



## Curriculum Vitae

Institute of Nutrition, Mahidol University (INMU)

999 Phutthamonthon 4 Rd., Salaya, Phutthamonthon

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**Name** Wisuwat Thongphichai  
**E-mail address** wisuwat.tho@mahidol.ac.th  
**Current position** Lecturer

### Education

2013 – 2018 Ph.D. (Chemistry), Faculty of Science,  
Mahidol University, Thailand  
2009 – 2012 B.Sc. (Chemistry), Faculty of Science,  
Mahidol University, Thailand

### Research Interest and Expertise

- Isolation and structure elucidation of bioactive secondary metabolites from medicinal herbs and foods
- Development and validation of chromatographic analysis for medicinal herbs and foods
- Food composition and analysis

### Research Experiences

- Method development for quantification of nutrient and non-nutrient in foods using qNMR, HPLC and LCMS.
- Comprehensive research on Thai medicinal plants, focusing on the isolation, identification, and quantification of key bioactive compounds.

### Training

- ISO/IEC 17025:2017 Requirements, Department of Science Service, *Thailand*.
- ESPReL Safety Standard, Institute of Nutrition, Mahidol University, *Thailand*.
- Ethical Principles in Human Research for Biomedical Research, Mahidol Central-Institutional Review Board (MU-CIRB), Mahidol University, *Thailand*.
- Standard Laboratory Safety, National Research Council of Thailand, *Thailand*.
- Start Innovation-Driven Enterprise & Spin Innovation-Driven Enterprise (STARTIDEs & SPINIDEs) Program #1, supported by Program Management Unit for Human Resources & Institutional Development, Research and Innovation (PMU-B), *Thailand*.

### Honors and Awards

20 Oct – 5 Recipient of the International Education Innovation Fund ASEAN  
Dec 2025 Research Collaboration Project (2025): Training at Curtin University,  
Perth, WA, Australia



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## Publications

### International

1. Kriengsaksri K, **Thongphichai W**, Uttarawichien T, Khoochonthara J, Towiwat P, Sukrong S. Optimization of Natural Deep Eutectic Solvent-Assisted Extraction of Rosmarinic Acid from *Thunbergia laurifolia* Lindl. and Evaluation of Antioxidant Activity. *Molecules*. 2025; 30(24):4795. <https://doi.org/10.3390/molecules30244795>
2. Judprasong K, Sinpoo C, Naksuriyawong S, Kamdee K, Meepho S, Phokasem P, Saengkorakot C, Funklin R, Uapoonphol N, Disayathanoowat T, Esor J, **Thongphichai W**, Boonsirichai K. A Synergistic Approach Combining Stable Carbon Isotope Ratio Analysis and Melissopalynology for the Authentication of Honey from Thailand. *Foods*. 2025; 14(22):3850. <https://doi.org/10.3390/foods14223850>
3. Thongkan N, Thitikornpong W, Muangprom A, **Thongphichai W**, Sangarwut N, Chakhonkaen S, Tongmark K, Rattanakitti A, Kaewmungkun K, Chuanasa T, Sukrong S. Integrative Phytochemical and Transcriptomic Analysis Reveals Genes Regulating 14-Deoxyandrographolide in Thai *Andrographis paniculata*. *ACS Omega*. 2025; 10(48):58542-58554. DOI: 10.1021/acsomega.5c06327
4. Nwe SY, Dasuni Wasana PW, Hasriadi, Towiwat P, **Thongphichai W**, Sritularak B, Sukrong S. Angolensin Isolated from *Pterocarpus indicus* Willd. Attenuates LPS-Induced Sickness Behaviors in Mice and Exhibits CNS Safety. *International Journal of Molecular Sciences*. 2025; 26(10):4887. <https://doi.org/10.3390/ijms26104887>
5. **Thongphichai W**, Hasriadi H, Wasana P.W.D., *et al.* Anti-inflammatory activity of *Curcuma wanenlueanga* Saensouk, Thomudtha & Boonma rhizomes and the search for its bioactive markers by harmonizing bioassay-guided isolation and network pharmacology. *BMC Complement Med Ther* 25, 143 (2025). <https://doi.org/10.1186/s12906-025-04884-0>
6. Nwe SY, Uttarawichien T, Boonsom T, **Thongphichai W**, Wasana PWD, Sritularak B, Payuhakrit W, Sukrong S, Towiwat P. Bioassay-guided isolation of two antiproliferative metabolites from *Pterocarpus indicus* Willd. against TGF- $\beta$ -induced prostate stromal cells (WPMY-1) proliferation via PI3K/AKT signaling pathway. *Front Pharmacol*. 2024;15:1452887. Published 2024 Oct 3. doi:10.3389/fphar.2024.1452887
7. Hasriadi H, Wasana PWD, **Thongphichai W**, Sukrong S, Towiwat P. Exploring the safety of lycorine in the central nervous system and its impact on pain-like behaviors in mice. *Sci Rep*. 2024;14(1):16856. Published 2024 Jul 22. doi:10.1038/s41598-024-64410-z
8. Jayashan SS, Darai N, Rungrotmongkol T, Dasuni Wasana PW, Nwe SY, **Thongphichai W**, Suriyakala G, Towiwat P, Sukrong S. Exploring the



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- Therapeutic Potential of Spilanthol from *Acmella paniculata* (Wall ex DC.) R. K. Jansen in Attenuating Neurodegenerative Diseases: A Multi-Faceted Approach Integrating In Silico and In Vitro Methodologies. *Applied Sciences*. 2024; 14(9):3755. <https://doi.org/10.3390/app14093755>
9. Hasriadi, Dasuni Wasana PW, Thongphichai W, Samun Y, Sukrong S, Towiwat P. *Curcuma latifolia* Roscoe extract reverses inflammatory pain in mice and offers a favorable CNS safety profile. *J Ethnopharmacol*. 2024;318(Pt A):116877. doi:10.1016/j.jep.2023.116877
10. **Thongphichai W**, Pongkittiphan V, Laorpaksa A, Wiwatcharakornkul W, Sukrong S. Antimicrobial Activity against Foodborne Pathogens and Antioxidant Activity of Plant Leaves Traditionally Used as Food Packaging. *Foods*. 2023; 12(12):2409. <https://doi.org/10.3390/foods12122409>
11. Hasriadi, Jongchanapong A, **Thongphichai W**, et al. Antinociceptive efficacy of *Clerodendrum petasites* S. Moore, a Thai medicinal plant, and its CNS safety profiles. *J Tradit Complement Med*. 2022;13(1):81-92. Published 2022 Nov 12. doi:10.1016/j.jtcme.2022.11.001
12. **Thongphichai W**, Uttarawichien T, Chanvorachote P, et al. Standardization of the ethanolic extract of *Crinum latifolium* leaves by two bioactive markers with antiproliferative activity against TGF- $\beta$ -promoted prostate stromal cells (WPMY-1). *BMC Complement Med Ther*. 2022;22(1):139. Published 2022 May 18. doi:10.1186/s12906-022-03617-x
13. **Thongphichai W**, Tuchinda P, Pohmakotr M, et al. Anti-HIV-1 activities of constituents from the rhizomes of *Boesenbergia thorelii*. *Fitoterapia*. 2019;139:104388. doi:10.1016/j.fitote.2019.104388