TMP paper, *Journal of Pulp and Paper Science*, 20, pp. J97-J102, 1994.
- Etemad, S.Gh., Mujumdar, A.S., Huang, B., Viscous dissipation effects in entrance region heat transfer for a power law fluid flowing between parallel plates, *International Journal of Heat and Fluid Flow*, 15, pp. 122-132, 1994.
- Etemad, S.Gh., Mujumdar, A.S., Effect of aspect ratio and rounded corners on laminar forced convection heat transfer of a non-Newtonian fluid, *International Communications in Heat Mass Transfer*, 21, pp. 283-296, 1994.
- Seyedein, S.H., Hasan, M., Mujumdar, A.S., Laminar flow and heat transfer for multiple impinging slot jets with an inclined confinement surface, *International Journal of Heat and Mass Transfer*, 37, pp. 1867-1875, 1994.
- Seyedein, S.H., Hasan, M., Mujumdar, A.S., Modelling of single confined turbulent slot jet impingement using different various k-e turbulence models, *Applied Mathematical Modelling*, 8, pp. 526-537, 1994.
- Rabie, H.R., Mujumdar, A.S., Weber, M.E., Interrupted electro-osmotic dewatering of clay suspensions, *Separation Technology*, 4, pp. 38-46, 1994.
- Passos, M.L., Mujumdar, A.S., Massarani, G., Scale-up of spouted bed dryers: Criteria and applications, *Drying Technology-An International Journal*, 12, pp. 351-391, 1994.

1993

- Gong, Z.-X., Mujumdar, A.S., A model for kiln drying of refractory concrete slabs, *Drying Technology-An International Journal*, 11, pp. 1617-1639, 1993.
- Kalwar, M.I., Raghavan, G.S.V., Mujumdar, A.S., Circulation of particles in two-dimensional spouted beds with draft plates, *Powder Technology*, 77, pp. 233-242, 1993.

- Passos, M.L., Mujumdar, A.S., Raghavan, G.S.V., Prediction of maximum spoutable bed height in two-dimensional spouted beds, *Powder Technology*, 74, pp. 97-105, 1993.
- Timofeev, O., Mujumdar, A.S., Press drying, condebelt drying and impulse drying of paper, A selective bibliography, *Drying Technology-An International Journal*, 11, pp. 1885-1902, 1993.
- Beke, J., Vas, A., Mujumdar, A.S., Impact of process parameters on nutritional value of convectively dried grains, *Drying Technology-An International Journal*, 11, pp. 1415-1428, 1993.
- Ratti, C., Mujumdar, A.S., Fixed bed batch drying of shrinking particles with time-varying drying air conditions, *Drying Technology-An International Journal*, 11, pp. 1311-1335, 1993.
- Jumah, R.Y., Mujumdar, A.S., A PC program for preliminary design of a continuous well-mixed fluid bed dryer, *Drying Technology-An International Journal*, 11, pp. 831-846, 1993.
- Beke, J., Mujumdar, A.S., Influence of drying conditions on the fragility of corn kernels, *Drying Technology-An International Journal*, 11, pp. 603-614, 1993.
- Huang, B., Mujumdar, A.S., Use of neural network to predict industrial dryer performance, *Drying Technology-An International Journal*, 11, pp. 525-541, 1993.
- Hirosue, H., Mujumdar, A.S., Effect of particle cascade from flights on heat transfer and pressure drop in rotary dryers and coolers, *Drying Technology-An International Journal*, 11, pp. 195-207, 1993.
- Tulasidas, T.L., Kudra, T., Raghavan, G.S.V., Mujumdar, A.S., Effect of bed height on simultaneous heat and mass transfer in a two-dimensional spouted bed dryer, *International Communications in Heat Mass Transfer*, 20, pp. 79-88, 1993.

1992

- Kalwar, M.I., Raghavan, G.S.V., Mujumdar, A.S., Spouting of two-dimensional beds with draft plates, *Canadian Journal of Chemical Engineering*, 70, pp. 887-894, 1992.
- Alikhani, Z., Raghavan, G.S.V., Mujumdar, A.S., Adsorption drying of corn in zeolite granules using a rotary drum, *Drying Technology-An International Journal*, 10, pp. 783-797, 1992.

- Shivhare, U.S., Raghavan, G.S.V., Bosisio, R.G., Mujumdar, A.S., Microwave drying of corn III - Intermittent operation, *Transactions of the ASAE*, 35, pp. 959-962, 1992.
- Zhang, D., Mujumdar, A.S., Deformation and stress analysis of porous capillary bodies during intermittent volumetric thermal drying, *Drying Technology-An International Journal*, 10, pp. 421-443, 1992.
- Chen, S.-R., Chen, J.-Y., Mujumdar, A.S., Preliminary study of steam drying of silkworm cocoons, *Drying Technology-An International Journal*, 10, pp. 251-260, 1992.
- Eccles, E.R.A., Mujumdar, A.S., Correlation for cylinder-to-bed heat transfer in aerated vibrated beds of small particles, *Drying Technology-An International Journal*, 10, pp. 165-187, 1992.
- Eccles, E.R.A., Mujumdar, A.S., Cylinder-to-bed heat transfer in aerated vibrated beds of small particles. *Drying Technology-An International Journal*, 10, pp. 139-164, 1992.
- Malhotra, K., Mujumdar, A.S., Particle flow and contact heat transfer characteristics of stirred granular beds, *Drying Technology-An International Journal*, 10, pp. 51-80, 1992.
- Ramamurthy, P., Mujumdar, A.S., van Heiningen, A.R.P., Kubes, G.J., Concentration of black liquor to high solids, *TAPPI Journal* 74, pp. 195-202, 1992.

1991

- Shivhare, U.S., Raghavan, G.S.V., Bosisio, R.G., Mujumdar, A.S., Particulate drying in microwave environment with varying initial moisture content, *Powder Handling and Processing*, 3, pp. 153-157, 1991.
- Kalwar, M.I., Kudra, T., Raghavan, G.S.V., Mujumdar, A.S., Drying of grains in a drafted two-dimensional spouted bed, *Journal of Food Process Engineering*, 5, pp. 321-332, 1991.
- Kudra, T., Pan, Y.-K., Mujumdar, A.S., Evaporation from single droplets impinging on heated surfaces, *Drying Technology-An International Journal*, 9, pp. 693-707, 1991.
- Dong, Z.-X., Pan, Y.-K., Wei, Z., Mujumdar, A.S., Effect of vibration on the drying rate during the falling rate period, *Drying Technology-An International Journal*, 9, pp. 723-733, 1991.

- Polat, S., Mujumdar, A.S., van Heiningen, A.R.P., Douglas, W.J.M., Numerical model for turbulent jets impinging on a surface with throughflow, *Journal of Thermophysics and Heat Transfer*, 5, pp. 172-180, 1991.
- Gong, Z.-X., Song, B., Mujumdar, A.S., Numerical simulation of drying of refractory concrete, *Drying Technology-An International Journal*, 9, pp. 479-500, 1991.
- Bond, J.-F., Crotogino, R.H., Douglas, W.J.M., Mujumdar, A.S., van Heiningen, A.R.P., Impingement drying of paper in superheated steam in the constant rate period, *Technology Today*, 5, pp. 284-288, 1991.
- Ju, S., Weber, M.E., Mujumdar, A.S., Electroosmotic dewatering of bentonite suspensions, *Separations Technology*, 1, pp. 214-221, 1991.
- Hasan, M., Mujumdar, A.S., Weber, M.E., Cyclic melting and freezing, *Chemical Engineering Science*, 47, pp. 1537-1587, 1991.
- Polat, S., Mujumdar, A.S., Douglas, W.J.M., Impingement heat transfer under a confined slot jet, Part I: Effect of surface throughflow, *Canadian Journal of Chemical Engineering*, 69, pp. 266-273, 1991.
- Polat, S., Mujumdar, A.S., Douglas, W.J.M., Impingement heat transfer under a confined slot jet, Part II: Effects of surface motion and throughflow, *Canadian Journal of Chemical Engineering*, 69, pp. 274-280, 1991.
- Malhotra, K., Mujumdar, A.S., Model for contact heat transfer in mechanically stirred granular beds, *International Journal of Heat Mass Transfer*, 34, pp. 415-425, 1991.
- Mujumdar, A.S., Drying technologies of the future, *Drying Technology-An International Journal*, 9, pp. 325-347, 1991.
- Pan, Y.-K., Gan, Y.-M., Liu, X.-D., Wei, Z., Mujumdar, A.S., Drying of sticky granular materials during the constant rate period in a vibrated fluidized bed, *Drying Technology- An International Journal*, 9, pp. 1067-1079, 1991.
- Malhotra, K., Mujumdar, A.S., Wall-to-bed heat transfer rates in mechanically stirred granular beds, *International Journal of Heat Mass Transfer*, 34, pp. 427-435, 1991.

1990

- Kudra, T., Mujumdar, A.S., Raghavan, G.S.V., Kalwar, M.I., Two-dimensional spouted beds for thermal processing, *Powder Handling and Processing*, 2, pp. 347-353, 1990.

- Passos, M.L., Mujumdar, A.S., Raghavan, G.S.V., Spouted and spout-fluidized beds for grain drying, *Drying Technology-An International Journal*, 7, pp. 660-696, 1990.
- Malhotra, K., Mujumdar, A.S., Effects of particle shape on particle-surface thermal contact resistance, *Journal of Chemical Engineering of Japan*, 23, pp. 510-513, 1990.
- Polat, S., Mujumdar, A.S., van Heiningen, A.R.P., Douglas, W.J.M., Effect of near-wall modelling on prediction of impingement heat transfer, *Drying Technology-An International Journal*, 8, pp. 705-730, 1990.
- Malhotra, K., Miyahara, M., Mujumdar, A.S., Estimation of particle renewal rates along the wall in mechanically stirred granular beds, *Chemical Engineering and Processing*, 27, pp. 121, 1990.
- Kumar, P., Mujumdar, A.S., Effect of drying on pulp and paper properties: A bibliography, *Drying Technology-An International Journal*, 8, pp. 543-569, 1990.
- Kumar, P., Mujumdar, A.S., Superheated steam drying: A bibliography, *Drying Technology-An International Journal*, 8, pp. 195-205, 1990.
- Kumar, P., Mujumdar, A.S., Koran, Z., Microwave drying: Effects on paper properties, *Drying Technology-An International Journal* 8, pp. 1061-1088, 1990.

1989

- Lawal, A., Mujumdar, A.S., Viscous dissipation effects on thermal entrance heat transfer to power-law fluids in arbitrary cross-sectional ducts, *Chemical Engineering Journal*, 41, pp. 57-66, 1989.
- Kudra, T., Mujumdar, A.S., Raghavan, G.S.V., Gas-to-particle heat transfer in two-dimensional spouted beds, *International Communications in Heat and Mass Transfer*, 16, pp. 731-741, 1989.
- Poirier, N., Mujumdar, A.S., Numerical solutions to the Graetz problem – Achieving accuracy in the entrance region, *International Communications in Heat and Mass Transfer* 16, pp. 205-514, 1989.
- Erdesz, K., Mujumdar, A.S., Numerical investigation of a phenomenological model of a vibrated fluidized bed, *Drying Technology-An International Journal*, 7, pp. 487-502, 1989.
- Kudra, T., Mujumdar, A.S., Impinging stream dryers for particles and pastes, *Drying Technology-An International Journal*, 7, pp. 219-266, 1989.

1988

- Mujumdar, A.S., Erdesz, K., Applications of vibration techniques for drying and agglomeration in food processing, *Drying Technology-An International Journal*, 6, pp. 275-290, 1988.
- Malhotra, K., Mujumdar, A.S., Imakoma, H., Okazaki, M., Fundamental particle mixing studies in an agitated bed of granular materials in a cylindrical vessel, *Powder Technology*, 55, pp. 107-114, 1988.
- Mujumdar, A.S., Passos, M.L., Dryer design project – A tool to teach drying and design to undergraduates, *Drying Technology-An International Journal*, 6, pp. 275-290, 1988.

1987

- Filkova, I., Lawal, A., Mujumdar, A.S., Heat transfer and power-law fluids in tube flow: Numerical and experimental studies, *Journal of Food Engineering*, 6, pp. 143-151, 1987.
- Malhotra, K., Mujumdar, A.S., Immersed surface heat transfer in a vibrated fluidized bed, *Industrial and Engineering Chemistry Research*, 26, pp. 1983-1992, 1987.
- Fallavollita, J.A., Avedesian, M.M., Mujumdar, A.S., Kraft black liquor recovery in a fluidized bed, *Canadian Journal of Chemical Engineering*, 65, pp. 812-817, 1987.
- Weber, M.E., Witwit, S.M., Mujumdar, A.S., A model for electro-osmotic dewatering under constant voltage, *Drying Technology-An International Journal*, 5, pp. 467-474, 1987.
- Jariwala, V.G., Mujumdar, A.S., Weber, M.E., The periodic steady state for cyclic energy storage in paraffin wax, *Canadian Journal of Chemical Engineering*, 65, pp. 899-906, 1987.
- Lawal, A., Mujumdar, A.S., Experimental study of heat transfer to pseudo-plastic fluids in square and circular tubes, *Chemical Engineering Communications*, 59, pp. 309-324, 1987.
- Passos, M.L., Mujumdar, A.S., Raghavan, G.S.V., Pressure drop in slotted spouted beds of grains: Comparison of data with models, *Powder Technology*, 52, pp. 131-137, 1987.

- Hasan, M., Mujumdar, A.S., Laminar boundary-layer analysis of simultaneous mass and heat transfer in natural convection around a horizontal cylinder, *International Journal of Energy Research*, 11, pp. 359-371, 1987.

1986

- Erdesz, K., Mujumdar, A.S., Hydrodynamical aspects of conventional and vibrated fluid beds – A comparative evaluation, *Powder Technology*, 46, pp. 167-172, 1986.
- Lawal, A., Mujumdar, A.S., Extended Graetz problem – A comparison of various solution techniques, *Chemical Engineering Communications*, 39, pp. 91-100, 1986.

1985

- Hasan, M., Mujumdar, A.S., Combined heat and mass transfer in free convection along a rotating plate under uniform heat and mass fluxes, *Chemical Engineering Communications*, 35, pp. 212-222, 1985.
- van Heiningen, A.R.P., Douglas, W.J.M., Mujumdar, A.S., A high sensitivity fast-response heat flux sensor, *International Journal of Heat and Mass Transfer*, 28, pp. 1657-1667, 1985.
- Filkova, I., Koziskova, B., Mujumdar, A.S., Lawal, A., Convective heat transfer in a tube for selected liquids in the food industry, *Sbornik Uvtiz, Potranarske Vedy, (Czech Academy of Agriculture)*, 3, pp. 173-182, 1985 (in Czech).
- Hasan, M., Mujumdar, A.S., Simultaneous heat and mass transfer in mixed convection along a vertical cone, *Chemical Engineering Communications*, 36, pp. 281-298, 1985.
- Hasan, M., Mujumdar, A.S., Simultaneous heat and mass transfer in free convection from a horizontal cylinder, *AIAA Journal*, 23, pp. 1602-1608, 1985.
- Lawal, A., Mujumdar, A.S., Developing flow and heat transfer to power-law fluids in square, trapezoidal and pentagonal Ducts, *International Communications in Heat and Mass Transfer*, 12, pp. 23-31, 1985.
- Conley, N., Lawal, A., Mujumdar, A.S., An assessment of the accuracy of numerical solutions to the Graetz problem, *International Communications in Heat and Mass Transfer*, 12, pp. 209-218, 1985.

- Lawal, A., Mujumdar, A.S., Laminar flow and heat transfer for power-law fluids flowing in arbitrary cross-section ducts, *Numerical Heat Transfer*, 8, pp. 217-244, 1985.
- Polat, S., Mujumdar, A.S., Douglas, W.J.M., Heat transfer distribution under a turbulent impinging jet, *Drying Technology-An International Journal*, 3, pp. 15-38, 1985.
- Hasan, M., Mujumdar, A.S., Combined heat and mass transfer in free convection about a sphere, *Canadian Journal of Chemical Engineering*, 63, pp. 412-421, 1985.
- Cui, W.-K., Douglas, W.J.M., Mujumdar, A.S., Impingement steam drying of paper, *Drying Technology-An International Journal*, 3, pp. 307-320, 1985.
- Malhotra, K., Mujumdar, A.S., Flow patterns for cylinders immersed in an aerated vibrated bed, *Canadian Journal of Chemical Engineering*, 63, pp. 22-28, 1985.
- Hasan, M., Mujumdar, A.S., Simultaneous heat and mass transfer under mixed convection along a vertical cone, *Energy Research*, 9, pp. 129-140, 1985.
- Hasan, M., Mujumdar, A.S., Transpiration-induced buoyancy effect around a horizontal cylinder embedded in a porous medium, *Energy Research*, 9, pp. 151-163, 1985.

1984

- Jaussaud, J.-P., Mujumdar, A.S., Douglas, W.J.M., Evaporation under an obliquely impinging laminar ducted slot jet – A numerical model, *International Communications in Heat and Mass Transfer*, 11, pp. 335-344, 1984.
- Hasan, M., Mujumdar, A.S., Coupled heat and mass transfer in natural convection under flux condition along a vertical cone, *International Communications in Heat and Mass Transfer*, 11, pp. 157-172, 1984.
- Hasan, M., Mujumdar, A.S., Effect of spatially varying acceleration on the combined heat and mass transfer in free convection along a plate, *International Communications in Heat and Mass Transfer*, 11, pp. 591-604, 1984.
- Ringer, D.U., Mujumdar, A.S., Analysis of aerodynamics and heat transfer in vibro-fluidized beds, *Drying Technology-An International Journal*, 2, pp. 449-470, 1984.
- Mujumdar, A.S., Cui, W.-K., Superheated steam drying of paper and board, *IPPTA Journal*, 21, pp. 49-53, 1984.

- Malhotra, K., Law, L.K.C., Mujumdar, A.S., Pressure drop characteristics for vibrated beds of dry and sticky particles, *Powder Technology*, 39, pp. 101-104, 1984.
- Cui, W.-K., Mujumdar, A.S., Trends in drying of paper, *China Pulp & Paper*, 2, pp. 43-52, 1984 (in Chinese).
- Lawal, A., Mujumdar, A.S., Forced convection heat transfer to a power-law fluid in arbitrary cross-section ducts, *Canadian Journal of Chemical Engineering*, 62, pp. 326-333, 1984.

2. Conference publications (partial list)

2006

- Innovation and globalization in drying R&D; A.S. Mujumdar; Proc. Of IDS2006, 15th International Drying Symposium Budapest, Hungary, Ed. I. Farkas, Szent Istvan University, Godollo, Hungary, Vol. A, pp 3-17, August 2006.
- Recent advances in fluid bed drying; B.N. Thorat, A.K. Patel, S.S. Waje and A.S. Mujumdar; 15th International Drying Symposium Budapest, Hungary, Ed. I. Farkas, Szent Istvan University, Godollo, Hungary, Vol. A, pp 54-67, August 2006.
- Screw conveyor dryer: Process and equipment design; S.S. Waje, B.N. Thorat and A.S. Mujumdar; 15th International Drying Symposium Budapest, Hungary, Ed. I. Farkas, Szent Istvan University, Godollo, Hungary, Vol. A, pp 621-628, August 2006.
- Continuous operation of a chemical heat pump; H. Ogura, S. Yasuda, Y. Otsubo and A.S. Mujumdar; 15th International Drying Symposium Budapest, Hungary, Ed. I. Farkas, Szent Istvan University, Godollo,
- Pulse combustion impingement to enhance paper drying; Z.H. Wu, A.S. Mujumdar, X.D. Liu and L. Yang; 15th International Drying Symposium Budapest, Hungary, Ed. I. Farkas, Szent Istvan University, Godollo, Hungary, Vol. B., pp 971-978, August 2006.
- A study of coupled heat and mass transfer through a composite food product during convective drying; S.M.A. Rahman, M.R.

Islam and A.S. Mujumdar; 15th International Drying Symposium
Budapest, Hungary, Ed. I. Farkas, Svent Istvan University,
Godollo, Hungary, pp 1503-1509 August, 2006.

- Mujumdar, A.S., Academic Research: Effect of Globalization and Role of Innovation, Plenary Lecture, CHEMECA2006, Joint Australia-New Zealand Chemical Engineering Conference, Auckland, New Zealand, September 2006.
- Mujumdar, A.S., Overview of R&D projects utilizing FLUENT CFD software, Invited lecture, FLUENT Users' Group Meeting, Singapore, July 27-28, 2006.
- Mujumdar, A.S., Modeling of Selected Problems in Industrial Transport Processes, Plenary lecture, ENIEF 2006, XV Congress on Numerical Methods and their Applications, Santa Fe, Argentina, Nov. 7-10, 2006.
- Z.Q. Lou, C. Yap and A.S. Mujumdar, "Numerical Investigation of Two-phase Impinging Jet Heat Transfer with Mixture Model", Abstract accepted by ASME ATI Conference, Milan, Italy, 2006
- Wang X.-Q., Mujumdar, A.S. and Yap, C., Optimization of fractal-like microchannel networks, Fluent User Group Meeting, Singapore, July 27-28, 2006.
- Wang X.-Q., Mujumdar, A.S. and Yap, C., Free convection heat transfer in horizontal and vertical rectangular cavities filled with nanofluids, 13th Int. Conference of Heat Transfer, Sydney, Australia, August 13-18, 2006.
- Wang, X.Q., Mujumdar, A.S. and Yap, C., Free convection heat transfer in horizontal and vertical rectangular cavities filled with nanofluids, 13th International Heat Transfer Conference, Sydney, Australia, August 13-18, 2006.
- Z.Q. Lou, C. Yap and A.S. Mujumdar, "Experimental Investigation of Single Phase and Boiling Heat Transfer of Pure Water Under a Micro-impinging Jet Heat Transfer" Abstract accepted by ECI Conference on Boiling, Spoleto 7-12 May 2006.
- Xiang-Qi Wang, Arun S. Mujumdar, and Christopher Yap, Free convection heat transfer in horizontal and vertical rectangular cavities filled with nanofluids, submitted to 13th International Heat Transfer Conference, Sydney, Australia, 13-18 August, 2006.
- Hee Joo Poh, Rina Lum, Lou Jing, Arun. S. Mujumdar, Investigation of New Channel Designs on PEMFC Performance, /ASME The Fourth International Conference on FUEL CELL SCIENCE, ENGINEERING and TECHNOLOGY/, June, 19-21, 2006, Irvine, California, Abstract accepted - FUELCELL2006-97242.

2005

- Mujumdar, A.S., Innovation and R&D needs in industrial drying technologies, Plenary lecture, Asia Pacific Drying Conference ADC2005, Proceedings, pp. 3-36, 2005.
- Tong, C.K., Islam, M.R., and Mujumdar, A.S., Mechanical means of enhancing drying rates: Effect on drying kinetics and quality, Asia Pacific Drying Conference ADC2005, Proceedings, pp. 289-305, 2005.
- Huang, L., Mujumdar, A.S. and Zhou, C., Development of a novel two-stage horizontal spray dryer using CFD, Asia Pacific Drying Conference ADC2005, Proceedings, pp. 613-625, 2005.
- Zhonghua, W., mujumdar, A.S. Liu, X and Yang, L., Flow and heat characteristics under an impinging pulse combustor tailpipe exhaust, Asia Pacific Drying Conference ADC2005, Proceedings, pp. 670-684, 2005.
- Z.Q. Lou, C. Yap and A.S. Mujumdar, Numerical investigation of laminar impinging jet heat transfer to finned heat sink, Proceedings of ASME:2005 Summer Heat Transfer Conference 2005, Published on CD/Presented
- Yong, Chan Kok, Islam, Md R., and Mujumdar, A.S., Mechanical means of enhancing drying rates: Effect on drying kinetics and quality, 4th Asia-Pacific Drying Conference, ADC05, Kolkata, India, December, 12-14, 2005.
- Saravanan, V., Islam, Md. R., Mujumdar, A.S., Microwave vacuum drying of heat sensitive materials, 4th Asia-Pacific Drying Conference, ADC05, Kolkata, India, December, 12-14, 2005.
- Mujumdar, A.S. and Devahastin, S., Recent advances in drying technologies for roots, ISSc Conference, Kuala Lumpur, Malaysia, June 2005.

2004

- Suvarnakuta, P., Devahastin, S., Soponronnarit, S. and Mujumdar, A.S., Drying kinetics and heat transfer of porous particles undergoing low-pressure superheated steam drying, 15th International Symposium on Transport Phenomena (ISTP15), Bangkok, Thailand, May 9-12, 2004.
- Mujumdar, A.S., Heat transfer under impinging jets, Keynote Lecture, 15th International Symposium on Transport Phenomena (ISTP15), Bangkok, Thailand, May 9-12, 2004.

- S. J. Wang, S. Devahastin and A. S. Mujumdar, A Computational Study of Approaches to Improve Mixing under Laminar Confined Impinging Streams, [15th International Symposium on Transport Phenomena, Bangkok, Thailand, May 9-13, 2004.](#)
- Wang, S.J., and Mujumdar, A.S., Flow and mixing characteristics of 3D confined turbulent opposing jets: Unequal jets, International Workshop and Symposium on Industrial Drying, (IWSID2004), Mumbai, India, December 20-23, 2004, Topics in Heat & Mass Transfer, edited by G.H. Chen, S. Devahastin and B.N. Thorat.
- Birchal, V.S., Passos, M.L., Wildhagen, G.R.S. and Mujumdar, A.S., The influence of spray dryer operation variables on milk powder quality, 14th International Drying Symposium, (IDS 2004), Sao Paulo, Brazil, August 22-25, 2004.
- Ogura, H., Yamamoto, T., Otsubo, Y., Ishida, H., Kage, H. and Mujumdar, A.S., Controllability of a chemical heat pump dryer, 14th International Drying Symposium, (IDS 2004), Sao Paulo, Brazil, August 22-25, 2004.
- Trindade, A.L.G., Costa Jr., E.F., Passos, M.L., and Mujumdar, A.S., Drying of non-Newtonian suspensions in conical spouted beds of inert particles: Model and simulation, 14th International Drying Symposium, (IDS 2004), Sao Paulo, Brazil, August 22-25, 2004.
- Huang, Lixin, Kumar, Kuruchi, and Mujumdar Arun S., Computational fluid dynamics simulation of spray drying using different models for the falling rate period, 14th International Drying Symposium, (IDS 2004), Sao Paulo, Brazil, August 22-25, 2004.
- Huang, Lixin, de A. Passos, M.L., Kumar, Kuruchi, and Mujumdar, Arun S., A three-dimensional simulation of a spray dryer with a rotary atomizer, 14th International Drying Symposium, (IDS 2004), Sao Paulo, Brazil, August 22-25, 2004.
- Markowski, Adam S., and Mujumdar Arun S., Layer-of-protection analysis (LOPA) for industrial drying risk assessment, 14th International Drying Symposium, (IDS 2004), Sao Paulo, Brazil, August 22-25, 2004.
- Mujumdar, Arun S., Innovation and role of IDS in promoting global R&D effort in drying: A personal perspective, Plenary Lecture, 14th International Drying Symposium, (IDS 2004), Sao Paulo, Brazil, August 22-25, 2004.
- Mujumdar, Arun S., Emerging dehydration technologies for preservation of agro-products, Keynote lecture, International Conference on Emerging Technologies in Agricultural and Food Engineering, IIT Kharagpur, Dec. 14-17, 2004.
- Huang, Lixin, Passos, M.L., and Mujumdar, A.S., Comparison of CFD model with experimental results for a spray dryer fitted with a rotating wheel atomizer,

- International Workshop and Symposium on Industrial Drying, (ISWID2004) Mumbai, India, December, 20-23, 2004.
- So Zhao Ki, Toh Keng Wi and Ravi Kandasamy, Feasibility Study for the Application of Phase Change Material(PCM) in Thermal Management of Portable Electronic Devices, Topics on Heat and Mass Transfer, International Workshop and Symposium on Industrial Drying(IWSID), pp 256-263, Mumbai, India, 2004.
 - Poh, Hee Joo, Kumar, Kurichi, Mujumdar Arun S., Impingement heat transfer under pulsed single and multiple turbulent air jets, International Workshop and Symposium on Industrial Drying, IWSID 2004, Mumbai, India, December 21-23, 2004.
 - Shi, Yu Ling, Mujumdar, A.S. and Ray, M.B., Effect of large temperature differences on local Nusselt number for turbulent slot impinging jet, International Workshop and Symposium on Industrial Drying, (ISWID2004) Mumbai, India, December, 20-23, 2004.
 - Wu, Zhonghua and Mujumdar A.S., Pulse combustion spray drying, International Workshop and Symposium on Industrial Drying, (ISWID2004) Mumbai, India, December, 20-23, 2004.
 - Wu, Zhonghua, Mujumdar, A.S., Is Bombardier Beetle design suited for a pulse combustor? Workshop and Symposium on Industrial Drying, (ISWID2004) Mumbai, India, December, 20-23, 2004.
 - Wu, Zhonghua, Mujumdar, A.S. and Liu, Xiangdong, Numerical investigation of a pulse combustion spray drying process, CIGR International Conference, Oct. 11-14, 2004, Beijing, P.R. China.
 - Mujumdar, Arun S., Global Perspectives on Drying R&D: Needs and Emerging Trends, Plenary lecture, International Workshop and Symposium on Industrial Drying, (ISWID2004) Mumbai, India, December, 20-23, 2004.

2003

- Mujumdar, A.S., 2003, Innovation in thermal drying technologies and future R&D needs, Keynote lecture, Proceedings of 14th International Symp. on Transport Phenomena, Bali, July 7-9, 2003.
- Mujumdar, A.S. and Alves-Filho, O., Emerging Drying Technologies: Future Trends and R&D Needs, Keynote Lecture, 2nd Nordic Drying Conference, Copenhagen, Denmark, June 25-27, 2003 (CD Proceedings).
- Alves-Filho, O. and Mujumdar, A.S., International Drying R&D, Invited lecture, EUDrying 03, Crete, Greece, September 4-5, 2003.

- Mujumdar, A.S. Invited Lecture on Developments in Drying of Grains and Cereals, Regional Seminar on Grain Drying in South Asia, December 1-2, 2003, Durgapur, India (Australian Project) Also, Chief Guest and Inaugural Address
- Mujumdar, A.S. Recent Advances in Food Dehydration, Keynote Lecture, CoFE, AIChE Conference, San Francisco, USA, November 18-20, 2003.
- Gaikwad, S.B., Wang, W., Chen, G., Thorat, B. and Mujumdar A.S., Fluidized bed drying with microwave heating: Effect of loss factor, NDC'03, 2nd Nordic Drying Conference, Copenhagen, Denmark. June 27-27,2003
- Ogura, H. and Mujumdar, A.S., Chemical heat pump drying in the heat storing step, ADC'03, 3rd Asia-Pacific Drying Conference, September 1-3, 2003, Bangkok, Thailand.
- Huang, L., Kumar, K. and Mujumdar, A.S., Numerical experiments in a mixed flow spray dryer, NDC'03, 2nd Nordic Drying Conference, Copenhagen, Denmark, June 25-27, 2003.
- Huang, L., Kumar, K. and Mujumdar, A.S., Some CFD simulations of spray drying chambers – Effects of operating conditions, ADC'03, 3rd Asia-Pacific Drying Conference, September 1-3, 2003, Bangkok, Thailand.
- Islam, M.R., Sablani, S.S., Mujumdar, A.S., Prediction of drying rates using artificial networks, 3rd Asia-Pacific Drying Conference, Asian Institute of Technology, Proceedings, pp. 447-455, Sept. 1-3, 2003, Bangkok, Thailand
- Islam, M.R., Ho, J.C., and Mujumdar, A.S., Some numerical simulations with liquid diffusion model and their practical significance, ADC'03, 3rd Asia-Pacific Drying Conference, Proceedings, pp. 645-656, September 1-3, 2003, Bangkok, Thailand.
- Yeo, B.K.C., Halwader, M.N.A. and Mujumdar, A.S., Phase change energy storage system: an analysis of cyclic melting and freezing, Proceedings of ISES Solar World Congress, 14-19 June, 2003, Goteborg, Sweden.

2002

- Mujumdar, A.S., Current status and future directions of industrial drying, Plenary lecture, Proceedings of Regional Symposium of Chemical Engineering, RSCE 2002, Vol. 1, pp. 11-24, Kuala Lumpur, Malaysia October 28-30, 2002.
- Mujumdar, A.S., Thermal dehydration technologies: Recent progress and future challenges, Endowment lecture, Proceedings of the fifth joint Heat and Mass Transfer conference of Indian Heat and Mass Transfer Society and American

- Society of Mechanical Engineers, Editors S.K. Saha, S.P. Venkateshan, B.V. S.S.S. Prasad, S.S. Sadhal, pp. 15-26. Kolkata, India, January 4-6, 2002.
- Mujumdar, A.S. and Wang, W., Drying Research – Current States and Future Trends, Proceedings of the 8th National Drying Symposium, Harbin, P.R. China, January 8-10, 2002.(In Chinese)
 - Hawlader, M.N.A., Chua, K.J., Chou, S.K., Ho, J.C. and Mujumdar, A.S., Heat pump drying of banana slices: Influence of cyclic variation of air temperature on product quality, 7th Int. Energy Agency Conf., Beijing, May 19-22, 2002.
 - Mujumdar, A.S., A new paradigm for future drying R&D, Keynote Lecture, 13th International Drying Symposium (IDS'2002), Beijing, P.R. China, August 27-31, 2002.
 - Ho, J.C., Hawlader, M.N.A., Mujumdar, A.S., Suckoordeen, A., Some hydrodynamic characteristics of spouted bed dryer with converging and diverging draft tubes, Proceedings of the 13th International Drying Symposium, IDS'2002, Beijing, August 27-31, 2002.
 - Devahastin, S. and Mujumdar A.S., A numerical study of flash drying characteristics of a two-dimensional impinging stream dryer, Proceedings of the 13th International Drying Symposium, IDS'2002, Beijing, August 27-31, 2002.
 - Ogura, H., Hamaguchi, N., Kage, H., and Mujumdar A.S., Energy and cost estimation: Application of chemical heat pump dryer to industrial ceramics drying, Proceedings of the 13th International Drying Symposium, IDS'2002, No. 163, Beijing, August 27-31, 2002.
 - Li, J., Campbell, G.M. and Mujumdar A.S., Mathematical modeling of air drying of particulate solids – A discrete approach, Proceedings of the 13th International Drying Symposium, IDS'2002, Beijing, August 27-31, 2002.
 - Perera, C.O, Ng, F.L, Mujumdar, A.S., The effect of moisture content on the conversion of ergosterol to vitamin D in shiitake mushrooms, Proceedings of the 13th International Drying Symposium, IDS'2002, Beijing, August 27-31, 2002.
 - Yuling, Shi, Ray, M.B. and Mujumdar, A.S., Effect of temperature differences on local Nusselt number under turbulent slot jets, Proceedings of the 13th International Drying Symposium, IDS'2002, Beijing, August 27-31, 2002.
 - Yuling, Shi, Ray, M.B., and Mujumdar, A.S., Effect of Prandtl number on heat transfer under a turbulent impinging slot jet, Asia Pacific Chemical Engineering Conference, Auckland, New Zealand, October, 2002.
 - Yuling, Shi, Ray, M.B. and Mujumdar, A.S., Effect of cross-flow on normal and oblique impingement heat transfer under a turbulent impinging jet, Asia Pacific Chemical engineering Conference, Auckland, New Zealand, October 2002.

- Wang, W., Thorat, B. N., Chen, G., and Mujumdar, A.S., Fluidized-bed drying of heat sensitive porous material with microwave heating, Proceedings of the 13th International Drying Symposium, IDS'2002, Beijing, August 27-31, 2002.

2001

- Mujumdar, A.S., Food dehydration – Recent developments and future challenges, Keynote Lecture, International Food Engineering Conference, Seoul, Korea, November 2-3, 2001.
- Mujumdar A.S., Innovative drying technologies – Current status and R&D opportunities, Keynote Lecture, Chemcon2001, Annual conference of the Indian Institution of Chemical Engineers, Chennai, December 19-21, 2001.
- Hawlader, M.N.A., Chou, S.K. and Mujumdar, A.S., Inspiring the young to do engineering, 6th ASEAN Science and Technology Week, 17-19 September 2001, Brunei.
- Mujumdar, A.S., and Kudra, T., Drying of slurries with particulate media in various gas-particle contactors, Keynote Lecture, Proceedings of 2nd Asia-Oceania Drying Conference, Penang, Malaysia, August 2001, pp. 1-25.
- Yuling, S., Ray, M.B. and Mujumdar A.S., A parametric study of impingement heat transfer under a slot jet using CFD, Proceedings of 2nd Asia-Oceania Drying Conference, Penang, Malaysia, August 2001, pp. 65-76
- Chen, G. and Mujumdar, A.S., Application of electrical field in dewatering and drying, Proceedings of 2nd Asia-Oceania Drying Conference, Penang, Malaysia, August 2001, pp. 217-228.
- Sanga, E.C., Mujumdar, A.S. and Raghavan, G.S.V., Experimental and numerical analysis of intermittent microwave-convection drying, Proceedings of 2nd Asia-Oceania Drying Conference, Penang, Malaysia, August 2001 pp. 202-216.
- Mujumdar, A.S., International Drying Conferences: A Personal Perspective, Keynote Lecture, Second Inter-American Drying Conference, Boca del Rio, Veracruz, Mexico, July 8-10, 2001.
- Chou, S.K., Chua, K.J., Ho, J.C., Mujumdar, A.S. and Hawlader, M.N.A., Current status and prospects for hybrid heat pump drying technologies, Proceedings of 1st Nordic Drying Conference, Trondheim, Norway, June 2001, ISBN 82-594-2073-2 (CD ROM).
- Hosseinalipour, S.M., Mujumdar, A.S., A new performance index for opposing jet contactors based on numerical simulation results, 9th Annual Conference of the CFD Society of Canada (CFD2001), Waterloo, Canada, May 2001.

- Ogura, H., Kage, H. and Mujumdar A.S., Novel convective dryer combined with chemical heat pump, *Proceedings of 1st Nordic Drying Conference*, Trondheim, Norway, June 2001, ISBN 82-594-2073-2 (CD ROM).
- Sanga, E.C., Mujumdar, A.S. and Raghavan, G.S.V., Analysis of heat and mass transfer under microwave fields: Numerical simulation and experimental validation, submitted for possible presentation at the *ASAE Annual General Meeting in San Diego, California*, July, 2001.
- Sanga, E.C., Raghavan, G.S.V. and Mujumdar, A.S., Heat and mass transfer during microwave convection drying of composite materials; simulation with incorporation of shrinkage of material, submitted for possible presentation at the *Second Inter-American Drying Conference (IADC2001)*, Vera Cruz, Mexico, July 2001.
- Mujumdar, A.S., Drying research – current status and future trends, *Research Trends*, Trivandrum, India (in press).
- Mujumdar, A.S., Current trends and R&D needs in drying, Plenary Lecture, *1st Nordic Drying Conference*, Trondheim, Norway, June 2001.

2000

- Sanga, E.C., Mujumdar, A.S. and Raghavan, G.S.V., Microwave-convective drying of discretely non-homogeneous materials: Kinetics and quality attributes, presented at *Microwve 2000: Sustainable Technology for the New Millennium and the Third Chinese Microwave Chemistry Symposium*, Nankai University, Tianjin, P.R. China, May 7-10, 2000.
- Hawlader, M.N.A., Chua, K.J., Chou, S.K., Ho, J.C., Mujumdar, A.S., Heat pump drying of an agricultural product: Influence of cyclic variation of air temperature, *18th Conference of ASEAN Confederation of Engineering Organizations*, Hanoi, Vietnam, November 2000.
- Mujumdar, A.S., Innovative drying technologies and trends for the future, Keynote lecture, *Proceedings of the 14th Malaysian Conference of Chemical Engineering*, W.R.W. Daud (Ed.) Institute of Chemical Engineering of Malaysia, Malaysia, pp. 193-214, 2000.
- Ogura, H., Ishida, H., Kage, H., Matsuno, Y., Mujumdar, A.S., Experimental study on proposed chemical heat pump dryer using Calcium Oxide/Calcium Hydroxide reaction, *50th Canadian Chemical Engineering Conference*, Montreal, Canada, October 2000.

- Sanga, E., Mujumdar, A.S., Raghavan, G.S.V., Heat and mass transfer in non-homogeneous materials under microwave field, *50th Canadian Chemical Engineering Conference*, Montreal, Canada, October 2000.
- Prabhu, D., Bi, Z.-Y., Mujumdar, A.S., Enhancement of impinging jet heat transfer by modifying the jet flow field, *50th Canadian Chemical Engineering Conference*, Montreal, Canada, October 2000.
- Devahastin, S., Mujumdar, A.S., Hydrodynamic, heat Transfer and mixing characteristics of laminar two-dimensional opposing jets: A computational study, *50th Canadian Chemical Engineering Conference*, Montreal, Canada, October 2000.
- Wu, J., Devahastin, S., Mujumdar, A.S., Experimental and numerical studies of an impinging stream dryer configuration, *50th Canadian Chemical Engineering Conference*, Montreal, Canada, October 2000.
- Ogura, H., Ishida, H., Kage, H., Matsuno, Y., Mujumdar, A.S., Proposal for a chemical heat pump dryer, *Proceedings of the 33rd Autumn Meeting of Society of Chemical Engineers of Japan*, Hamamatsu, Japan, August 2000.
- Pan, Y.-K., Li, J.-G., Ye, W.-H., Mujumdar, A.S., Kudra, T., Drying of a dilute suspension in a vibrated fluidized bed of inert particles, *12th International Drying Symposium*, The Netherlands, August 2000.
- Chua, K.J., Mujumdar, A.S., Hawlader, M.N.A., Chou, S.K., Ho, J.C., Heat pump drying of agricultural products – Effects of continuous and stepwise change of drying temperature, *12th International Drying Symposium*, The Netherlands, August 2000.
- Ogura, H., Kage, H., Matsuno, Y., Mujumdar, A.S., Studies on a novel chemical heat pump dryer using a gas-solid reaction, *12th International Drying Symposium*, The Netherlands, August 2000.
- Passos, M.L., d'Angelo, J.V.H., Mujumdar, A.S., Effect of capillary forces on the drying of non-Newtonian suspensions in fluid beds of inert particles, *12th International Drying Symposium*, The Netherlands, August 2000.
- Sanga, E., Mujumdar, A.S. Mujumdar, Raghavan, G.S.V., Experimental results of combined microwave-convection drying of non-homogeneous materials, ASAE Paper no. 006099, *ASAE Annual International Meeting*, Milwaukee, July 2000.
- Ogura, H., Kage, H., Matsuno, Y., Mujumdar, A.S., Application of chemical heat pump technology to industrial drying: A proposal for a new chemical heat pump dryer, *Proceedings of the Symposium on Energy Engineering in the 21st Century (SEE2000)*, P. Cheng (Ed.) Begell House, New York, pp. 932-938, 2000.

1999

- Mujumdar, A.S., Khillarkar, D.B., Hawlader, M.N.A., Melting of a phase change material in concentric horizontal annuli of arbitrary cross-section, *Proceedings of the Fourth Asia-Pacific Conference on Computational Mechanics*, C.M. Wang, K.H. Lee, K.K. Ang (Eds.) Elsevier, Amsterdam, pp. 637-642, 1999.
- Mujumdar, A.S., Passos, M.L., Drying: Innovative technologies and trends in research and development, Keynote Lecture, *Proceedings of the First Asia-Australia Drying Conference*, Bali, Indonesia, pp. 3-25, 1999.
- Mujumdar, A.S., Devahastin, S., Raghavan, G.S.V., Spouted bed drying: Overview of contributions from McGill University, *Proceedings of the First Asia-Australia Drying Conference*, Bali, Indonesia, pp. 670-681, 1999.
- Anantawaraskul, S., Mujumdar, A.S., Techniques for enhancement of impingement heat and mass transfer rates, *Proceedings of the First Asia-Australia Drying Conference*, Bali, Indonesia, pp. 117-135, 1999.
- Nishimura, A., Deguchi, S., Matsuda, H., Kobayashi, N., Hasatani, M., Mujumdar, A.S., Effects of particle properties on hydrodynamic behaviors and heat transfer characteristics in pulsated fluidized bed, *Proceedings of the Eighth Asia-Pacific Confederation of Chemical Engineering Congress*, Seoul, South Korea, pp. 1741-1744, 1999.

1998

- Ogura, H., Matsuno, Y., Mujumdar, A.S., Simulation of hydration/dehydration of CaO/Ca(OH)₂ chemical heat pump reactor for cold/hot heat generation, *Proceedings of the Eleventh International Drying Symposium*, Halkidiki, Greece, pp. 1914-1921, 1998.
- Hosseinalipour, S.M., Devahastin, S., Mujumdar, A.S., Evaluation of a superheated steam impinging stream dryer performance via a numerical approach, *Proceedings of the Eleventh International Drying Symposium*, Halkidiki, Greece, pp. 232-239, 1998.
- Devahastin, S., Mujumdar, A.S., Batch drying of a particulate material in a well-mixed dryer at constant bed temperature, *Proceedings of the Eleventh International Drying Symposium*, Halkidiki, Greece, pp. 456-463, 1998.
- Nishimura, A., Deguchi, S., Matsuda, H., Hasatani, M., Mujumdar, A.S., Enhancement of heat transfer characteristics in a pulsated fluidized bed, *Proceedings of the Thirty Fifth National Heat Transfer Conference*, Nagoya, Japan, pp. 771-772, 1998.

- Mujumdar, A.S., Devahastin, S., Arai, N., Furuhashi, T., Free convection-dominated melting of a phase change material in a horizontal cylindrical annulus, *Proceedings of the Thirty Fifth National Heat Transfer Conference*, Nagoya, Japan, pp. 237-238, 1998.
- Pan, Y.K., Zhao, L.J., Dong, Z.X., Mujumdar, A.S., Kudra, T., Quality Interaction in Thermal Dehydration of Biological Materials, *Drying '98, Vol. B*, Ziti Editions, Greece, pp. 1343-1349, 1998.

1996

- Devahastin, S., Mujumdar, A.S., Raghavan, G.S.V., Spouted Bed Research at McGill University, *Proceedings of the International Conference on Food Industry Technology and Energy Applications*, Bangkok, Thailand, pp. 22-29, 1996.
- Devahastin, S., Mujumdar, A.S., Raghavan, G.S.V., Two-Dimensional Finite Element Model for Wheat Drying, *Proceedings of the International Conference on Food Industry Technology and Energy Applications*, Bangkok, Thailand, pp. 59-68, 1996.
- Mujumdar, A.S., Innovation in Drying, *Drying '96, Vol. A*, Lodz Technical University, Poland, pp. 3-13, 1996.
- Beke, J., Mujumdar, A.S., Giroux, M., Some Features of Microwave Drying of Corn and Potato Samples, *Drying '96, Vol. A*, Lodz Technical University, Poland, pp. 888-896, 1996.
- Pan, Y.K., Wu, H., Li, Z.Y., Mujumdar, A.S., Kudra, T., Effect of a Tempering Period on Drying of Carrot in a Vibro-Fluidized Bed, *Drying '96, Vol. A*, Lodz Technical University, Poland, pp. 1016-1022, 1996.

1994

- Etemad, S. Gh., Mujumdar, A.S., Nassef, R., Simultaneously developing flow and forced convection heat transfer of non-Newtonian fluids in equilateral triangle duct with different boundary conditions, *Proceeding of the Seventh International Symposium Transport Phenomena in Manufacturing Processes*, Acapulco, Mexico, pp. 47-52, 1994.
- Kudra, T., Ranganna, B., Raghavan, G.S.V., Mujumdar, A.S., Sablani, S.S., Parametric Studies of an Asymmetrical Two-Dimensional Spouted Bed Dryer with Draft Channel, *Drying '94, Vol. A*, Gold Coast, Australia, pp. 335-342, 1994.

- Pan, Y.K., Pang, J.Z., Li, Z.Y., Kudra, T., Mujumdar, A.S., Drying of Heat Sensitive Bio-Products on Solid Carriers in Vibrated Fluid Bed, *Drying' 94, Vol. B*, Gold Coast, Australia, pp. 819-824, 1994.
- Grabowski, S., Mujumdar, A.S., Ramaswamy, H.S., Strumillo, C., Osmo-Convective Drying of Grapes in a Fluidized Bed of Sugar and Semolina, *Drying' 94, Vol. B*, Gold Coast, Australia, pp. 921-928, 1994.
- Shiravi, A.H., Mujumdar, A.S., Kubes, G.J., Numerical Study of Heat Transfer and Fluid Flow in Multiple Turbulent Impinging Jets, *Drying' 94, Vol. B*, Gold Coast, Australia, pp. 1343-1350, 1994.
- Hosseinalipour, S.M., Mujumdar, A.S., Flow and Thermal Characteristics of Opposing Turbulent Jets, *Drying' 94, Vol. B*, Gold Coast, Australia, pp. 1369-1378, 1994.

1993

- Mujumdar, A.S., Drying of plantation crops – Potential for application of some novel technologies, Keynote Lecture, *Proceedings of the International Symposium on Energy Perspectives in Plantation Industry*, Connoor, India, pp. 85-99, 1993.
- Tulasidas, T.N., Raghavan, G.S.V., Ramaswamy, H.S., Mujumdar, A.S., Microwave drying of grapes in a multi-mode cavity, *Proceedings of the Twenty Eighth Microwave Symposium*, pp. 217-221, 1993.

1992

- Gong, Z.-X., Zhang, G.-S. and Mujumdar, A.S. Prediction of pore pressure in refractory concrete produced by firing, *Drying'92*, Elsevier, Amsterdam, pp. 1780-1789, 1992.
- Huang, B., Mujumdar, A.S., Prediction of industrial dryer performance using neural network, *Drying'92*, Elsevier, Amsterdam, pp. 1124-1132, 1992.
- Ramamurthy, P., Mujumdar, A.S., van Heiningen, A.P.R., Kubes, G.J., A simple model for superheated steam drying of black liquor films, *Drying'92*, Elsevier, Amsterdam, pp. 1573-1583, 1992.
- Tulasidas, T.N., Kudra, T., Raghavan, G.S.V., Mujumdar, A.S., Effect of bed height on drying of shelled corn in a two-dimensional spouted bed equipped with draft plates, *Drying'92*, pp.1564-1570, 1992.

- Shivhare, U.S., Alvo, P., Raghavan, G.S.V., van de voort, F.R., Mujumdar, A.S., Application of response surface methods in grain drying research, *Drying'92*, Elsevier, Amsterdam, pp.1549-1563, 1992.

1991

- Chen, S.-R., Chen, J.-Y., Mujumdar, A.S. Preliminary study on silkworm cocoons drying, *Drying'91*, Elsevier, Amsterdam, pp 620-627, 1991.
- Mujumdar, A.S., Superheated steam drying of paper, *Proceedings of the International Symposium on Alternate Methods for Paper Drying*, Helsinki, Finland, pp. 313-424, 1991.

1990

- Kumar, P., Mujumdar, A.S., Koran, Z., Effect of microwave drying on paper properties, *Proceedings of the Seventy Sixth Canadian Pulp and Paper Association Annual Meeting*, Canadian Pulp and Paper Association, Montreal, Canada, pp. 161-166, 1990.
- Shivhare, U.S., Raghavan, G.S.V., Mujumdar, A.S., Bosisio, R.G., van de voort, F.R., Equilibrium moisture content for corn in a microwave environment. *ASAE Paper No. 90-6606*, Chicago, December 18-21, 1990.
- Shivhare, U.S., Raghavan, G.S.V., Bosisio, R.G., Mujumdar, A.S., van de voort, F.R., Drying corn in microwave environment with varying initial moisture contents. *ASAE Paper No. 90-6605*, Chicago, December 18-21, 1990.

1989

- Mujumdar, A.S., Aerodynamics and heat transfer in vibrated beds of particles, Keynote Lecture, *Proceedings of the Fourth Australian Conference on Heat and Mass Transfer*, Christchurch, New Zealand, pp. 91-104, 1989.
- David, M., Mujumdar, A.S., Crotogino, R.H., Douglas, W.J.M., Effect of superheated steam drying on paper properties, *Proceedings of the Seventy Fifth Canadian Pulp and Paper Association Annual Meeting*, Canadian Pulp and Paper Association, Montreal, Canada, pp. B233-B237, 1989.
- Malhotra, K., Mujumdar, A.S., Okazaki, M., Particle Flow Patterns in a Mechanically Stirred Two-Dimensional Cylindrical Vessel, *Drying'89*, Hemisphere, Washington, pp. 406-414, 1989

- Kalwar, M.I., Mujumdar, A.S., Raghavan G.S.V., Fanous, M.A., Aerodynamics of Grains in a Large Scale Two-Dimensional Spouted Bed with Draft Plates , *Drying'89*, Hemisphere, Washington, pp. 433-439, 1989.

1988

- Malhotra, K., Mujumdar, A.S., Okazaki, M., Particle Flow Patterns in a Mechanically Stirred Two-Dimensional Cylindrical Vessel, *Sixth International Drying Symposium, Vol. I*, Versailles, France, pp. 23-32, 1988.
- Passos, M.L., Mujumdar, A.S., Raghavan, G.S.V., Spouting and Spout-Fluidization of Dry/Wet Particles in a Two Dimensional Bed, *Sixth International Drying Symposium, Vol. I*, Versailles, France, pp. 127-136, 1988.
- Alikhani, Z., Raghavan, G.S.V., Mujumdar, A.S., Kinetics of Moisture Sorption in a Mixture of Heated Granular Zeolite and Grain, *Sixth International Drying Symposium, Vol. I*, Versailles, France, pp. 257-262, 1988.
- Rozhdestvensky, A.V., Volinets, A.Z., Mujumdar, A.S., Stability of the Phase Front in Sublimation Dehydration: Analysis and Experiments, *Sixth International Drying Symposium, Vol. I*, Versailles, France, pp. 427-434, 1988.
- Erdesz, K., Mujumdar, A.S., Numerical investigation of the phenomenological model of vibrated fluidized bed, *Sixth International Drying Symposium, Vol. II*, Versailles, France, pp. 19-26, 1988.
- Kalwar, M.I., Raghavan, G.S.V., Mujumdar, A.S., Fanous, M.A., Aerodynamics of grains in a large scale two-dimensional spouted bed with draft plates, *Sixth International Drying Symposium, Vol. II*, Versailles, France, pp. 69-76, 1988.
- Zhang, Y.F., Gong, Z.X., Mujumdar, A.S., Two-dimensional finite element model for drying of refractory concrete, *Sixth International Drying Symposium, Vol. II*, Versailles, France, pp. 41-44, 1988.

1987

- Mujumdar, A.S., Erdesz, K., Classification of Vibrated Equipment for Processing of Particulate Materials, *Drying'87*, Hemisphere, Washington, pp. 55-73, 1987.
- Mujumdar, A.S., Erdesz, K., Design Strategy and Guidelines for Continuous Vibrated Bed Dryers, *Drying'87*, Hemisphere, Washington, pp. 74-100, 1987.
- Mujumdar, A.S., Al-Taleb, M., Hasan, M., Evaporation of Liquids from a Wet Stretching Surface into Air, Unsaturated Air and Superheated Solvents, *Drying'87*, Hemisphere, Washington, pp. 261-269, 1987.

1986

- Mujumdar, A.S., Erdesz, K., Ringer, D.U., Hydrodynamic Similarity of Conventional and Vibrated Fluidized Beds, *Drying'86, Vol. 1*, Hemisphere, Washington, pp. 169-176, 1986.
- Mujumdar, A.S., Erdesz, K., Ringer, D.U., Hydrodynamic Similarity of Conventional and Vibrated Fluidized Beds, *Drying'86, Vol. 2*, Hemisphere, Washington, pp. 169-176, 1986.

1985

- Mujumdar, A.S., Malhotra, K., Single Tube Heat Transfer in Aerated Vibrated Beds, *Drying'85*, Hemisphere, Washington, pp. 186-194, 1985.

1984

- Huang, P.-G., Mujumdar, A.S., Douglas, W.J.M., Numerical prediction of flow and heat transfer under a turbulent impinging slot jet with surface motion and cross-Flow, *ASME Paper 84-WA/HT-33*, 1984.
- Loo, E., Mujumdar, A.S., A simulation model for combined impingement and through drying using superheated steam as the drying Medium, *Drying'84*, Hemisphere, Washington, pp. 264-280, 1984.
- Law, L.K.C., Ziaie, B., Malhotra, K., Mujumdar, A.S., Pressure drop and particle circulation studies in modified slot spouted beds, *Drying'84*, Hemisphere, Washington, pp. 286-289, 1984.
- Cui, W.-K., Mujumdar, A.S., A novel steam jet and double-effect evaporation dryer for paper, Parts I and II, *Drying'84*, Hemisphere, Washington, pp. 468-479, 1984.
- Malhotra, K., Mujumdar, A.S., Single tube heat transfer in aerated vibrated beds, *Proceedings of Fourth International Drying Symposium, Vol. 1*, Kyoto International Conference Hall, Kyoto, Japan, pp. 681-689, 1984.
- Mujumdar, A.S., Raghavan, G.S.V., Canadian Research and Development in Drying - A Survey, *Drying'84*, Hemisphere, Washington, pp. 1-10, 1984.
- Mujumdar, A.S., Aerodynamic Characteristics of a Vibrated Bed of Particles, *Drying'84*, Hemisphere, Washington, pp. 178-185, 1984.

- Mujumdar, A.S., Swaminathan, R., Some Aerodynamic Aspects of Spouted Beds of Grains, *Drying'84*, Hemisphere, Washington, pp. 197-204, 1984.
- Mujumdar, A.S., Raghavan, G.S.V., Anderson, K., Characteristics of Asymmetric Two-Dimensional Slot Spouted Beds for Grains, *Drying'84*, Hemisphere, Washington, pp. 205-209, 1984.
- Mujumdar, A.S., Cui, W.K., Drying of Paper - A Summary of Recent Developments, *Drying'84*, Hemisphere, Washington, pp. 292-295, 1984.

1982

- Ringer, D.U., Linde, A.G., Mujumdar, A.S., Immersed surface-to-particle heat transfer in a vibro-fluidized bed, *Proceedings of The Third International Drying Symposium*, Wolverhampton, England, pp. 107-114, 1982.
- Pakowski, Z., Mujumdar, A.S., Heat transfer from a horizontal cylinder to a vibrated bed of wet particles, *Proceedings of the Third International Drying Symposium, Vol. 2*, Birmingham, UK, pp. 149-155, 1982.
- Mujumdar, A.S., Huang, P.-G., Douglas, W.J.M., Prediction of heat transfer under a plane turbulent impinging jet including effects of cross-Flow and wall motion, *Drying'82*, Hemisphere, Washington, pp. 91-98, 1982.
- Khalid, M., Mujumdar, A.S., Aerodynamic and drying characteristics of an agitated fluidized bed Dryer, *Drying'82*, Hemisphere, Washington, pp. 61-66, 1982.
- Ringer, D.U., Mujumdar, A.S., Flow and immersed-Surface heat transfer in a vibro-fluidized Bed, *Drying'82*, Hemisphere, Washington, pp. 67-73, 1982.
- Mujumdar, A.S., Huang, P.G., A Transient Simulation Model for Combined Impingement and Through Drying of Permeable Web, *Drying'82*, Hemisphere, Washington, pp. 106-114, 1982.

1980

- Mujumdar, A.S., Summary of Discussion Session on Research Needs and Opportunities in Drying, *Drying' 80, Vol. 1: Developments in Drying*, Hemisphere, Washington, pp.1-3, 1980.
- Mujumdar, A.S., Gupta, R., Aerodynamic and Thermal Characteristics of Vibrated Fluid Beds - A Review, *Drying' 80, Vol. 1: Developments in Drying*, Hemisphere, Washington, pp.141-150, 1980.

- Mujumdar, A.S., Li, Y.K., Jog, V., A Simulation Model for Freeze Drying, *Drying' 80, Vol. 1: Developments in Drying*, Hemisphere, Washington, pp. 233-241, 1980.
- Mujumdar, A.S., Obot, N.T., Douglas, W.J.M., Design Correlations for Heat and Mass Transfer Under Various Turbulent Impinging Jet Configurations, *Drying' 80, Vol. 1: Developments in Drying*, Hemisphere, Washington, pp.388-402, 1980.
- Mujumdar, A.S., Saad, N.R., Douglas, W.J.M., Heat Transfer Under Multiple Turbulent Slot Jets Impinging on a Flat Plate, *Drying' 80, Vol. 1: Developments in Drying*, Hemisphere, Washington, pp. 422-430, 1980.
- Mujumdar, A.S., Gupta, R., Leung, P., Drying of Granular Materials in a Vibrated Fluidized Bed, *Drying'80, Vol. 2: Proceedings of the Second International Symposium*, Hemisphere, Washington, pp. 201-207, 1980.
- Mujumdar, A.S., Kroll, K., Bad Hersfeld, F.R., Menon, A.S., Drying Since the Millenniums, *Drying'80, Vol. 2: Proceedings of the Second International Symposium*, Hemisphere, Washington, pp. 485-494, 1980.

1979

- Tovar, J.N., Mujumdar, A.S., Turbulence parameters in an axisymmetric double expansion, *The International Symposium on Papermachine Headboxes*, Montreal, Canada, pp. 54-63, 1979.
- Li, Y.K., Mujumdar, A.S., Prediction of developing turbulent flow in two-dimensional asymmetric channels, *The International Symposium on Papermachine Headboxes*, Montreal, Canada, pp. 64-73, 1979.
- Baliga, B.R., Mujumdar, A.S., On the numerical prediction of confined flows in irregular-shaped domains, *The International Symposium on Papermachine Headboxes*, Montreal, Canada, pp. 74-83, 1979.

1978

- Li, Y.K., Mujumdar, A.S., Douglas W.J.M., Coupled heat and mass transfer under a laminar impinging jet, *Proceedings of The First International Symposium on Drying*, Montreal, Canada, pp175-184, 1978.

3. Parts (chapters) of books (Partial listing)

2005 and 2006

- Huang Li Xin and Mujumdar, A.S., Spray drying of foods, chapter in Dehydration of Foods, Mujumdar, A.S. and Sablani, S., editors, 2006.
- Mujumdar, A.S. and Chung Lim Law, Fluidize bed drying, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Marcel Dekker, NY 2006.
- Law, C.L., Sablani, S. and Mujumdar, A.S., Dimensional analysis, chapter in Handbook of Mathematical Modeling in Bioprocesses, editors, S. Sablani, A.K. Datta and A.S. Mujumdar, CRC Press, Boca Raton, USA, 2006. (submitted)
- Mujumdar, A.S. and Menon, A.S., Drying of Solids: Principles, Classification and Selection of Dryers, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Pakowski, Z. and Mujumdar, A.S., Basic Process Calculations in Drying, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Mujumdar, A.S. and Devahastin, S., Fluidized Bed Drying, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Filkova, I. and Mujumdar, A.S., Industrial Spray Drying Systems, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Pallai, E., Szentmarjay, T. and Mujumdar, A.S., Spouted Bed Drying, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Mujumdar, A.S., Impingement Drying, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Ratti, C. and Mujumdar, A.S., Infrared Drying, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Mujumdar, A.S., Superheated Steam Drying Technologies, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.

- Kudra, T. and Mujumdar, A.S., Special Drying Techniques and Novel Dryers, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Chen, G. and Mujumdar, A.S., Drying of Herbs, Spices, Tea, Coffee and Tobacco, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Sablani, S.S. and Mujumdar, A.S., Drying of Potatoes, Peanuts and Roots, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Pakowski, Z. and Mujumdar, A.S., Drying of Pharmaceutical Products, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Polat, O. and Mujumdar, A.S., Drying of Pulp and Paper, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Mujumdar, A.S., Drying in Mineral Processing, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Chen, G., Yue, P.L. and Mujumdar, A.S., Drying of Sludges, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Hung, J.Y., Wimberger, R.J. and Mujumdar, A.S., Drying of Coated Webs, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Mujumdar, A.S. and Hasan, M., Drying of Polymers, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Jumah, R.Y. and Mujumdar, A.S., Dryer Feeder Systems, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Jumah, R.Y. and Mujumdar, A.S., Dryer Emission Control Systems, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.
- Jumah, R.Y., Mujumdar, A.S. and Raghavan, G.S.V., Control of Industrial Dryers, Handbook of Industrial Drying 3rd Enhanced Edition, Ed. A.S. Mujumdar, Taylor & Francis, NY 2006.

2004

- Ratti, C. and Mujumdar, A.S., Drying of fruits, Chapter 7 in Processing Fruits, 2nd edition, Science and Technology, ed. D.M. Barrett, L. Somogyi, H. Ramaswamy, CRC press, pp. 127-159, 2004.

2003

- Islam, M.R., Mujumdar, A.S. Periodic Multi-Mode Batch Drying of Heat-Sensitive Materials – Engineering Applications of the Diffusion Equation, Drying of Products of Biological Origin, Science Publishers, Enfield, New Hampshire, USA, (2003).
- Mujumdar, A.S., Drying of Biotechnological Products: Current Status and New Developments, in Food Science and Food Biotechnology, Ed. G.F. Gutierrez-Lopez and G.V. Barbosa-Canovas, CRC Press, Boca Raton, FL, USA pp 267-278, (2003).
- Ratti, C. and Mujumdar, A.S., Drying of fruits, Chapter for Processing Fruits and Vegetables: Science and Technology, 2nd Edition, Vol. I: Fruits: Biology, Principles and Applications, CRC Press, Boca Raton, FL, USA, 2003.
- Mujumdar, A.S. and S. Devahastin, Fluidized Bed Drying, Chapter in Handbook of Fluidization, Editor, W.J. Yang, Taylor & Francis, NY, USA (2003).
- Mujumdar, A.S., Beke, J., Grain Drying Fundamentals, in A. Chakraverty, A.S. Mujumdar, G.S.V. Raghavan, H.S. Ramaswamy (Eds.) *Handbook of Postharvest Technology*, Taylor & Francis, Inc., New York, (2003).

2002

- Mujumdar, A.S., Drying: Principles and Practice, in Albright's Chemical Engineer's Handbook, Editor, Lyle Albright, Taylor & Francis, NY, USA, (2002).

2001

- Mujumdar A.S., Recent Developments in the Drying Technologies for the Production of Particulate Materials, in A. Levy, H. Kalman (Eds), *Handbook of Conveying and Handling of Particulate Solids*, Elsevier, The Netherlands.
- Mujumdar, A.S., Industrial Drying Technologies: Current Status and Future Trends, pp. 112-125, in Y.H. Mori and K. Ohnishi (Eds.) *Energy and*

Environment: Technological Challenges for the Future, Springer Verlag, Tokyo, 2001.

2000

- Mujumdar, A.S., Devahastin, S., Fundamental Principles of Drying, pp. 1-22, in S. Devahastin (Ed.) *Mujumdar's Practical Guide to Industrial Drying*, Exergex, Montreal, Canada, 2000.
- Mujumdar, A.S., Classification and Selection of Industrial Dryers, pp. 23-36, in S. Devahastin (Ed.) *Mujumdar's Practical Guide to Industrial Drying*, Exergex, Montreal, Canada, 2000.
- Mujumdar, A.S., Dryers for Particulate Solids, Slurries and Sheet-Form Materials, pp. 37-61, in S. Devahastin (Ed.) *Mujumdar's Practical Guide to Industrial Drying*, Exergex, Montreal, Canada, 2000.
- Mujumdar, A.S., Dryers for Production of Particulate Solids, pp. 63-73, in S. Devahastin (Ed.) *Mujumdar's Practical Guide to Industrial Drying*, Exergex, Montreal, Canada, 2000.
- Mujumdar, A.S., Devahastin, S., Fluidized Bed Drying Technology, pp. 75-98, in S. Devahastin (Ed.) *Mujumdar's Practical Guide to Industrial Drying*, Exergex, Montreal, Canada, 2000.
- Mujumdar, A.S., Innovation in Drying Techniques and Future Trends, pp. 99-113, in S. Devahastin (Ed.) *Mujumdar's Practical Guide to Industrial Drying*, Exergex, Montreal, Canada, 2000.
- Mujumdar, A.S., Superheated Steam Drying – Technology of the Future, pp. 115-138, in S. Devahastin (Ed.) *Mujumdar's Practical Guide to Industrial Drying*, Exergex, Montreal, Canada, 2000.
- Mujumdar, A.S., Global Drying Research and Development, pp. 139-148, in S. Devahastin (Ed.) *Mujumdar's Practical Guide to Industrial Drying*, Exergex, Montreal, Canada, 2000.
- Mujumdar, A.S., Some Thoughts on R&D, Creativity and Need for Industry-University Interaction, pp. 149-159, in S. Devahastin (Ed.) *Mujumdar's Practical Guide to Industrial Drying*, Exergex, Montreal, Canada, 2000.

1999

- Mujumdar, A.S., Devahastin, S., Drying: Terminology and Fundamentals, pp. 5-42, in A.S. Mujumdar, S. Suvachittanont (Eds.) *Developments in Drying, Vol. 1*, Kasetsart University Press, Bangkok, Thailand, 1999.
- Mujumdar, A.S., Devahastin, S., Fluidized Bed Drying, pp. 59-111, in A.S. Mujumdar, S. Suvachittanont (Eds.) *Developments in Drying, Vol. 1*, Kasetsart University Press, Bangkok, Thailand, 1999.
- Sanga, E., Mujumdar, A.S., Raghavan, G.S.V., Microwave Drying: Principles and Applications, pp. 112-141, in A.S. Mujumdar, S. Suvachittanont (Eds.) *Developments in Drying, Vol. 1*, Kasetsart University Press, Bangkok, Thailand, 1999.
- Grabowski, S., Mujumdar, A.S., Solar-Assisted Osmotic Dehydration, pp. 142-178, in A.S. Mujumdar, S. Suvachittanont (Eds.) *Developments in Drying, Vol. 1*, Kasetsart University Press, Bangkok, Thailand, 1999.
- Mujumdar, A.S., Passos, M.L., Drying: Innovative Technologies and Trends in Research and Development, pp. 235-268, in A.S. Mujumdar, S. Suvachittanont (Eds.) *Developments in Drying, Vol. 1*, Kasetsart University Press, Bangkok, Thailand, 1999.

1997

- Mujumdar, A.S., Drying Fundamentals, pp. 7-30, in C.G.J. Baker (Ed.) *Industrial Drying of Foods*, Blackie Academic & Professional, London, UK, 1997.
- Mujumdar, A.S., Alterman, D.S., Drying in the Pharmaceutical and Biotech Fields, pp. 235-260, in E. Goldberg (Ed.) *Handbook of Downstream Processing*, Blackie Academic & Professional, London, UK, 1997.
- Jumah, R.Y., Mujumdar, A.S., Raghavan, G.S.V., A Mathematical Model for Constant and Intermittent Batch Drying of Grains in a Novel Rotating Jet Spouted Bed, *Mathematical Modelling and Numerical Techniques in Drying Technology*, Marcel Dekker, New York, pp. 339-380, 1997.
- Hosseinalipour, S.M., Mujumdar, A.S., A Model for Superheated Steam Drying of Particles in an Impinging Stream Dryer, *Mathematical Modelling and Numerical Techniques in Drying Technology*, Marcel Dekker, New York, pp. 537-574, 1997.
- Gong, Z.X., Mujumdar, A.S., Mathematical Modelling of Kiln and On-site Drying of Concrete, *Mathematical Modelling and Numerical Techniques in Drying Technology*, Marcel Dekker, New York, pp. 575-612, 1997.

1996

- Mujumdar, A.S., Non-Newtonian Fluid Heat Transfer, pp. 757-761, in G.F. Hewitt, G.L. Shires, Y.V. Polezhaev (Eds.) *International Encyclopaedia of Heat and Mass Transfer*, CRC Press, Boca Raton, 1996.

1995

- Mujumdar, A.S., Menon, A.S., Drying of Solids: Principles, Classification and Selection of Dryers, Chapter 1, pp. 1-40, in A.S. Mujumdar (Ed.) *Handbook of Industrial Drying, 2nd Edition*, Marcel Dekker, New York, 1995.
- Pakowski, Z., Mujumdar, A.S., Basic Process Calculations in Drying, Chapter 3, pp. 71-112, *ibid.*
- Filkova, I., Mujumdar, A.S., Industrial Spray Drying Systems, Chapter 9, pp. 263-307, *ibid.*
- Pallai, E., Szentmarjay, T., Mujumdar, A.S., Spouted Bed Drying, Chapter 13, pp. 453-488, *ibid.*
- Mujumdar, A.S., Huang, B., Impingement Drying, Chapter 14, pp. 489-502, *ibid.*
- Kudra, T., Mujumdar, A.S., Impinging Stream Dryers, Chapter 17, pp. 539-566, *ibid.*
- Ratti, C., Mujumdar, A.S., Infrared Drying, Chapter 18, pp. 567-588, *ibid.*
- Pakowski, Z., Mujumdar, A.S., Drying of Pharmaceutical Products, Chapter 24, pp. 743-774, *ibid.*
- Polat, O., Mujumdar, A.S., Drying of Pulp and Paper, Chapter 28, pp. 861-898, *ibid.*
- Mujumdar, A.S., Drying in Mineral Processing, Chapter 30, pp. 921-930, *ibid.*
- Hung, J.Y., Wimberger, R.J., Mujumdar, A.S., Drying of Coated Webs, Chapter 33, pp. 1007-1038, *ibid.*
- Mujumdar, A.S., Hasan, M., Drying of Polymers, Chapter 34, pp. 1039-1070, *ibid.*
- Mujumdar, A.S., Superheated Steam Drying, Chapter 35, pp. 1071-1086, *ibid.*
- Kudra, T., Mujumdar, A.S., Special Drying Techniques and Novel Dryers, Chapter 36, pp. 1087-1150, *ibid.*

- Jumah, R.Y., Mujumdar, A.S., Dryer Feeder Systems, Chapter 37, pp. 1151-1178, *ibid.*
- Jumah, R.Y., Mujumdar, A.S., Dryer Emission Control Systems, Chapter 38, pp. 1179-1226, *ibid.*
- Markowski, A., Mujumdar, A.S., Safety Aspects of Industrial Dryers, Chapter 41, pp. 1277-1312, *ibid.*
- Jumah, R.Y., Mujumdar, A.S., Raghavan, G.S.V., Control of Industrial Dryers, Chapter 43, pp. 1343-1368, *ibid.*

1992

- Mujumdar, A.S., Innovative Industrial Drying Technologies of the Future, pp. 3-20, in A.S. Mujumdar (Ed.) *Drying of Solids*, International Science Publisher, New York, 1992.
- Kudra, T., Mujumdar, A.S., Raghavan, G.S.V., Kalwar, M.I., Two-Dimensional Spouted Bed: Some Hydrodynamic, Heat Transfer and Drying Characteristics, pp. 65-85, in A.S. Mujumdar (Ed.) *Drying of Solids*, International Science Publisher, New York, 1992.
- Zhide, C., Dexin, W., Jiazhi, L., Mujumdar, A.S., Infrared Thermal Radiation Drying of Wood, pp. 187-196, in A.S. Mujumdar (Ed.) *Drying of Solids*, International Science Publisher, New York, 1992.
- Mujumdar, A.S., Superheated Steam Drying of Paper, pp. 208-220, in A.S. Mujumdar (Ed.) *Drying of Solids*, International Science Publisher, New York, 1992.
- Timofeev, O., Belski, A., Mujumdar, A.S., Effect of Dryer Fabric Pressure on Multi-Cylinder Drying of Paper, pp. 221-236, in A.S. Mujumdar (Ed.) *Drying of Solids*, International Science Publisher, New York, 1992.
- Kaminski, W., Adamiec, J., Grabowski, S., Zbicinski, I., Strumillo, C., Mujumdar, A.S., Application of Degradation Kinetics to Optimization of Drying Process for Yeasts, pp. 250-266, in A.S. Mujumdar (Ed.) *Drying of Solids*, International Science Publisher, New York, 1992.
- Grabowski, S., Mujumdar, A.S., Drying Technologies in Potato Processing, pp. 303-325, in A.S. Mujumdar (Ed.) *Drying of Solids*, International Science Publisher, New York, 1992.

- Grabowski, S., Mujumdar, A.S., Solar-Assisted Osmotic Dehydration, pp. 367-404, in A.S. Mujumdar (Ed.) *Drying of Solids*, International Science Publisher, New York, 1992.
- Mujumdar, A.S., Parrouffe, J.M., Dostie, M., Poulin, A., Convective Transport in Infrared Drying, *Drying '92, Part A*, Elsevier, Amsterdam, pp. 695-703, 1992.
- Mujumdar, A.S., Nassikas, A.A., Akritidis, C.B., Close-Cycle Heat Pump Dryer Using Superheated Steam - An Application to Paper Drying, *Drying '92, Part A*, Elsevier, Amsterdam, pp. 1085-1098, 1992.
- Timofeev, O., Bel'Skii, A., Mujumdar, A.S., Soem Preliminary Studies of Impulse Drying of Paper at moderate Temperatures and Pressures, *Drying '92, Part A*, Elsevier, Amsterdam, pp. 1099-1107, 1992.
- Grabowski, S., Mujumdar, A.S., Solar-Assisted Osmotic Dehydration, *Drying '92, Part B*, Elsevier, Amsterdam, pp. 1689-1696, 1992.
- Li, S.Q., Gong, Z.X., Mujumdar, A.S., Calculations of the State Variables of Moist Air, *Drying '92, Part B*, Elsevier, Amsterdam, pp. 1790-1797, 1992.
- Grabowski, S., Mujumdar, A.S., Ramaswamy, H.S., Strumillo, C., Particle Size Distribution of L-Lysine Dried in Jet- Spouted Bed, *Drying '92, Part B*, Elsevier, Amsterdam, pp. 1940-1948, 1992.
- Huang, B., Mujumdar, A.S., Prediction of Industrial Dryer Performance Using Neutral Network, *Drying '92, Part B*, Elsevier, Amsterdam, pp. 1124-1132, 1992.
- Shivhare, U.S., Alvo, P., Raghavan, G.S.V., Mujumdar, A.S., Effect of Bed-Height on Drying of Shelled Corn in a Two-Dimensional Spouted Bed Equipped with Draft Plates, *Drying '92, Part B*, Elsevier, Amsterdam, pp. 1564-1570, 1992.
- Ramamurthy, P., Mujumdar, A.S., Van Heiningen, A.R.P., Kubes, G.J., A Simple Model for Superheated Steam Drying of Black Liquor Films, *Drying '92, Part B*, Elsevier, Amsterdam, pp. 1573-1583, 1992.
- Grabowski, S., Mujumdar, A.S., Solar-Assisted Osmotic Dehydration, *Drying '92, Part B*, Elsevier, Amsterdam, pp. 1689-1696, 1992.
- Gong, Z.X., Zhang, G.S., Mujumdar, A.S., Prediction of Pore Pressure in Refractory Concrete Produced by Firing, *Drying '92, Part B*, Elsevier, Amsterdam, pp. 1780-1789, 1992.
- Li, S.Q., Gong, Z.X., Mujumdar, A.S., Calculations of the State Variables of Moist Air, *Drying '92, Part B*, Elsevier, Amsterdam, pp. 1790-1797, 1992.

- Grabowski, S., Mujumdar, A.S., Ramaswamy, H.S., Strumillo, C., Particle Size Distribution of L-Lysine Dried in Jet-Spouted Bed, *Drying '92, Part B*, Elsevier, Amsterdam, pp. 1940-1948, 1992.

1991

- Mujumdar, A.S., Shivhare, U.S., Raghavan, G.S.V., Kudra, T., Van de Voort, F.R., Through-Circulation Microwave Drying of Corn, *Drying '91*, Elsevier, Amsterdam, pp. 414-422, 1991.
- Bond, J.F., Mujumdar, A.S., Van Heiningen, A.R.P., Douglas, W.J.M., An experimental study of the falling rate period of superheated steam impingement drying of paper, *Helsinki Symposium on Alternate Methods of Pulp and Paper Drying*, Helsinki, Finland, pp. 339-356, 1991.

1990

- Rozhdestvensky, A.V, Kudra, T., Mujumdar, A.S., Droplet-Hot Surface Interaction and its Potential for Drying of Suspensions, pp. 543-562, in T.N. Veziroglu (Ed.) *Multiphase Transport and Particulate Phenomena, Vol. 1*, Hemisphere, Washington, 1990.
- Kudra, T., Mujumdar, A.S., Melster, V., Impinging Stream Dryers: Principles, Practice and Potential, pp. 17-32, in A.S. Mujumdar (Ed.) *Drying of Solids*, Sarita Prakashan, Meerut, India, 1990.
- Kumar, P., Mujumdar, A.S., Superheated Steam Drying: A State-of-the-Art Survey, pp. 33-71, in A.S. Mujumdar (Ed.) *Drying of Solids*, Sarita Prakashan, Meerut, India, 1990.
- Passos, M.L., Mujumdar, A.S., Raghavan, G.S.V., Spouting and Spout-Fluidization of Dry/Wet Particles in a Two-Dimensional Bed, pp. 211-220, in A.S. Mujumdar (Ed.) *Drying of Solids*, Sarita Prakashan, Meerut, India, 1990.
- Rozhdestvensky, A.V, Volinets, A.Z., Mujumdar, A.S., Stability of the Phase Front in Sublimation Dehydration: Analysis and Experiments, pp. 282-288, in A.S. Mujumdar (Ed.) *Drying of Solids*, Sarita Prakashan, Meerut, India, 1990.
- Chen, Z., Mujumdar, A.S., Bibliography on Drying of Coated Webs, *Drying of solids*, Sarita Prakashan, New Delhi, pp. 289-303, 1990.
- Kumar, P., Mujumdar, A.S., Effect of Drying on Pulp & Paper Properties: A Bibliography, *Drying of solids*, Sarita Prakashan, New Delhi, pp. 304-319, 1990.

- Kumar, P., Mujumdar, A.S., Superheated Steam Drying: A Bibliography, *Drying of solids*, Sarita Prakashan, New Delhi, pp. 320-325, 1990.
- Kalwar, M.I., Raghavan, V.G.S., Mujumdar, A.S., Bibliography on Spouted Bed Technology, *Drying of solids*, Sarita Prakashan, New Delhi, pp. 343-352, 1990.

1989

- Erdesz, K., Ringer, D., Mujumdar, A.S., Transport Processes in Vibro-fluidized Beds, pp. 317-358, in L.K. Doraiswamy, A.S. Mujumdar (Eds.) *Transport Processes in Fluidized Particle Systems*, Elsevier, Amsterdam, 1989.
- Polat, S., van Heiningen, A.R.P., Mujumdar, A.S., Douglas, W.J.M., Numerical Study of Turbulent Slot Jets Impinging on a Surface with Throughflow, pp. 508-522, in R.W. Lewis, K. Morgan (Eds.) *Numerical Methods in Thermal Problems, Vol. VI (Part 1)*, pp. 508-522, 1989.

1987

- Lawal, A., Mujumdar, A.S., Laminar Duct Flow and Heat Transfer to Purely Viscous Non-Newtonian Fluids, pp. 352-444, in R.A. Mashelkar, A.S. Mujumdar, R. Kamal (Eds.) *Transport Phenomena in Polymeric Systems – I*, Wiley Eastern, Delhi, 1987.
- Passos, M.L., Mujumdar, A.S., Raghavan, G.S.V., Spouted Beds for Drying: Principles and Design Considerations, pp. 359-397, in A.S. Mujumdar (Ed.) *Advances in Drying, Vol. 4*, Hemisphere, Washington, 1987.
- Mujumdar, A.S., Menon, A.S., Drying of Solids: Principles, Classification, and Selection of Dryers, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 3-46, 1987.
- Pakowski, Z., Mujumdar, A.S., Basic Process Calculations in Drying, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 83-132, 1987.
- Filkova, I., Mujumdar, A.S., Industrial Spray Drying Systems, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 243-294, 1987.
- Pallai, E., Nemeth, J., Mujumdar, A.S., Spouted Bed Drying, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 419-460, 1987.
- Mujumdar, A.S., Impingement Drying, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 461-474, 1987.

- Pakowski, Z., Mujumdar, A.S., Drying of Pharmaceutical Products, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 605-642, 1987.
- Polat, O., Mujumdar, A.S., Drying of Pulp and Paper, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 643-682, 1987.
- Mujumdar, A.S., Drying in Mineral Processing, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 711-720, 1987.
- Mujumdar, A.S., Drying of Coated Webs, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 753-756, 1987.
- Hasan, M., Mujumdar, A.S., Drying of Polymers, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 757-788, 1987.
- Narayan, S.B., Mujumdar, A.S., Fire and Explosion Hazards in Drying Plants, *Handbook of Industrial Drying*, Marcel Dekker, New York, pp. 863-880, 1987.

1986

- Cui, W.-K., Mujumdar, A.S., Paper Drying – An Overview of Developments, pp. 142-156, in A.S. Mujumdar (Ed.) *Drying of Solids*, Wiley Eastern, Delhi, 1986.
- Hasan, M., Mujumdar, A.S., Evaporation of Water from a Wet Moving Surface into a Parallel Stream of Air, Humid Air and Superheated Steam, pp. 164-174, in A.S. Mujumdar (Ed.) *Drying of Solids*, Wiley Eastern, Delhi, 1986.
- Mujumdar, A.S., Future Trends in Drying Technology – A Viewpoint, pp. 213-216, in A.S. Mujumdar (Ed.) *Drying of Solids*, Wiley Eastern, Delhi, 1986.
- Hasan, M., Mujumdar, A.S., Industrial Drying of Polymers and Resins: Principles and Dryer Selection Guidelines, pp. 291-316, in A.S. Mujumdar (Ed.) *Drying of Solids*, Wiley Eastern, Delhi, 1986.

1984

- Pakowski, Z., Mujumdar, A.S., Strumillo, C., Theory and Application of Vibrated Beds and Vibrated Fluid Beds for Drying Processes, pp. 245-306, in A.S. Mujumdar (Ed.) *Advances in Drying, Vol. 3*, Hemisphere, Washington, 1984.

1983

- Gupta, R., Mujumdar, A.S., Recent Developments in Fluidized Bed Drying, pp. 155-192, in A.S. Mujumdar (Ed.) *Advances in Drying, Vol. 2*, Hemisphere, Washington, 1983.

1978

- Mujumdar, A.S., Impingement Heat and Mass Transfer, *Short Courses on Industrial Drying*, McGill University, Montreal, Canada, pp. 79-116, 1978.

4. Technical Reports (major projects only)

1997

- Mujumdar, A.S., Topics in Heat and Mass Transfer, *TEPCO Chair Lecture Series*, Keio University, Yokohama, Japan, 1997.

1994

- Woods, B., Husain, H., Mujumdar, A.S., *Techno-Economic Assessment of Potential Superheated Steam Drying Applications in Canada*, Canadian Electrical Association Report 913 U 888, 1994.

1990

- Mujumdar, A.S., *Superheated Steam Drying - Principles, Practice and Potential for Use of Electricity*, Canadian Electrical Association Report. 817 U 671, 1990.
- Polat, S., Mujumdar, A.S., van Heiningen, A.R.P., Douglas, W.J.M., *Evaluation of a Numerical Model for Flow and Heat Transfer under Jets Impinging on a Surface with Throughflow*, Postgraduate Research Laboratory Report No. 454, Pulp and Paper Research Institute of Canada, 1990.

5. Authored/Edited books and proceedings volumes

2006

- Mujumdar, A.S., Ed., *Handbook of Industrial Drying, 3rd Expanded Edition*, Taylor & Francis, Philadelphia, USA (in press). Fifty four chapters, 75% new material compared to the 2nd edition of 1995. Twenty three chapters authored or co-authored by Professor Mujumdar, September 2006.
- Chinese translation of Mujumdar A.S., *Guide to Industrial Drying, Principles, Equipment and New Developments*, Chemical Press, Beijing, 2006.

2005

- Mujumdar, A.S., *Guide to Industrial Drying, Principles, Equipment and New Developments*, Colour Publications Pvt. Ltd., Mumbai, India, 2005, 349 pp. *Translation in Chinese language published by Chemical Publishers, Beijing in July 2005.*
- Kudra, T. and Mujumdar, A.S., Translation in Chinese of the book entitled, “Advanced drying technologies”, published by Chemical Publishers, Beijing, 2005.

2004

- Mujumdar, A.S., Ed, *Dehydration of Products of Biological Origin*, Science Publishers, Enfield, NH, USA.
- Mujumdar A.S., *Guide to Industrial Drying, Principles, Equipment and New Developments*, Colour Publications, Mumbai, India, 2004, 349 pp.

2003

- Chakraverty, A., Mujumdar, A.S., Raghavan, G.S.V., and Ramaswamy, H.S., Editors, *Handbook of Postharvest Technology*, Marcel Dekker, NY., 884 pp.

2002

- Kudra, T. and Mujumdar, A.S., *Advanced Drying Technologies*, Marcel Dekker, N.Y., USA, pp 452.
- Mujumdar, A.S. (Ed.) *Drying Technology in Agriculture and Food Sciences*, Oxford/IBH, Delhi, India. Published simultaneously by Science Publisher, Inc., New York.

2000

- Mujumdar, A.S., Suvachittanont, S. (Eds.) *Developments in Drying, Vol. 2*, Kasetsart University Press, Bangkok, Thailand, 2000.
- *Mujumdar's Practical Guide to Industrial Drying*, edited by S. Devahastin, Exergex, Brossard, Canada (translated into Chinese, Hungarian and Indonesian languages).

1999

- Mujumdar, A.S., Suvachittanont, S. (Eds.) *Developments in Drying, Vol. 1*, Kasetsart University Press, Bangkok, Thailand, 1999.

1998

- Pan, Y.-K., Wang, X., Mujumdar, A.S. (Eds.), *Modern Drying Technology*, Chemical Industry Publisher, Beijing, China, 1998 (in Chinese).
- Akritidis, C.B., Marinos-Kouris, D., Saravakos, G.D., Mujumdar, A.S., (Eds.) *Drying '98*, Ziti Editions, Greece, 1998.

1996

- Turner, I., Mujumdar, A.S. (Eds.), *Mathematical Modelling and Numerical Techniques in Drying Processes*, Marcel Dekker, New York, 1996.
- Mujumdar, A.S., Strumillo, C., Pakowski, Z., (Eds.) *Drying '96*, Lodz Technical University, Poland, 1996.

1995

- Mujumdar, A.S. (Ed.), *Handbook of Industrial Drying, 2nd Edition*, Marcel Dekker, New York, 1995.

1994

- Rudolph, V., Keey, R.B., Mujumdar, A.S., (Eds) *Drying' 94, Vol. A*, Gold Coast, Australia, 1994.
- Rudolph, V., Keey, R.B., Mujumdar, A.S., (Eds) *Drying' 94, Vol. B*, Gold Coast, Australia, 1994.

1993

- Mujumdar A.S., Mashelkar, R.A. (Eds.) *Advances in Transport Processes, Vol. IX*, Elsevier, Amsterdam, 1993.

1992

- Mujumdar, A.S. (Ed.), *Drying'92*, Elsevier, Amsterdam, 1992.
- Mujumdar, A.S. (Ed.), *Drying of Solids*, International Science Publisher, New York, 1992.
- Mujumdar, A.S., (Ed.) *Advances in Drying, Vol. 5*, Hemisphere, Washington, 1992.

1991

- Mujumdar A.S., Filkova, I. (Eds.), *Drying'91*, Elsevier, Amsterdam, 1991.
- Mujumdar, A.S., Mashelkar, R.A. (Eds.), *Advances in Transport Processes, Vol. VIII*, Elsevier, Amsterdam, 1992.

1990

- Mujumdar, A.S. (Ed.), *Drying of Solids*, Sarita Prakashan, Meerut, India, 1990.

1989

- Mujumdar A.S., Roques, M., (Eds.), *Drying'89*, Hemisphere, Washington, 1989.
- Doraiswamy, L.K., Mujumdar, A.S. (Eds.) *Transport in Fluidized Particle Systems*, Elsevier, Amsterdam, 1989.
- Mashelkar, R.A., Mujumdar, A.S., Kamal, R., (Eds.) *Advances in Transport Processes, Vol. VI: Transport Phenomena in Polymeric Systems-2*, Wiley Eastern Limited, New Delhi, 1989.

1988

- Roques, M.A., Mujumdar, A.S., (Eds.), *Sixth International Drying Symposium*, Versailles, France, 1988.

1987

- Mashelkar, R.A., Mujumdar, A.S., Kamal, R. (Eds.), *Transport Phenomena in Polymeric Systems – I*, Wiley Eastern, Delhi, 1987.
- Mujumdar, A.S. (Ed.), *Handbook of Industrial Drying*, Marcel Dekker, New York, 1987.
- Mujumdar, A.S., (Ed.) *Drying '87*, Hemisphere, Washington, 1987.
- Mujumdar, A.S., (Ed.) *Advances in Drying, Vol. 4*, Hemisphere, Washington, 1987.
- Mujumdar, A.S., Mashelkar, R.A., (Eds.), Doraiswamy, L.K., Kulkarni, B.D., (Sp. Eds.) *Advances in Transport Processes, Vol. VII*, Wiley Eastern Limited, New Delhi, 1987.

1986

- Mujumdar, A.S. (Ed.), *Drying'86*, Hemisphere, Washington, 1986.
- Mujumdar, A.S. (Ed.), *Drying of Solids*, Wiley Eastern, Delhi, 1986.
- Mujumdar, A.S., Mashelkar, R.A., (Eds.) *Advances in Transport Processes, Vol. IV*, Wiley Eastern Limited, New Delhi, 1986.

1985

- Toei, R., Mujumdar, A.S., (Eds.) *Drying '85*, Hemisphere, Washington, 1985.

1984

- Mujumdar, A.S. (Ed.) *Drying '84*, Hemisphere, Washington, 1984.
- Mujumdar, A.S., Toei, R., (Eds.) *Proceedings of Fourth International Drying Symposium*, Kyoto International Conference Hall, Japan, 1984.
- Mujumdar, A.S., (Ed.) *Advances in Drying, Vol. 3*, Hemisphere, Washington, 1984.
- Mujumdar, A.S., Mashelkar, R.A., (Eds.) *Advances in Transport Processes, Vol. III*, Wiley Eastern Limited, New Delhi, 1984.

1983

- Mujumdar, A.S., (Ed.) *Advances in Drying, Vol. 2*, Hemisphere, Washington, 1983.

1982

- Mujumdar, A.S. (Ed.) *Drying '82*, Hemisphere, Washington, 1982.
- Mujumdar, A.S., Mashelkar, R.A., (Eds.) *Advances in Transport Processes, Vol. II*, Wiley Eastern Limited, New Delhi, 1982.

1980

- Mujumdar, A.S., (Ed.) *Drying '80: Developments in Drying*, Hemisphere, Washington, 1980.
- Mujumdar, A.S., (Ed.) *Advances in Drying, Vol.1*, Hemisphere, Washington, 1980.
- Mujumdar, A.S., Mashelkar, R.A., (Eds.) *Advances in Transport Processes, Vol. I*, Wiley Eastern Limited, New Delhi, 1980.

1979

- Mujumdar, A.S., (Ed.) *The International Symposium on Papermachine Headboxes*, Montreal, Canada, 1979.

1978

- Mujumdar, A.S., (Ed.) *Proceedings of the First International Symposium on Drying*, Science Press, Princeton, 1978.
- Mujumdar, A.S., Keey, R.B., (Eds.) *Short Courses on Industrial Drying*, McGill University, Montreal, Canada, 1978.

This compilation is not complete. Papers published during 1967-78 are not included.