

Chongdee Thammakhet-Buranachai

Associate Professor

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ACADEMIC BACKGROUND

B. Sc. (Chemistry), First Class Honor: Prince of Songkla University, Thailand, March, 2001

Ph.D. (Chemistry): Prince of Songkla University, Thailand, July, 2007

AREAS OF EXPERTISE AND TEACHING COMPETENCIES

Chromatography

Development of Sample Preparation Technique for Trace Analysis of Organic Compounds

Chemical Sensors

EMPLOYMENTS

September 2007- present Lecturer at the Department of Chemistry, Faculty of Science,
Prince of Songkla University

April 2012-Jan 2019 Assistant Professor in Analytical Chemistry

August 2018-present Director of the Center of Excellence for Trace Analysis and
Biosensor, Faculty of Science, Prince of Songkla University

Jan 2019- present Associate Professor in Analytical Chemistry

PUBLICATIONS (2016-2021)

Changsan, T., Wannapob, R., Kaewpet, M., Shearman, K., Wattanasin, P., Cheung Mak, W., Kanatharana, P., Thavarungkul, P., **Thammakhet-Buranachai, C***. 2021. Magnetic microsphere sorbent on CaCO₃ templates: Simple synthesis and efficient extraction of trace carbamate pesticides in fresh produce, *Food Chemistry*, 342, 128336.

Jantarat, T., Chuaychob, S., **Thammakhet-Buranachai, C.**, Thavarungkul, P., Kanatharana, P., Srisintorn, W., Buranachai, C. 2021. A Label-free DNA-based Fluorescent Sensor for Cisplatin Detection, *Sensors and Actuators B: Chemical*, 326, 128764.

Chuaychob, S., **Thammakhet-Buranachai, C.**, Kanatharana, P. Thavarungkul, P., Buranachai, C. Fujita M., Maeda M., 2020. A nanobiosensor for the simple detection of small molecules using non-crosslinking aggregation of gold nanoparticles with G-quadruplexes. *Analytical Methods*, 2, 230

Sukree, W., Sooksawat, D., Kanatharana, P., Thavarungkul P., **Thammakhet-Buranachai C.** 2020. A miniature stainless steel net dumbbell-shaped stir-bar for the extraction of phthalate esters in instant noodle and rice soup samples. *JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH, PART B*, 55(1), 60–68.

Chunin, N., Phooplub, K., Kaewpet, M., Wattanasin, P., Kanatharana, P., Thavarungkul, P., **Thammakhet-Buranachai, C.**, 2019. A novel 3D-printed solid phase microextraction

- device equipped with silver-polyaniline coated pencil lead for the extraction of phthalate esters in cosmeceutical products. *ANALYTICA CHIMICA ACTA* 1091, 30-39.
- Makkliang, F., Kanatharana, P., Thavarungkul, P., **Thammakhet-Buranachai, C.**, 2018. A miniaturized monolith-MWCNTs-COOH multi-stir-rod microextractor device for trace parabens determination in cosmetic and personal care products. *Talanta*, 184, 429-436.
- Siritham, C., **Thammakhet-Buranachai, C.**, Thavarungkul, P., Kanatharana, P., 2018. A stir foam composed of graphene oxide, poly(ethylene glycol) and natural latex for the extraction of preservatives and antioxidant, *Microchimica Acta*, 185:148
- Makkliang F, Kanatharana P, Thavarungkul P. **Thammakhet-Buranachai C.** 2017. A polypyrrole-chitosan cryogel stir-bead micro-solid phase extractor for the determination of phthalate esters in contact lenses storage solutions and in artificial saliva in contact with baby teethers. *Analytica Chimica Acta*, 985, 69-78.
- Poorahong S, Niammusik A, Chaykleang P, Kanatharana P, Thavarungkul P. **Thammakhet-Buranachai C.** 2017. A scanner-based colorimetric mercuric ion detection using Tween-20-stabilized AuNPs solution in 96-well plates. *Journal of Environmental Science and Health. Part A, Toxic/Hazardous Substances & Environmental Engineering*. 52 (11), 1082–1088.
- Siritham. C., Thavarungkul, P., **Thammakhet-Buranachai, C.** and Kanatharana, P. 2013. Online microchannel preconcentrator for carbofuran detection. *Talanta*, 2017, 167, 573-572.
- Makkliang F, Kanatharana P, Thavarungkul P, **Thammakhet C.** A novel miniaturized zinc oxide/hydroxylated multiwalled carbon nanotubes as a stir-brush microextractor device for carbamate pesticides analysis. *Anal. Chim. Acta*. 2016; 917, 27-36.
- Siritham C, **Thammakhet C**, Thavarungkul P, Kanatharana P*. 2016. Multiwalled carbon nanotubes–poly(vinyl alcohol) composite cryogel used in microcolumn liquid chromatography to separate various herbicides. *Analytical Methods*, **8**, 3975-3981.
- Subba JR, **Thammakhet C**, Thavarungkul P, Kanatharana P. 2016. Distributions of SO₂ and NO₂ in the lower atmosphere of an industrial area in Bhutan. *Journal of environmental science and health. Part A, Toxic/hazardous substances & environmental engineering*: 1-10.
- Subba JR, **Thammakhet C**, Thavarungkul P, Kanatharana P. 2016. Sampling of BTX in Hat Yai city using cost effective laboratory-built PCB passive sampler. *Journal of environmental science and health. Part A, Toxic/hazardous substances & environmental engineering*. **51**(10), 861-869.