

SPECIALTY & RESEARCH INTEREST

- Biodegradable edible films and coatings
- Nanoparticles & Polymer Nanocomposite
- Light barrier materials for food packaging
- Food packaging & Shelf life extension
- Innovative processing technologies for food and beverages

Postal Address:

24/56 Nebkahast Road, Hua-Hin,
Prachuapkirikhan 77110 Thailand

Tel: +66(0)32-513-110
+66(0)63-615-6645

E-mail: Aungkana.o@gmail.com
Angpungkao@yahoo.com

EDUCATION

Postdoctoral Researcher

Department of Packaging, Yonsei University, Wonju Campus,
South Korea

Research area: Light barrier in food packaging development

2017 http://pkg.yonsei.ac.kr/packaging/sub_en.htm

Food Engineering, Ph.D. Under Royal Golden Jubilee Ph.D. Program

Doctoral Program in Food Engineering, Kasetsart University
Kamphaeng Saen Campus, Nakhon Pathom, Thailand

Dissertation: Preparation and Properties of Plasticized Banana Flour Based Nanocomposite Films for food Packaging Application

2016 <http://eng.kps.ku.ac.th/>

Food Engineering, B.Eng. (2nd Honor)

Department of Food Engineering, Kasetsart University,
Khamphaengsaen Campus, Nakhon Pathom,
Thailand

Graduation project: Water Vapor Permeability Measuring Equipment for Edible Films by Gravimetric Technique

2003 <http://eng.kps.ku.ac.th/>

2. WORK EXPERIENCES

Assistant Wine Maker

Still Wine Production,
Siam Winery Co., Ltd. Samutsakorn, Thailand

2006-2010 <http://www.siamwinery.com/>

- Responsible for the wine products quality from vineyard (grape) to bottled wine.

Research and Development Supervisor

Spy Wine Cooler Section,
Siam Winery Co., Ltd. Samutsakorn, Thailand

2004-2006 <http://www.siamwinery.com/>

- Responsible for the successful delivery of NPD projects from concept to launch.
- Initiate new methodologies for new and existing products to improve the efficiency and profitability.

Production Engineer

Spy Wine Cooler Section,
Siam Winery Co., Ltd. Samutsakorn, Thailand

2003-2004 <http://www.siamwinery.com/>

- Organize and run successful production trials and be able to investigate root cause when problem found.

TRAINNING

Exchange Student

Department of Food Engineering and Bionanocomposite Research Institute, Mokpo National University, Republic of Korea

2015 <http://www.mmu.ac.kr/G5/>

Basic DSC Operation, Trouble shooting and Maintenance course

PerkinElmer, Thailand

2015 <http://www.perkinelmer.com/th/>

Safety Awareness on Laminar Flow, Biological Safety Cabinet & Fume Hood Technology

Esco Education Center, Thailand

2013 <http://my.escoglobal.com/>

The Psychology of Consumer Preference, Liking and Emotion in Product Choice

Kasetsart University Sensory and Consumer Research Center, Thailand

2012 <http://www.agro.ku.ac.th/researches.php>

<http://www.uniwi>

Internship in South Africa (Wine making) Uniwines Breedekloof NUWEHOOP Winery, Breedekloof, South Africa	2010	nes.co.za/the-land-and-its-people/winemakers/
Food Hygiene for HACCP/GMP Internal Audit Siam Winery Co., LTD. By Q&A Quality and Calibration Co., LTD. Samutprakarn, Thailand	2004	http://www.qaquality.co.th/
Design of Experiment Technique and Statistical Analysis for Product Development National Food Institute Thailand, Kasetsart University, Thailand	2004	http://www.nfi.or.th/th/index.php

HONORS

Outstanding Poster Presentation in RGJ-Ph.D. Congress XV The Thailand Research Fund, Thailand	2014	http://rgj.trf.or.th/main/home-th/
Royal Golden Jubilee Ph.D. Scholarship The Thailand Research Fund, Thailand	2010-2016	http://rgj.trf.or.th/main/home-th/

1. PUBLICATIONS

Conferences Proceedings

Poster Presentation

- Orsuwan A., Kwon S. and S. Ko. 2017. Comparative study of organic UV-absorbers on the light absorption capacity and the properties of low-density polyethylene (LDPE). Proceeding of the 52nd Annual Conference of Korean Society of Packaging Science and Technology 2017, Korean National Food Cluster, Republic of Korea.
- Orsuwan A. and R. Sothornvit. 2014. Characterization of Unripe Banana (*Musa sapientum* Linn.) Plasticized-based Films: Effect of Banana and Plasticizer Types. RGJ-Ph.D. Congress XV 2014, JomtienPalm Beach Resort Pattaya, Chonburi.

- Orsuwan A. and R. Sothornvit. 2013. Water vapor permeability and mechanical properties of plasticized-based unripe banana (*Musa sapientum* Linn.) flour and starch films. The 15th Food Innovation Asia Conference 2013, Bitec Bangna, Bangkok, Thailand.

Oral Presentation

- Orsuwan A. and R. Sothornvit. 2013. Chemical, physical, and physicochemical properties of modified banana starches, pp. 162-166. Proceeding of the 6th Thai Society of Agricultural Engineering (TSAE) International Conference 2013, Prachuap kirikhan, Thailand.

Book Chapter

- Orsuwan A. and R. Sothornvit. 2017. Chapter 7 Polysaccharide Nanobased Packaging Materials for Food Application. In Handbook of Food Bioengineering Volume 9 "Food Packaging and Preservation", pp. 239-270, Grumezescu, A.M. and Holban, A.M., Academic Press.

Peer-Reviewed Publication

- Orsuwan A., S. Kwon, N. Bumbudsanparoke and S. Ko. 2019. Novel LDPE-Riboflavin Composite Film with Dual Function of Broad-Spectrum Light Barrier and Antimicrobial Activity. *Food Control*, 100, 176-182.
- Kwon S., A. Orsuwan, N. Bumbudsanpharoke, C. Yoon, J. Choi and S. Ko. 2018. A Short Review of Light Barrier Materials for Food and Beverage Packaging. *Korean Journal of Packaging Science & Technology*, 24(3), 141-148.
- Orsuwan A. and R. Sothornvit. 2018. Reinforcement of Beeswax and Montmorillonite on the Water barrier and Mechanical Properties of Banana Flour Bio-composite Films. *Journal of Food Science and Technology*, 53(12), 2642-2649.
- Orsuwan A. and R. Sothornvit. 2018. Active Banana Flour Nanocomposite Films Incorporated with Garlic Essential Oil as Multifunctional Packaging Material for Food Application. *Food and Bioprocess Technology*, 11(6), 1199-1210.
- Orsuwan A. and R. Sothornvit. 2017. Development and Characterization of banana flour film incorporated with montmorillonite and banana starch nanoparticles. *Carbohydrate Polymers*, 174, 235-242.
- Orsuwan A. and R. Sothornvit. 2017. Effect of banana and plasticizer types on mechanical, water barrier and heat sealability of plasticized banana-based films. *Journal of Food Processing and Preservation*, 42(1), e13380-e13387.
- Orsuwan, A., S. Shankar, L.F. Wang, R. Sothornvit and J.W. Rhim. 2017. One-step preparation of banana powder/silver nanoparticles composite films. *Journal of Food Science and Technology*, 54(2), 497-506.
- Orsuwan, A., S. Shankar, L.F. Wang, R. Sothornvit and J.W. Rhim. 2016. Preparation of antimicrobial agar/banana powder blend films reinforced with silver nanoparticles. *Food Hydrocolloids*, 60, 476-485.

- Orsuwan A. and R. Sothornvit. 2015. Effect of miniemulsion cross-linking and ultrasonication on properties of banana starch. *International Journal of Food Science and Technology*, 50, 298-304.