

# SARISA SURIYARAK

*Dr.rer.nat.*

## Research Interest

Food nano (micro)structure/Functional colloid  
Food Safety /Antimicrobial application  
Biotechnology/Fermentation

## Contact

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## Academic Qualifications

### PHD IN FOOD SCIENCE

*University of Hohenheim, Stuttgart, Germany*  
*Doctoral Thesis: "Novel Antimicrobial Phenolipids: Functionality, Mechanisms of Action and Delivery Systems Design"*

### MS IN FOOD SCIENCE

*University of Massachusetts Amherst, MA, USA*  
*Masters Thesis: "Food Colloids as Carrier Systems for Antimicrobials"*

### BSc IN CHEMISTRY

*Mahidol University, Bangkok, Thailand*  
*Thesis: "Rate enhancement of atom transfer radical polymerization (ATRP) by ferrocene moiety"*

## Awards & Scholarships

- 2014** Student Travel Scholarship by International Association for Food Protection (IAFP)
- 2014** The dissertation completion grants of the DAAD program "STIBET Doktoranden
- 2005** Royal Thai Government Scholarship under Strategic Scholarships for Frontier Research Network by Commission on Higher Education

## Academic Employment

### LECTURER

*Department of Food Technology, Faculty of Science, Chulalongkorn University, Bangkok, Thailand, 2016-Present*

## Research Grants

**Suriyarak., S., Duangmal, K.** Emulsifying properties of protein concentrate from cassava leaves and its applications in ice cream. Ratchadaphiseksomphot endowment Fund, Chulalongkorn University, Thailand, 2020-2022

Borompichaichartkul, C., **Suriyarak. S.** Development of high quality curcumin powder as a functional ingredient. Thailand Research Fund, Thailand, 2021-2022

Duangmal, K., Chotechuang, N., **Suriyarak, S.** Extra-concentrated pineapple juice beverage as appetite stimulant in elderly people (Sub-project of Added value of purple waxy corn and pineapple as functional food innovations and nutraceuticals in order to increase the competition potential of agricultural products). Grand challenges Thailand, National Research Council of Thailand, 2020-2021

Puttlerpong, C., **Suriyarak, S.** Development of instant powered drink containing amino acids as liver supplement. Industrial Technology Assistant Program (ITAP), National Science and Technology Development Agency (NSTDA), Thailand, 2019-2020

## Publications (selected)

- Hamad, A., **Suriyarak, S.**, Devahastin, S., & Borompichaichartkul, C. (2020). A novel approach to develop spray-dried encapsulated curcumin powder from oil-in-water emulsions stabilized by combined surfactants and chitosan. *Journal of Food Science* 85 (11), 3874-3884.
- **Suriyarak, S.**, Schmidt, H., Villeneuve, P., & Weiss, J. (2018). Morphological and dose-dependent study on the effect of methyl, hexyl, and dodecyl rosmarinate on *Staphylococcus carnosus* LTH1502: Use of the Weibull model. *Journal of Food Protection*. 81(4), 598-605.
- Suriyarak, S., Gibis, M., Schmidt, H., Villeneuve, P., & Weiss, J. (2014). Antimicrobial mechanism and activity of dodecyl rosmarinate against *Staphylococcus carnosus* LTH1502 as influenced by addition of salt and change in pH. *Journal of Food Protection*. 77(3), 444-452. doi: 10.4315/0362-028X.JFP-13-239.
- **Suriyarak, S.** & Weiss, J. (2014). Cutoff Ostwald ripening stability of alkane-in-water emulsion loaded with eugenol *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 446, 71-79.