## NAME: Chalat Santivarangkna

#### Profile

Food biotechnologist with practical experiences with food industries and researches on probiotic, prebiotic, nutrition and functional foods. Able to work either independently or within a cross-functional and multi-cultural team. Proven interpersonal, communicative, and organizing skills. Comfortable in dealing with a challenging problem. Naturally taking a systematic approach and lateral thinking to problem solving.

EMAIL ADDRESS: chalat.san@Mahidol.ac.th

#### EDUCATION

Dr.rer.nat. Food Biotechnology	Technical University Munich	Germany
MSc. Biotechnology	Kasetsart UniversityThailand	Thailand
BSc. Agricultural Industry	King Mongkut's Institute of	Thailand
	Technology Ladkrabang	

#### CURRENT POSITIONS

- Director, Institute of Nutrition, Mahidol University, Thailand (ca. 170 staffs, 35 PhD staffs thereof)
- Lecturer

## HONORS AND AWARDS

- GABA-containing probiotic rice drink was selected as outstanding research to be supported by Thailand Innovation Agency for commercialization (Research for Innovation, R4i programme)
- Training scholarship: Innovative and Sustainable Competitiveness in Food and Drink, Newton Fund, 28 Feb-7 March 2015, United Kingdom
- Training scholarship: Multicountry Observational Study Mission on Regional Business Partnerships among Farmers, Food-Processing SMEs, and Research Institutes, Asian Productivity Organization, 24-28 February 2014, Japan
- Outstanding PhD dissertation from the Association for Dairy Research Promotion
- Scholarship from the Association for Dairy Research Promotion, TU-München
- Scholarship from the German Academic Exchange Service, DAAD

## OTHER PROFESSIONAL ACTIVITIES

- Ad hoc reviewer: 19 international peer-reviewed journals
- Expert reviewer: Thai-FDA, Thailand Research Fund, National Research Council, Agricultural Research Development Agency (ARDA), Thailand Risk Assessment Center (TRAC), EU-France funding: AgreenSkills programme
- Member: Subcommittee of Thai-FDA: Analysis and Judgement on Food Issues, Nutrition/Health Claims, Working group for drafting/revising the Notifications of the Ministry of Health on Health Claims and on Probiotics; Subcommittee on the Revision of Iodine Fortification in Salt and Food Products-The National Committee on Iodine Deficiency

Disorders

- Advisor: Southeast Asia Probiotics Scientific and Regulatory Experts Network
- Edited Healthy Cooking with Oats Vol. 1&3 (published together with 4 ASEAN Nutrition Societies/Foundation)
- Filing 3 patents and 3 petty patents (pending for approval)

# PUBLICATIONS

- National Level
- 1. Wassana Pookate1, Uthaiwan Suttisansanee, Dunyaporn Trachootham, Chalat Santivarangkna, (2019) In vitro  $\alpha$ -glucosidase and dipeptidyl-peptidase-IV inhibitory activities of coffee brewed with mung bean coat as the adjunct. Proceeding The 10th International Graduate Students Conference on Population and Public Health Sciences IGSCCP-10, p. 199-207
- Phanyotha T, Srichamnong W, Santivarangkna C, Tangsuphoom N and Suttisansanee U. (2014) Anti-acetylcholinesterese activities from Gynura procumbens leaves extracted using response surface methodology. Agricultural Sci. J. 45(2) Suppl.: 17-20.
- Chutipanyaporn P, Kruawan K, Chupeerach C, Santivarangkna C and Suttisansanee U. (2014) The investigation on **α**-glucosidase inhibitory from legume extracts. Agricultural Sci. J. Agricultural Sci. J. 45 (2) Suppl: 133-136
- Chutipanyaporn P, Kruawan K, Chupeerach C, Santivarangkna C and Suttisansanee U. (2014) The effect of cooking process on antioxidant activities and total phenolic compounds of five colored beans. Food and Applied Bioscience Journal. 2(3): 183-191
- International Level
- Somsong, P.; Santivarangkna, C.; Tiyayon, P.; Hsieh, C.-M.; Srichamnong, W. Assessing Polyphenol Components and Antioxidant Activity during Fermented Assam Tea Ball Processing. Sustainability 2020, 12, 5853.
- Nilesh Prakash Nirmal, Chalat Santivarangkna, Mithun Singh Rajput, Soottawat Benjakul, Trends in shrimp processing waste utilization: An industrial prospective, Trends in Food Science & Technology, 103, 2020, 20-35.
- 3. Trachootham, D., Chupeeracha, C. Tuntipopipat, S., Pathomyok, L., Boonnak, K., Praengama, K., Promkama, C. and **Santivarangkna**, C. Drinking fermented milk containing Lactobacillus paracasei 431 (IMULUS<sup>™</sup>) improves immune response against H1N1 and cross-reactive H3N2 viruses after influenza vaccination: A pilot randomized triple-blinded placebo controlled trial. Journal of Functional Foods, 2017, 33: 1-10.
- 4. Suwapat K., Thiyajai, P., Suttisansanee, U. and **Santivarangkna**, C. Determination of GABA Content in Thai Brown Rice by an Optimized Enzyme-Based Method, Chiang Mai Journal of Science, 2016; 43(X) : 1-12.
- 5. Santivarangkna, C., Aschenbrenner, M., Kulozik, U. and Foerst, P (2011) Roles of Glassy State on Stabilities of Freeze-Dried Probiotics, *J Food Sci*, 76 (8) R152-R156
- Foerst, P., Kulozik, U., Schmitt, M. Bauer, S., and Santivarangkna, C. (2011) Storage Stability of Vacuum-Dried Probiotic Bacterium Lactobacillus paracasei, *Food Bioprod Proccess*, 90 (2), 295-300

- Santivarangkna, C., Naumann, D., Kulozik, U., K., and Foerst, P. (2010) Protective Effects of Sorbitol during the Vacuum Drying of Lactobacillus helveticus: an FT-IR Study, *Anal Microbiol*, 60, 235-242
- 8. Santivarangkna, C., Kulozik, U., Hermine K., and Foerst, P. (2009) Changes in membrane fatty acids of Lactobacillus helveticus during vacuum drying with sorbitol, *Lett Appl Microbiol*, 49, 516-521
- 9. Higl, B., **Santivarangkna**, C. and Foerst,P. (2008) Evaluation and optimization of freeze- and vacuum drying processes for the production of microbial starter cultures, *Chem Eng Tech* (Chemie Ingenieur Technik, in German), 80(8), 1-8
- 10. Santivarangkna, C., Kulozik, U. and Foerst, P. (2008) Inactivation mechanisms of lactic acid starter cultures preserved by drying processes, *J Appl Microbiol*, 105, 1-13
- 11. **Santivarangkna,**C., Higl,B. and Foerst,P. (2008) Protection mechanisms of sugars during different stages of preparation process of dried lactic acid starter cultures, *Food Microbiol* 25, 429-441
- 12. Santivarangkna,C., Kulozik,U. and Foerst,P. (2007) Alternative drying processes for the industrial preservation of lactic acid starter cultures, *Biotechnol Prog* 23, 302-315
- 13. Santivarangkna,C., Wenning,M., Foerst,P. and Kulozik,U. (2007) Damage of cell envelope of Lactobacillus helveticus during vacuum drying, *J Appl Microbiol* 102, 748-756
- 14. **Santivarangkna**,C., Kulozik,U. and Foerst,P. (2006) Effect of carbohydrates on the survival of Lactobacillus helveticus during vacuum drying, *Lett Appl Microbiol* 42, 271-276
- Noonpakdee,W., Santivarangkna,C., Jumriangrit,P., Sonomoto,K. and Panyim,S. (2003) Isolation of nisin-producing Lactococcus lactis WNC 20 strain from Nham, a traditional Thai fermented sausage. *Int J Food Microbiol*, 81, 137-145

## BOOKS

- 1. Foerst, P. and **Santivarangkna, C.** (Book Editors) Advances in Probiotic Technologies, CRC Press, 2015, ISBN 9781498734530
- 2. Santivarangkna, C. Chapter 15: Storage of Probiotics, In P., Foerst and C. Santivarangkna (Ed.), Advances in Probiotic Technology, CRC Press, 2015, ISBN 9781498734530
- 3. Invited book chapter: **Santivarangkna**, C. Chapter 7: Preservation of Lactic Starters, In A. K. Puniya, Fermented Milk and Dairy Products, CRC Press, book scheduled to release in 2014
- 4. Invited book chapter: Foerst, P. and **Santivarangkna, C.** Chapter 17: Advances in Starter Culture Technologies, In W. H. Holzapfel(Ed.): Advances in fermented foods and beverages, Woodhead Publishing, book scheduled to release in 2014
- Invited book chapter: Santivarangkna, C., Kulozik, U. and Foerst, P, (2011) Chapter 20: Storing Lactic Acid Bacteria: Current Methodologies and Physiological Implications, In K. Papadimitriou and E. Tsakalidou (Eds.): Stress Response in Lactic Acid Bacteria, Springer Publisher, ISBN-10: 0387927700

LANGUAGES: ENGLISH-Fluent, GERMAN-Good, THAI-Native

INTERESTS: Football, Swimming, Cooking, and Reading