



THUNWADEE SUKSAROJ

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PROFESSIONAL APPOINTMENT

Associate Professor Present
ASEAN Institute for Health Development, Mahidol University (Thailand)

ADMINISTRATIVE APPOINTMENT

Director 2024 - Present
ASEAN Institute for Health Development, Mahidol University (Thailand)

Executive Secretary Present
ASEAN University Network for Health Promotion (AUN-HPN)

Carbon footprint Assessor 2009 - Present
Thai Carbon Labels

Consultant 2009 - Present
Cleaner technology and green productivity in Agro-industries

Technical Manager 2009 - 2016
Environmental Operating Center (ISO/IEC17025 Certified), Faculty of Environmental Management, Prince of Songkla University.

EDUCATION

Dr.Sc. (Industrial Science and Biological Process: Food Science) 2006
Université Montpellier, France

M.Sc. Environmental Technology 2002
Mahidol University, Thailand

B.Sc. Public Health (Environmental Health Science) with a second- class honor 1999
Mahidol University, Thailand

EXPERTISE / AREAS OF RESEARCH INTEREST

- Environmental Technology and Biotechnology
- Environmental Health

WORK AND RESEARCH EXPERIENCE

Lecturer ASEAN Institute for Health Development, Mahidol University	2016 - Present
Adjunct Researcher National Chung Hsing University, Taiwan	2021
Lecturer Faculty of Environmental Management, Prince of Songkla University.	2002 - 2016

PUBLICATIONS LIST

- **Suksaroj TT.**, Jha NK., Chuanpongpanich S., Siriraksophon W., Kwanyuen B., Suksaroj C. Strategy development for domestic water use reduction in special economic zone of Thailand through water user perception and factor analysis. *Environmental and Sustainability Indicators*, 2024, 21:100344. <https://doi.org/10.1016/j.indic.2024.100344>.
- Pant A., **Susaroj T.**, Janmaimool P., Laosee O., Rattanapan C., Resilience capacity of pre-hospital emergency medical service(EMS) providers and the future agenda for sustainable development of a resilient EMS system in Thailand. *Asia Pacific Journal of Health management*. 2024, 19(2):i3899.
- Suksaroj, C., Jearat, K., Cherypiew, N., Rattanapan, C., **Suksaroj, T.T.** Promoting circular economy in the palm oil industry through biogas codigestion of palm oil mill effluent and empty fruit bunch pressed wastewater. *Water (Switzerland)*, 2023,15(12): 2153.
- Ounsaneha, W., Laosee, O., **Suksaroj, T.T**, Rattanapan, C. Combined Impact of Omicron Vaccination and Environmental Risk Exposure: A Thailand Case Study. *Vaccines*, 2023, 11(2):297.
- Ounsaneha, W., Laosee, O., **Suksaroj, T.T**, Rattanapan, C. Preventive Behaviors and Influencing Factors among Thai Residents in Endemic Areas during the Highest Epidemic Peak of the COVID-19 Outbreak. *International Journal of Environmental Research and Public Health*, 2023,20(3):2525.
- Ounsaneha, W., Rattanapan, C., **Suksaroj, T.T**, Kantachote, D., Klawech, W., Rakkamon, T. Biogas production by co- digestion of municipal wastewater and food waste: Performance in semi-continuous and continuous operation. *Water Environment Research*, 2021, 93(2): 306-315.
- Saritsiri S, Mongkolchati A, **Suksaroj T.** (2021). Prevalence of chronic kidney disease and related factors among diabetic patients in primary care, Bangkok, Thailand. *Journal of Public Health and Development*. 19(1), 1-18
- Wai KH, **Tachapattaworakul Suksaroj T.** (2020) . Food sanitation of salad vending in the markets of Nay Pyi Taw, Myanmar. *Journal of Public Health and Development*. 11(4) , 165- 169
- **Suksaroj T.T**, Yaeed S, Suksaroj C. (2020). The effect of POME ultrasonication on biogas production and reduction of greenhouse gases emissions from wastewater treatment units of palm oil mills. *Desalination and water treatment*. 202: 86-94

- Tejavaddhana P, Suriyawongpaisan W, Kasemsup V, **Suksaroj T.** (2020). The roles of village health volunteers: COVID-19 prevention and control in Thailand. *Asia Pacific of Health Management.* 15(3), i477
- Sae-NGae S, Cheirsilp B, Louhasakul Y, **Suksaroj T.T.** Intharapat P. (2020). Techno-economic analysis and environmental impact of biovalorization of agro- industrial wastes for biodiesel feedstocks by oleaginous yeasts. *Sustainable Environmental Research.* 30(1): 11
- Ounsaneha W, Laosee O, **Suksaroj T.T.**, Srisamai P, Rattanapan C. (2020). Tourist Behavior of Plastic Waste Reduction in the Coastal Area of Trang Province, Thailand. *International Journal of Environmental Science and Development.* 11(4): 165-169
- Rattanapan C, **Suksaroj T.T.**, Ounsaneha W. (2019). Choice of Food Waste Management for a Large Vegetable Market in Thailand. *International of Environmental Science and Development.* 10(3): 100-103
- Manandhar S, **Suksaroj T.T.**, Rattanapan C. (2019). The Association between Green Space and the Prevalence of Overweight/ Obesity among Primary School Children. *International Journal of Occupational and Environmental Medicine.* 10(1): 1-10
- Taecharungroj V, **Suksaroj T.T.**, Rattanapan C. (2018). The place sustainability scale: measuring residents' perceptions of the sustainability of a town. *Journal of place management and development.* <https://doi.org/10.1108/JPMD-04-2017-0037>
- Chaivisit P, Fontana A, Galindo S, Strub C, Choosong T, Kantachote D, **Suksaroj T.T.** (2018). Airborne bacteria and fungi distribution characteristics in natural ventilation system of the university hospital in Thailand (2018). *Environment Asia.* 11(2): 53-66
- Yaed S, **Suksaroj T.T.**, Suksaroj C. (2017) . Mechanical pretreatment processes for enhancement of biogas production from palm oil mill effluent (POME). *Desalination and water treatment.* 1-7, doi:10.5004/dwt.2017.20258
- Rahim FK, **Suksaroj T.**, Jayasvasti I (2016) Social determinant of Health of Adult Smoking Behavior: Differences between Urban and Rural Areas in Indonesia. *National Public Health Journal.* 11 (2) : 51-55 DOI:10.21109/kesmas.v11i2.1237.
- Junpadit P, **Suksaroj T.T.**, Boonsawang P (2016). Transformation of Palm Oil Mill Effluent to Terpolymer Polyhydroxyalkanoate and Biodiesel Using *Rummeliibacillus pycnus* Strain TS8. *Waste Biomass Valor.* DOI 10.1007/s12649-016-9711-1
- Ophithakorn T, Sabah A, Delalonde M, Bancon-Montigny C, **Suksaroj T T** and Wisniewski C (2016) Organotins' fate in lagoon sewage system: dealkylation and sludge sorption/desorption. *Environmental Science and Pollution Research* 23(22):22832-22842.
- Siriraksophon S, Musikavong C, Suksaroj C and **Suksaroj T T** (2016) Evolution of pretreatment methods for nanofiltration membrane used for dissolved organic matter removal in raw water supply. *EnvironmentAsia* 9(2):10-17. DOI 10.14456/ea2016.3
- Musikavong C., Srinuang K., **Suksaroj T.T.** and Suksaroj C. (2016) Formation of trihalomethanes of dissolved organic matter fractions in reservoir and canal waters. *Journal of Environmental Science and Health Part A Toxic/Hazardous Substances & Environmental Engineering* 51(9):1-10.

- Rattanapana C., **Suksaroj T.T.**, Chumpikul J. and Choosong T. (2014) Health Risk Assessment of Hydrogen Sulfide Exposure among Workers in a Thai Rubber Latex Industry. *Environmentasia*, 7(1): 25-31.
- Ophithakorn T, Suksaroj C. and Suksaroj T.T. (2013) Simulation modeling of dissolved organic matter removal in a free water surface constructed wetland. *Ecological Modelling* 258:82-90.
- Musikavong C., Inthanuchit K., Srinuang K., **Suksaroj T.T.** and Suksaroj C. (2013) Reduction of fractionated dissolved organic matter and their trihalomethane formation potential with enhanced coagulation. *Scienceasia* 39: 56-66.
- Rattanapan C., **Suksaroj T.T.**, Wongsawass S., Ounsaneha W. (2013) Measure on Ecoefficiency of Thai Growing-Fishing Pig Farms. *Int J Environ Sci Dev*,4(5): 533-537.
- Muadchim M., **Suksaroj T.T.**, Rattanapan C., Suksaroj C. (2012) Biogas production and biochemical methane potential of anaerobic co-digestion from pretreated biodiesel processing wastewater and decanter cake. *Thai Environmental Engineering Journal*, 26(1): 15- 23.
- Ounsaneha W., **Suksaroj T.T.** and Chamondusit K. (2012) Selection of the sustainable area for rubber plantation of Thailand by eco-efficiency. *Procedia social and behavioral sciences*. Special issue under peer review and the responsibility of the Asia Pacific Business Innovation and Technology Management Society.
- Rattanapan C., **Suksaroj T.T.** and Ounsaneha W. (2012) Development of ecoefficiency indicators for rubber glove product by material flow analysis. *Procedia social and behavioral sciences*. Special issue under peer review and the responsibility of the Asia Pacific Business Innovation and Technology Management Society.
- Rattanapan C., Sawain A., **Suksaroj T.** and Suksaroj C. (2011) Enhanced efficiency of dissolved air flotation for biodiesel wastewater treatment by acidification and coagulation process. *Desalination* (280) 370-377.
- Banchaoattanasakda W., Musikavong C., **Tachapattaworakul T.** and Suksaroj C. (2011) Reduction of dissolved organic matter and trihalomethane formation potential in raw water supply reservoir by hybrid ultrafiltration process. *Journal of water supply: research and technology Aqua* (6038) 494-500.
- Kueseng T., **Suksaroj T.T.**, Musikavong C. and Suksaroj C. (2011) Enhanced coagulation for removal of dissolved organic matter and trihalomethane formation potential from raw water supply in Sri-trang reservoir, Thailand. *Water practice and Technology*, 6(1) online: doi:10.2166/WPT.2011.002.
- Kananam W., **Suksaroj T.T.**, Suksaroj C. (2011) Biochemical changes during oil palm (*Elaeis guineensis*) empty fruit bunches composting with decanter sludge and chicken manure. *Scienceasia* 37:17-23.
- Saeng, C., Cheirrsilp, B., **Tachapattawearakul, T.** and Bourtoom, T. (2011) Efficient concomitant production of lipids and carotenoids by oleaginous red yeast *Rhodotorula glutinis* cultured in palm oil mill effluent and application of lipids for biodiesel production, *Biotech. Bioprocess Eng.*, 16(1):23-33

- Saeng, C., Cheirrsilp, B., **Tachapattawearakul, T.** and Bourtoom, T. (2011) Potential use of oleaginous yeast *Rhodotorula glutinis* for the bioconversion of crude glycerol from biodiesel plant to lipids and carotenoids. *Process Biochemistry*, 46(1):210-218
- **T. Tachapattaworakul**, A. Fontana-Tachon, J.P. Guiraud, and R. Ratomahenina. (2008) Application of benomyl resistance and RAPD-PCR for detecting a *Trichoderma atroviride* strain used as biocontrol agent. *Biological Agricultural & Horticulture*, 25(4):367-377.

TEXTBOOK

- Environmental Health: Aspects, Impacts and Management. Nakhon Pathom: ASEAN Institute for Health Development, 2018. ISBN 978-616-443-224-6: 173 p.

RESEARCH COOPERATION FOR GRADUATE STUDENT

- **Hospital indoor air quality management**
Funder: ERAMUS- MUNDUS/PANACEA PROJECT
Host: UMR Qualisud, Université Montpellier, France
Activity: PhD Student research Internship and manuscript development
- **Simulation modeling of micropollutants removal in wastewater treatment plant**
Funder: Ministry of Education, Thailand
Host: Laboratoire de Physique Moléculaire et Structurale
UFR des Sciences Pharmaceutiques et Biologiques, Université Montpellier I, France
Activity: PhD Student research Internship and manuscript development
- **Palm oil mill wastewater treatment by physic-chemical processes**
Funder: FRANCO-Thai scholarship
Host: IEM, Montpellier II, France
Activity: PhD Student research Internship and manuscript development
- **Sustainability of Alternative Energy Production Technologies**
Funder: Technology Grant
Host: Institute of System Sciences, Innovation and Sustainability Research (ISIS),
University of Graz, Austria
Activity: PhD Student research Internship
- **Contribution of food insecurity to malnutrition in the form of stunted growth in children and overweight or obesity in mothers**
Funder: Postgraduate Student Mobility Program
Host: Teikyo University, Japan
Activity: Master Student Internship
- **Assessment of the Food Waste Problem and it's solutions along Food Supply Chain: A Comparative Study in Thailand and Guatemala**
Funder: National ChungHsing University, Taiwan
Host: NationalChungHsing University, Taiwan
Activity: Co-Thesis Advisor

- **The Effect of Dietary Behavior Change Program for Community Dwellers with Type 2 Diabetic Mellitus at Diabetes Schools, Thailand**
Funder: Graduate School, Mahidol University and Chulabhorn Royal Academy
Host: Jutendo University, Japan
Activity: PhD Student research Internship
- **Redefining and measuring resiliency of pre-hospital emergency medical service system**
Funder: Mahidol Student Mobility Fund
Host: Macquarie University, Australia
Activity: PhD Student research Internship