

REFERENCES

- Abnoyi, J., and Feil, B. 2007. **Clustering analysis for data mining and system identification**. Switzerland: Birkhauser Verlag AG.
- Adcharyaviriya, A., Soponronnarit, S., and Tiansuwan, J. 2001. Study of longan flesh drying. **Drying Technology** 19(9): 2315-2329.
- Adcharyaviriya, S., Soponronnarit, S., and Terdyothin, A. 2000. Diffusion models of papaya and mango glaze drying. **Drying Technology** 18(7): 1605-1615.
- Ade-Omowaye, B. I. O., Olaniyan, S. A., Adeyemi, I. A., and Isola, O. O. 2006. Development and quality evaluation of non-alcoholic beverages from maize based products. **Nutrition & Food Science** 36(3): 183-190.
- Banga, J. R., and Singh, R. P. 1994. Optimization of air drying of foods. **Journal of Food Engineering** 23: 189-211.
- Bie, W. B., Szrednicki, G., and Driscoll, R. H. 2007. Study of temperature and moisture distribution in paddy in a triangular spotted bed dryer. **Drying Technology** 25: 177-183.
- Braun, J. (2003). Agricultural economics and distribution effects. **25th International Conference of Agricultural Economists (IAAE)**, pp. 1-11. South Africa.
- Bray, F. 1986. **The rice economies**. Oxford: Basil Blackwell.
- Brown, J. G. 1994. **Agroindustrial investment and operations**. Washington, D.C.: World Bank.
- Ceylan, İ., Aktaş, M., and Doğan, H. 2007. Mathematical modeling of drying characteristics of tropical fruits. **Applied Thermal Engineering** 27(11-12): 1931-1936.

- de Vries, A., and Conlin, B. J. 2005. A comparison of the performance of statistical quality control charts in a dairy production system through stochastic simulation. **Agricultural Systems** 84(5): 317-341.
- Dong, R., Lu, Z., Liu, Z., Nishiyama, Y., and Cao, W. 2009. Moisture distribution in a rice kernel drying tempering drying. **Journal of Food Engineering** 91(1): 126-132.
- Dufour, P. 2006. Control engineering in drying technology: Review and trends. **Drying Technology** 24: 889-904.
- Doymaz, I. 2005. Drying behaviour of green beans. **Journal of Food Engineering** 69: 161-165.
- Eric, B. 2007. **The smoke of the gods: A social history of tobacco**. Philadelphia: Temple University Press.
- Fellows, P. J. 2000. **Food processing technology: Principles and practices**. (2 ed.). Florida: CRC Press.
- Frydman, A., Vasseur, I., Ducept, F., Siomeau, M., and Moureh, J. 1999. Simulation of spray drying in superheated steam using computational fluid dynamics. **Drying Technology** 17(7&8): 1313-1326.
- Glaeser, H. 2003. Control of the water content of dairy products - Definitions of limits, consideration of process variation, official use of autocontrol data. **Food Chemistry** 82: 121-124.
- Hu, Q., Zhang, M., Mujumdar, A. S., Xiao, G., and Sun, J. 2006. Drying of edamames by hot air and vacuum microwave combination. **Journal of Food Engineering** 77: 977-982.
- Iguza, A., and Virseda, P. 2007. Moisture desorption isotherms of rough rice at high temperatures. **Journal of Food Engineering** 79(3): 794-802.

- Jaisut, D., Prachayawarakorn, S., Varanyanond, W., and Soponronnarit, S. 2008. Effect of drying temperature and tempering time on starch digestibility of brown fragrant rice. **Journal of Food Engineering** 86(2): 251-258.
- Janarun, G. 1998. **Research report: A study on the production of dried vegetables and fruits**. Department of Chemistry, Faculty of Science, Pibulsongkram Rajabhat University.
- Janjai, S., Lamlert, N., Intawee, P., Mahayothee, B., Bala, B. K., Nagle, M., et al. 2008. Finite element simulation of drying of longan fruit. **Drying Technology** 26: 666-674.
- Jason, A. C. 1958. **Fundamental aspects of the dehydration of foodstuffs**. New York: London and Macmillan.
- Kritchanchai, D. 2004. Assessing responsiveness of the food industry in Thailand. **Industrial Management & Data Systems** 19(1): 207-216.
- Leeuwen, M. (2000). *Importance of agro-food chains in EU regions: A cross-section analysis*. Paper presented at the 13th International Conference on Input-Output Techniques.
- Legros, R., Millington, C. A., and Clift, R. 1994. Drying of tobacco particles in a mobilised bed. **Drying Technology** 12(3): 517-543.
- Lertworasirikul, S. 2008. Drying kinetics of semi-finished cassava crackers: A comparative study. **LWT** 41: 1360-1371.
- Liu, X., Chen, X., Wu, W., and Zhang, Y. 2006. Process control based on principal component analysis for maize drying **Food Control** 17(11): 894-899.
- Madhiyanon, T., Soponronnarit, S., and Tia, W. 2001a. Industrial-scale prototype of continuous spotted be paddy dryer. **Drying Technology** 19(1): 207-216.

- Madhiyanon, T., Soponronnarit, S., and Tia, W. 2001b. A two-region mathematical model for batch drying of grains in a two-dimensional spouted bed. **Drying Technology** 19(6): 1045-1064.
- Mangina, E., and Vlachos, I. P. 2005. The changing role of information technology in food and beverage logistics management: Beverage network optimisation using intelligent agent technology. **Journal of Food Engineering** 70: 403-420.
- Marsden, K., and Garzia, M. 1998. **Agro-industrial policy reviews: Methodological guidelines**. Rome: Food and Agricultural Organization of United States.
- Martinez-Bustos, F., Lopez-Soto, M., Martin-Martinez, E. S., Zazueta-Morales, J. J., and Velez-Medina, J. J. 2007. Effects of high energy milling on some functional properties of jicama starch (*Pachyrrhizus erosus* L. Urban) and cassava starch (*Manihot esculenta* Crantz). **Journal of Food Engineering** 78: 1212-1220.
- Meeso, N., Nathakaranakule, A., Madhiyanon, T., and Soponronnarit, S. 2007. Modelling of far-infrared irradiation in paddy drying process. **Journal of Food Engineering** 78(4): 1248-1258.
- Mevik, B.-H., Færgestad, E. M., Ellekjær, M. R., and Næs, T. 2001. Using raw material measurements in robust process optimization. **Chemometrics and Intelligent Laboratory Systems** 55: 133-145.
- Miller, H. 1998. Variation, innovation and dynamic quality. **The TQM Magazine** 10(6): 477-451.
- Mizzi, L. (1993). **A general overview of agro-industry** Available from: <http://ressources.ciheam.org/om/pdf/b07/93400011.pdf> [Retrieved 12 February 2004].

- Nath, A., and Chattopadhyay, P. K. 2007. Optimization of oven toasting for improving crispness and other quality attributes of ready to eat potato-soy snack using response surface methodology. **Journal of Food Engineering** 80(4): 1282-1292.
- National Food Institute. 1998. **A manual of longan drying with production and plan (in Thai)**. Bangkok: National Food Institute.
- Njie, D. N., and Rumsey, T. R. 1998. Experimental study of cassava sun drying. **Drying Technology** 16(1&2): 163-180.
- Noronha, J., Loey, A. V., Hendrickx, M., and Tobback, P. 1996. Simultaneous optimisation of surface quality during the sterilisation of packed foods using constant and variable retort temperature profiles **Journal of Food Engineering** 30(3-4): 283-297.
- Nwokah, N. G., and Maclayton, D. W. 2006. Customer-focus and business performance: The study of food and beverage organization in Nigeria. **Measuring Business Excellence** 10(4): 65-76.
- Olmos, A., Trelea, I. C., Courtois, F., Bonazzi, C., and Trystram, G. 2002. Dynamic optimal control of batch rice drying process. **Drying Technology** 20(7): 1319-1345.
- Pakowski, Z., Druzdzel, A., and Drwiega, J. 2004. Validation of a model of an expanding superheated steam flash dryer for cut tobacco based on processing data. **Drying Technology** 22(1&2): 45-47.
- Pan, Z., Khir, R., Godfry, R., Lewis, R., Thompson, J. F., and Salim, A. 2008. Feasibility of simultaneous rough rice drying and disinfestations by infrared radiation heating and rice milling quality. **Journal of Food Engineering** 84: 467-479.
- Paquet, J., Lacroix, C., and Thibault, J. 2000. Modeling of pH and acidity for industrial cheese production. **Journal of Dairy Science** 83(11): 2393-2409.

- Poomsa-ad, N., Soponronnarit, S., Prachayawarakorn, S., and Terdyothin, A. 2002. Effect of tempering on subsequent drying of paddy using fluidisation technique. **Drying Technology** 20(1): 195-210.
- Prachayawarakorn, S., Poomsa-sa, N., and Soponronnarit, S. 2005. Quality maintenance and economy with high-temperature paddy-drying processes. **Journal of Stored Product Research** 41: 333-351.
- Prachayawarakorn, S., Soponronnarit, S., Wetchacama, S., and Jaisut, D. 2002. Desorption isotherms and drying characteristics of shrimp in superheated steam and hot air. **Drying Technology** 20(3): 669-684.
- Quirijns, E. J. 2006. **Modelling and dynamic optimisation of quality indicator profiles during drying**. Doctoral Dissertation. System and Control Group Wageningen University.
- Rohitratana, K., and Boon-itt, S. 2001. Quality standard implementation in the Thai seafood processing industry. **British Food Journal** 103(9): 623-630.
- Rordprapat, W., Nathakaranakule, A., Tia, W., and Soponronnarit, S. 2005. Comparative study of fluidized bed paddy drying using hot air and superheated steam. **Journal of Food Engineering** 71: 28-36.
- Salgado, M., Lebert, A., Garcia, H. S., Muchnik, J., and Bimbenet, J. J. 1994. Development of the characteristic drying curve for cassava chips in monolayer. **Drying Technology** 12(3).
- Saravacos, G. D. C., S. E. 1962. A study of the mechanism of fruit and vegetable dehydration. **Food Technology** 16: 78-81.
- Soponronnarit, S. 1999. Fluidised-bed paddy drying. **ScienceAsia** 25: 51-56.
- Soponronnarit, S., Nathakaranakule, A., Jirajindalert, A., and Taechapairoj, C. 2006a. Parboiling brown rice using super heated steam fluidization technique. **Journal of Food Engineering** 75: 423-432.

- Soponronnarit, S., Prachayawarakorn, S., Rordprapat, W., Nathakaranakule, A., and Tia, W. 2006b. A superheated-steam fluidized-bed dryer for parboiled rice: Testing of a pilot-scale and mathematical model development. **Drying Technology** 24: 1457-1467.
- Soponronnarit, S., Swasdisevi, T., Wetchacama, S., Shujinda, A., and Srisawat, B. 2000a. Cyclonic rice husk furnace and its application on paddy drying. **International Energy Journal** 1(2): 67-75.
- Soponronnarit, S., Swasdisevi, T., Wetchacama, S., and Wutiwiwatchai, W. 2001a. Fluidised bed drying of soybeans. **Journal of Stored Product Research** 37: 133-151.
- Soponronnarit, S., Wetchacama, S., and Kanphukdee, T. 2000b. Seed drying using a heat pump. **International Energy Journal** 1(2): 97-102.
- Soponronnarit, S., Wetchacama, S., Trutassanawin, S., and Jariyatontivait, W. 2001b. Design, testing, and optimization of vibro-fluidized bed paddy dryer. **Drying Technology** 19(8): 1891-1908.
- Srikaeo, K., Furst, J. E., and Ashton, J. 2005. Characterization of wheat-based biscuit cooking process by statistical process control techniques. **Food Control** 16(4): 309-317.
- Suzuki, K., Ihara, K., Kubota, K., and Hosaks, H. 1977. Heat transfer of the constant rate period in drying of agar fel, carrot and sweet potatoe. **Nippon Shokuhin Kogyo Gokkaishi** 24: 387-393.
- Taechapairoj, C., Dhuchakallaya, I., Soponronnarit, S., Wetchacama, S., and Prachayawarakorn, S. 2003. Superheated steam fluidised bed paddy drying. **Journal of Food Engineering** 58: 67-73.
- Taguchi, G., Elsayed, E. A., and Thomas, C. H. 1989. **Quality engineering in production systems**. New York: McGraw-Hill.

- Tamon, H. (2005). Introduction to drying. In H. Tamon & W. Tanthapanichakoon (Eds.), *Drying technology in food industry* (pp. 13-23). Bangkok: Technology Promotion Association (Thailand - Japan).
- Teeboonma, U., Tiansuwan, J., and Soponronnarit, S. 2003. Optimization of heat pump fruit dryers. *Journal of Food Engineering* 59: 369-377.
- Themelin, A., Raoult-Wack, A. L., and Danzart, M. 1997. Multicriteria optimization of food processing combining soaking prior to air drying. *Drying Technology* 15(9): 2263-2279.
- Thurairajasingam, E., Shayan, E., and Masood, S. 2002. Modelling of a continuous food pressing process by dimensional analysis. *Computers & Industrial Engineering* 42(2-4): 343-351.
- Tirawanichakul, S., Sani, S., Sangwichien, C., and Tirawanichakul, Y. 2007. Parameters for the analysis of natural rubber drying. *Songklanakarin Journal of Science and Technology* 29: 335-346.
- Tirawanichakul, Y., Prachayawarakorn, S., Varanyanond, W., and Soponronnarit, S. 2004. Simulation and grain quality for in-store drying of paddy. *Journal of Food Engineering* 64: 405-415.
- Van Arsdel, W. B., Copley, M. J., and Morgan, A. I. 1973. *Food dehydration*. Connecticut: AVI Publishing Company.
- Van Der Spiegel, M., Luning, P. A., De Boer, W. J., Ziggers, G. W., and Jongen, W. M. F. 2006. Measuring effectiveness of food quality management in the bakery sector. *Total Quality Management* 17(6): 691-708.
- Van Der Spiegel, M., Luning, P. A., Ziggers, G. W., and Jongen, W. M. F. 2003. Towards a conceptual model to measure effectiveness of food quality systems. *Trends in Food Science & Technology* 14: 424-431.

- Varith, J., Dijkanarukkul, P., Achariyaviriya, A., and Achariyaviriya, S. 2007. Combined microwave-hot air drying of peeled longan. **Journal of Food Engineering** 81(2): 458-468.
- Verdijck, G. J. C., Straten, G. v., and Preisig, H. A. 2005. Optimisation of product quality and minimisation of its variation in climate controlled operations. **Computers and Electronics in Agriculture** 48: 103-122.
- Wetchacama, S., Soponronnarit, S., Prachayawarakorn, S., Pongpullponsak, A., Tuntiwetsa, W., and Kositcharoekul, S. 2001. Study of parameters affecting drying kinetics and quality of corns. **Kasetsart Journal** 35: 195-204.
- Yong, C. K., Islam, M. R., and Mujumdar, A. S. 2006. Mechanical means of enhancing drying rate: Effect on drying kinetics and quality. **Drying Technology** 24: 397-404.
- Yu, Y., and Wang, J. 2006. Modeling equilibrium moisture content of γ -ray irradiated rough rice. **Drying Technology** 24: 671-676.

VITA

Mr. Surachai Santisookrat was born on 24th August 1978 in Chiang Mai province of Thailand. He received his Bachelor Degree of Industrial Engineering at Chiang Mai University, Thailand in 2000. After graduating from Chiang Mai University, he decided to pursue his Master Degree and graduated in the field of Industrial Engineering from Chulalongkorn University, Thailand in 2002. After graduating from Chulalongkorn University, he has worked as a lecturer in Industrial Engineering at North-Chiang Mai University, Thailand. After working with two years, he got a scholarship from North-Chiang Mai University for studying Ph.D. program in the field of Industrial Engineering. After completing his Ph.D. study, he will continue to be a lecturer at North-Chiang Mai University, Thailand.