

CURRICULUM VITAE

Dr. Zhanyong LI



Professor, Processing Equipment & Controlling Engineering
Deputy Dean, College of Mechanical Engineering
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DEGREES

Ph.D. in Chemical Engineering – Nagoya University, Japan, 2002
Master in Mechanical Engineering – Tianjin Institute of Light Industry, 1994
Bachelor in Mechanical Engineering - Tianjin Institute of Light Industry, 1990

PROFESSIONAL AFFILIATIONS

Member, The Society of Chemical Engineers, Japan
Member, The International Scientific Committee, International Technical-Scientific
Conference “Energy-Saving Technologies for Drying, Hygro-Thermal and Thermal
Processing (DHTP)”

PROFESSIONAL CAREER

2004 – Present Professor, Tianjing University of Science & Technology
2002 – 2004 Postdoctoral fellow, Center for Integrated Research in Sci. & Eng.,
Nagoya University
1995 – 1998 Lecturer, Dept. of Mech. Eng., Tianjin Institute of Light Industry
1994 – 1995 Assistant, Dept. of Mech. Eng., Tianjin Institute of Light Industry
1990 – 1991 Technician, Datong Coal Mining Bureau, Shanxi Province

TEACHING ACTIVITIES

Process Principles and Equipment, Fundamentals of Mechanical CAD Technology, Recent
Developments in Chemical Process Equipment, Energy & Environment, Fluidization
Engineering Principles, Powder Technology, Numerical Heat Transfer & Fluid Flow

RESEARCH INTERESTS

Drying & Adsorption, Fluidization, Powder Technology, Disposal & treatment of wastes,
Computational Fluid Dynamics & Heat Transfer

SELECTED RECENT PUBLICATIONS

Book Chapters:

1. Kudra, T. and Mujumdar, A.S. (Translated by **Li, Z.Y.**) 2005. Advanced Drying
Technologies, 283p, Chemical Industry Press, China (ISBN 7-5025-7403-4) . (in

Chinese)

2. **Li, Z.Y.** and Pan, Y.K. 2003. Novel dryers, in: *Drying Technique & its Industrial Application* (eds. Z.W. Cao, Z.S. Tian, G.W. Liu), pp. 25-36. China Petrochemical Press (ISBN 7-80164-418-2). (in Chinese)
3. **Li, Z.Y.**; Wang, B.H; Wang, X.Z. and Kudra, T. 1998. Other special drying technologies. In: *Modern Drying Technology* (eds. Y.K. Pan and X.Z.Wang), pp.679-720. Chemical Industry Press, China (ISBN 7-5025-2046-5/TQ.1011). (in Chinese)
4. **Li, Z.Y.**; Jing, Y.S. and Mujumdar, A.S. 1998. Drying of polymers. (ibid), pp.1027-1045.
5. **Li, Z.Y.** and He, S.A. 1998. Microwave and radio frequency drying (ibid), pp.505-540.
6. Mujumdar, A.S. (Translated by **Li, Z.Y.** and Zhao, Y.P.) 1998. Innovation and trend of drying technologies. (ibid), pp3-11.

Referred Journal Publication:

1. **Li, Z.Y.**, N. Kobayashi and M. Hasatani; "Characteristics of Pressure Fluctuations in a Fluidized Bed of Binary Mixtures," *Journal of Chemical Engineering of Japan* , **38** (2005) (in press)
2. **Li, Z.Y.**, N. Kobayashi, A. Nishimura and M. Hasatani; "A Method to Predict the Minimum Fluidization Velocity of Binary Mixtures Based on Particle Packing Properties," *Chemical Engineering Communications*, **192** (7), 918-932 (2005)
3. **Li, Z.Y.** and N. Kobayashi; "Determination of Moisture Diffusivity by Thermo-Gravimetric Analysis under Non-Isothermal Condition," *Drying Technology*, **23**(6), 1331-1342 (2005)
4. **Li, Z.Y.**, J. S. Ye, N. Kobayashi and M. Hasatani; "Modeling of Diffusion in Ellipsoidal Solids: A Simplified Approach," *Drying Technology*, **22** (10), 2219-2230 (2004)
5. **Li, Z.Y.**, N. Kobayashi, S. Deguchi, F. Watanabe and M. Hasatani; "Investigation on Drying Kinetics in a Pulsed Fluidized Bed," *Journal of Chemical Engineering of Japan*, **37** (9), 1179-1182 (2004)
6. **Li, Z.Y.**, N. Kobayashi and M. Hasatani; "Modeling of Diffusion in Ellipsoidal Solids: a Comparative Study," *Drying Technology*, **22** (4), 649-675 (2004)
7. **Li, Z.Y.** , F. Watanabe, J. Kobayashi, N. Kobayashi and M. Hasatani; "Preparation of Hydrophilic Activated Carbon by Silica Filling in Pores for Adsorption Heat Pump," *SCEJ Proceedings of Energy Engineering Symposium*, **3**(1), 27-30 (2003)
8. **Li, Z.Y.**, N. Kobayashi, A. Nishimura, and M. Hasatani; "Sorption Drying of Soybean Seeds with Silica Gel. Part 1: Hydrodynamics of a Fluidized Bed Dryer," *Drying Technology*, **20**(6), 1193-1213 (2002)
9. **Li, Z.Y.**, N. Kobayashi, F. Watanabe and M. Hasatani; "Sorption Drying of Soybean Seeds with Silica Gel," *Drying Technology*, **20** (1), 223-233 (2002)
10. Hasatani, M., N. Kobayashi and **Z.Y. Li**; "Review: Drying and Dewatering R & D in Japan," *Drying Technology*, **19** (7), 1223-1251 (2001)
11. Pan, Y.K., **Z.Y. Li**, A.S. Mujumdar and T. Kudra; "Analogy of Heat and Mass Transfer for Drying Hygroscopic Particles in Vibrated Fluid Beds," *Bulletin of the Polish Academy of Science-Technical Science*, **48** (3), 463-474 (2000)

International Conference Publication:

1. **Li, Z.Y.**, J.S. Ye, J.T. Song and H.T. Wang; "Numerical Evaluation of the Non-Isothermal Method for Determination of Moisture Diffusivity," Second International Technical-Scientific Conference "Energy-Saving Technologies for Drying, Hygro-Thermal and Thermal Processing (DHTP-2005)", Moscow, Russia (11-14 October, 2005)
2. Ye, J.S. **Z.Y. Li**, H.T. Wang and J.T. Song; "Drying of Green Peas in a Pulsed Fluidized Bed Dryer," DHTP-2005, Moscow, Russia (11-14 October, 2005)
3. Liu Z.Y., L.L. Gao, D. Li, J.T. Song and **Z.Y. Li**; "Characteristics Of Circulating Fluidized Bed Evaporator With Vapor-Liquid-Solid Three-Phase Flow," DHTP-2005, Moscow, Russia (11-14 October, 2005)
4. Song J.T., Z.Y. Liu, D. Li, **Z.Y. Li** and J.S. Ye; "Experimental Study of the Evaporating Property of Pineapple Juice," DHTP-2005, Moscow, Russia (11-14 October, 2005)

5. **Li, Z.Y.** and J. S. Ye; "Modeling of Diffusion in Ellipsoidal Solids: A Simplified Approach to Solving Some Drying Problems," 16th International Congress of Chemical and Process Engineering (CHISA 2004); Prague, Czech Republic (Aug. 22-26, 2004).
6. **Li, Z.Y.**, N. Kobayashi, T. Kawakami, S. Deguchi, F. Watanabe and M. Hasatani; "Drying Kinetics in a Modified Fluidized Bed of Continuous and Pulsing Flows," in: Fluidization: Science and Technology (CJF-8); Gifu, Japan, pp.174-181 (Dec. 3-5, 2003) (ISBN: 4-9901883-1-4).
7. **Li, Z.Y.**, N. Kobayashi, A. Nishimura, S. Deguchi and M. Hasatani; "Fluidization Characteristics in a Fluidized Bed of Dissimilar Particles," in: IDS'2002. Beijing, P.R. China, pp. 587-595 (Aug. 27-30, 2002).
8. Kobayashi, N., **Z.Y. Li**, S. Deguchi and M. Hasatani; "Pressure Fluctuation Characteristics in a Fluidized Bed of Binary Particles," The 7th International Conference on Circulating Fluidized Beds. Niagara Falls, Ontario, Canada (May 5-8, 2002).
9. **Li, Z. Y.**, A. Nishimura, N. Kobayashi, F. Watanabe and M. Hasatani; "Enhancement of Heat and Mass Transfer by Using Pulsed Fluidized Bed," in: Proceedings of the 6th World Congress of Chemical Engineering (CD-ROM). Melbourne, Australia (Sept. 23-27, 2001).
10. **Li, Z. Y.**, N. Kobayashi, F. Watanabe and M. Hasatani; "Sorption Drying of Soybean Seeds with Silica Gel," in: Proceedings of the 2nd Asian-Oceania Drying Conference (ADC'2001) (Wan Ramli Wan Daud et al., eds.), Pulau Pinang, Malaysia, pp.517-525 (Aug. 20-22, 2001)
11. Hoshino, H., A. Nishimura, **Z.Y. Li**, N. Kobayashi and M. Hasatani; "Bed Behavior and Particle Lateral Mixing in a Two-Dimensional Pulsed Fluidized Bed," in: Fluidization: Science and Technology (CJF-7); D. Xu and S. Mori, eds. Xi'an, P. R. China, pp.71-76 (Oct. 20-22, 2000).