

Institute of Nutrition, Mahidol University (INMU)

999 Phutthamonthon 4 Rd., Salaya, Phutthamonthon

Name	Varongsiri Kemsawasd
E-mail address	varongsiri.kem@mahidol.ac.th
Current position	Assistant Professors

Education

2015	Copenhagen University, Denmark (Food Microbiology)
2010	Wageningen University, The Netherlands (Food safety)
2008	King Mongkut's University of Technology Thonburi, Thailand (Food
	Engineering)
2006	Chiangmai University, Thailand (Food science and Technology)

Research Interest and Expertise

1. Saccharomyces cerevisiae and non-Saccharomyces yeasts on alcoholic

fermentation

- 2. Microbial interactions
- 3. Quantitative microbial risk assessment
- 4. Nitrogen preferences in yeast fermentation
- 5. Probiotic fermentation
- 6. Antioxidant properties Research Experiences

Research Experiences

2021	Development of mulberry leaf hydrogel beads using microencapsulation
	technique for fabricating probiotic bacteria, Agricultural Research
	Development Agency
2019	Quality and Food safety of edible insects in Thailand for food security and
	sustainable consumption, Agricultural Research Development Agency
2019	Developing New Food Products for Crispy Fish Sticks , The Thailand Research
	Fund
2019	Developing New Food Products for Fish stock soup powder ,The Thailand
	Research Fund
2017-2018	Development of functional drink powder from cassava leave extract , The
	Thailand Research Fund (RUN)



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2018	Development of Sterilized Complete Meal Food Gel from Color Rice for
	Elderly, Agricultural Research Development Agency 2018
2017	Development of high-CLA fermented milk by fermentation of cow's milk with
	CLA-producing bacterium
2016	Development of Nutritious Probiotics Food Gel from Hom Nil Rice for Elderly
	,Agricultural Research Development Agency

Training

Internal audit ISO 17025
ISO 17025
ISO 19036
Thailand Food Innovation-Regional Boot Camps 2019
Biotechnology Application in Food Industry for Developing Countries China, National Research Institute of Food and Fermentation Industries Corporation Limited,

Publications

National

1 Kemsawasd V, Microplastics: From Cosmetics to Food Contaminants Thai Journal of Toxicology 2016; 31(1): 50-61

International

- Prihandari, R., Karnpanit, W., Kittibunchakul, S., Kemsawasd, V. Development of optimal digesting conditions for microplastic analysis in dried seaweed Gracilaria fisheri. Foods, 2021, 10(9), 2118
- Kemsawasd V, Chaikham P. Alteration of Bioactive Compounds and Antioxidative
 Properties in Thermal, Ultra-High Pressure and Ultrasound Treated Maoberry
 (Antidesma Bunius L.) Juice during Refrigerated Storage. Curr Res Nutr Food Sci 2021;
 9(3).
- 3 Kemsawasd V, Chaikham P. (2020) Effects of Frozen Storage on Viability of Probiotics and Antioxidant Capacities of Synbiotic Riceberry and Sesame-Riceberry Milk Ice Creams. Curr Res Nutr Food Sci ; 8(1). DOI: 10.12944/CRNFSJ.8.1.10
- 4 Naprasert J, Suttisansanee U, Kemsawasd V. (2019) Single and mixed lactic acid



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bacteria culture fermentation in red bean milk for development of a functional beverage Malays. Appl. Biol. (2019) 48(4): 139–145

- 5 Ivana Aprilia Pratiwi, Kemsawasd V, Winuprasith T. (2019) Storage Stability of High Fiber Snack Bar, GHMJ, Vol 3, No 3 124-137, DOI: 10.35898/ghmj-33456
- 6 Kemsawasd, V. , Chaikham P. (2019) Beneficial effectiveness of probiotic-low-fat ice cream containing Krueo Ma Noy (Cissampelos pareira L.) gum on colon microbiome under a dynamic gut model Food Research 3 (5) : 428 - 440 (October 2019) DOI: 10.26656/fr.2017.3(5).068
- 7 Kemsawasd V., Chaikham P.(2018) Survival of probiotics in soyoghurt plus mulberry (c.v. Chiang Mai 60) leaf extract during refrigerated storage and their ability to tolerate gastrointestinal transit, LWT, Volume 93, Pages 94-101, ISSN 0023-6438, doi: 10.1016/j.lwt.2018.03.027.
- Kemsawasd V., Chaikham P., Rattanasena P.(2018) Survival of immobilized probiotics in chocolate during storage and with an in vitro gastrointestinal model, In Food
 Bioscience, Volume 16, Pages 37-43, ISSN 2212-4292, doi: 0.1016/j.fbio.2016.09.001.
- 9 Chaikham P., Kemsawasd V., Seesuriyachan P. (2017) Spray drying probiotics along with maoluang juice plus Tiliacora triandra gum for exposure to the in vitro gastrointestinal environments, In LWT - Food Science and Technology, Volume 78, , Pages 31-40, ISSN 0023-6438, doi: 10.1016/j.lwt.2016.12.013.
- Branco P, Kemsawasd V, Santos L, Diniz M, Caldeira J, Almeida MG, Arneborg N, Albergaria H (2017) Saccharomyces cerevisiae accumulates GAPDH-derived peptides on its cell surface that induce death of non-Saccharomyces yeasts by cell-to-cell contact. FEMS Microbiol Ecol 93:fix055-fix055.
- 11 Chaikham P., Kemsawasd V., Apichartsrangkoon A. (2016) Effects of conventional and ultrasound treatments on physicochemical properties and antioxidant capacity of floral honeys from Northern Thailand, Food Bioscience. doi: 10.1016/j.fbio.2016.04.002.
- 12 Kemsawasd V., Branco P., Almeida M.G., Caldeira J., Albergaria H., Arneborg N. (2015) Cell-to-cell contact and antimicrobial peptides play a combined role in the death of Lachanchea thermotolerans during mixed-culture alcoholic fermentation with Saccharomyces cerevisiae. FEMS Microbiol Lett. doi: 10.1093/femsle/fnv103



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- 13 Kemsawasd V., Viana T., Ardö Y., Arneborg N. (2015) Influence of nitrogen sources on growth and fermentation performance of different wine yeast species during alcoholic fermentation. Appl Microbiol Biotechnol. doi: 10.1007/s00253-015-6835-3
- 14 Kemsawasd, V., Chaikum, P. Survivability of immobilized potential probiotics in chocolate matrices during storage and under in vitro gastrointestinal tract, Food Bioscience 2016