



Name : Suwat Saengkerdsub

Education

- Ph.D. (Poultry Science) University of Arkansas, USA.
- M.Sc.(Food Science and Technology) Texas A&M University, USA.
- Diploma (Microbiology and Biotechnology) Osaka University and Tohoku University, Japan
- M.Sc.(Industrial Microbiology) Chulalongkorn University, Thailand
- B.Sc.(Marine Science) Chulalongkorn University, Thailand

Present employment :

Department of Food Technology
Faculty of Agro-Industry, Prince of Songkla University
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Field of interest:

- Molecular biology in foodborne pathogens
- Biofilms in food processing
- Heterologous expressions with bacteria as hosts
- Metagenomes

Current researches:

- Transposon insertion sequencing in *Listeria monocytogenes*
- Genetic studies in *L. monocytogenes*

Certificates:

- Certificate of Participation “Developing and Implementing HACCP Plans” from Texas A&M University, USA.
- Certificate of completion “Introduction of Laboratory Safety” from Texas A&M University, USA.

Awards:

- Research program on “Comparative metagenome for phylogenetic and functional analysis of microbial communities in Japanese environment” in Japan between June 3 to August

24, 2015 supported by National Institute of Technology and Evaluation (NITE), Japan, and National Center for Genetic Engineering and Biotechnology (BIOTEC), National Science and Technology Development Agency (NSTDA), Thailand.

- Student Travel Grant Award, Amer. Soc. Microbiol. General 110th Annual Meeting, San Diego, CA. May 23-27, 2010.
- Graduate Research Awards in Microbiology, Microbiology program, Iowa State University. 2006
- International Post-Graduate University Course in Microbiology in Japan, Oct. 1, 2000-Sep. 30, 2001 supported by UNESCO and Japanese Government.

Publications:

- Saengkerdsub, S., Ricke, S.C. 2014. Ecology and characteristics of methanogenic archaea in animals and humans. *Critical Reviews in Microbiology*. 40: 97-116.
- Saengkerdsub, S., Muthaiyan, A., Lingbeck, J., O'Bryan, C.A., Crandall, P.G., Ricke, S.C. 2014. Identification and methionine analog tolerance of environmental bacterial isolates selected on methionine analog containing medium. *Journal of Environmental Science and Health, Part B*.49: 290-298.
- Saengkerdsub, S., O'Bryan, C.A., Crandall, P.G., Ricke, S.C. 2013. Possibility for probiotic sources of methionine for organic poultry nutritional supplementation: a review. *Journal of Probiotics and Health*. 1: 103.
- Saengkerdsub, S., Liyanage, R., Lay Jr., J.O, 2013. Suitability of various prepeptides and prepropeptides for the production and secretion of heterologous proteins by *Bacillus megaterium* or *Bacillus licheniformis*. *Agriculture, Food and Analytical Bacteriology*. 3: 230-248.
- Saengkerdsub, S., Lingbeck, J., Wilkinson, H.H., O'Bryan, C.A. Lay Jr., J.O, Crandall, P.G., Muthaiyan, A., Biswas, D., Ricke, S.C. 2013. Characterization of isolated yeast growth response to methionine analogs. *Journal of Environmental Science and Health, Part B*. 48: 1112-1120.
- Saengkerdsub, S. 2013. Linoleic acid isomerase expression in *Escherichia coli* BL21(DE3) and *Bacillus* spp. *Agriculture, Food and Analytical Bacteriology*. 3: 145-158.
- Kojima, K., Yokoyama, T., Ohkama-Ohtsu, N., Saengkerdsub, S., Itakura, M., Mitsui, H., Minamisawa, K., Arima, Y. 2012. Exploration of natural *nod* gene inducers for *Mesorhizobium loti* in seed and root exudates of *Lotus corniculatus*. *Soil Microorganism*. 66: 12-21.
- Saengkerdsub, S., Anderson, R.C., Wilkinson, H.H., Kim, W.-K., Nisbet, D.J., Ricke, S.C. 2007. Identification and quantification of methanogenic archaea in adult chicken ceca. *Applied and Environmental Microbiology*. 73: 353-356.
- Saengkerdsub, S., Herrera, P., Woodward, C.L., Anderson, R.C., Nisbet, D.J., Ricke, S.C. 2007. Detection of methane and quantitation of methanogenic archaea in feces from young broiler chicken using real-time PCR. *Letters in Applied Microbiology*. 45: 629-634.
- Saengkerdsub, S., Kim, W.-K., Anderson, R.C., Nisbet, D.J., Ricke, S.C. 2006 Effects of nitrocompounds and feedstuffs on *in vitro* methane production in chicken cecal contents and rumen fluid. *Anaerobe*.12: 85-92.
- Saengkerdsub, S., Itakura, M., Mitsui, H., Minamisawa, K. 2001. Towards identification of host legume induces: Construction of *nod* box-*lacZ* fusion in *Mesorhizobium loti*. Annual Report of ICBiotech, Osaka University, Japan. p 361-370.

Book chapter:

- Ricke, S.C, Saengkerdsub, S. 2014. *Bacillus* probiotics and biologicals for improving animal and human health: current applications and future prospects. in Beneficial microbes in fermented and functional foods. Ravishankar Rai, V., Jamuna Bai, A. (Eds.) CRC Press/Taylor & Francis Group. p 341-362 .

Presentation:

- Saengkerdsub, S., Lingbeck, J.M., Park, S, Muthaiyan, A., Ricke, S.C. 2010. Initial Screening Methionine-Producing Bacteria for Organic Poultry Feed. American Society for Microbiology General 110th Annual Meeting, San Diego, CA. May 23-27, 2010 (oral presentation).