

Sitanan Sartyoungkul

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Research interests in synthesis and computational investigation of organic, heterocyclic compounds and supramolecular chemistry



EDUCATION

- 2017-2020 **Osaka University, JAPAN**
Ph.D. in Applied Chemistry
Thesis title: "Properties of Triazasumanene and Related Cyclic Triamides"
Thesis supervisor: Prof. Hidehiro Sakurai
- 2015-2017 **Osaka University, JAPAN**
M.S. in Applied Chemistry
Thesis title: "Properties of Triazasumanene and Related Heterocycles"
Thesis supervisor: Prof. Hidehiro Sakurai
- 2010-2013 **King Mongkut's University of Technology Thonburi (KMUTT), THAILAND**
B.Sc. in Chemistry (1st Class Hons, GPAX 3.84)
Thesis title: "Development of Screen Printed Glassy Carbon Electrode for Nickel(II) Determination"
Thesis supervisor: Assist. Prof. Wijitar Dungchai and Prof. Charles S. Henry

PUBLICATIONS

1. **S. Sartyoungkul**, M. Ehara, H. Sakurai, "Time-Dependent Density Functional Theory Investigation of Excited State Intramolecular Proton Transfer in Tris(2-hydroxyphenyl)triazasumanene", *J. Phys. Chem. A*, **2020**, *124*, 1227-1234.
2. **S. Sartyoungkul**, Y. Yakiyama, H. Sakurai, "Synthesis and Dimerization Properties of Cup- and Bowl-shaped Cyclic Trilactams", *Asian J. Org. Chem.*, **2020**, *9*, 947-952.
3. **S. Sartyoungkul**, I. Thaveesangsakulthai, M. K. E. Cabello, C. Kulsing, H. Sakurai, "Application of Cup-shaped Trilactams for Selective Extraction of Volatile Compounds by Gas Chromatography-Mass Spectrometry", *Analyst*, **2020**, *145*, 6668-6676.

PRESENTATION AWARDS

- 2019, Sep Thieme Chemistry Poster Prize at the 27th International Society of Heterocyclic Chemistry Congress (ISHC-27), Kyoto, JAPAN
- 2014, Aug Bronze Award of Poster Presentation at Novel Research & Innovation Competition, Universiti Sains Malaysia, Penang, MALASIA in the representation by Faculty of Science, KMUTT

GRANTS AND FELLOWSHIPS

- 2015-2020 Grant-in-Aid for Scientific Research on Innovative Area 'π-System Figuration' from Ministry of Education, Culture, Sports Science and Technology (MEXT), JAPAN
- 2010-2013 Science Achievement Scholarship of Thailand (SAST), THAILAND

CONFERENCES

- 2019, Jul **Poster presentation**, The 18th International Symposium on Novel Aromatic Compounds (ISNA-18), Hokkaido, JAPAN
- 2019, Sep **Poster presentation**, The 27th International Society of Heterocyclic Chemistry Congress (ISHC-27), Kyoto, JAPAN
- 2019, Mar **Poster presentation**, π-System Figuration Symposium, Osaka University, Osaka, JAPAN
- 2018, Dec **Oral presentation**, Catalysis and Fine Chemicals (C&FC) 2018, Chulalongkorn University, Bangkok, THAILAND
- 2018, Nov **Poster presentation**, The 14th International Kyoto Conference on New Aspects of Organic Chemistry (IKCOC-14), Kyoto, JAPAN
- 2018, Mar **Oral Presentation**, The 98th Annual Meeting of The Chemical Society of Japan (CSJ), Chiba, JAPAN
- 2017, Mar **Oral Presentation**, The 97th Annual Meeting of The Chemical Society of Japan (CSJ), Yokohama, JAPAN
- 2013, Jan **Poster presentation**, Pure and Applied Chemistry International Conference 2013 (PACCON), Chonburi, THAILAND
- 2012, Oct **Poster presentation**, The 38th Congress on Science and Technology of Thailand (STT-38), Chiang Mai, THAILAND
- 2011, Oct **Poster presentation**, The 37th Congress on Science and Technology of Thailand (STT-37), Bangkok, THAILAND

RESEARCH EXPERIENCE

- 2018 **Short-term Research** with Assoc. Prof. Shimizu's group, Kyushu University, Fukuoka, JAPAN
- Research Project: "BODIPY complex on Cup-shaped Cyclic Trilactams"
- 2013 **Summer Internship** and Short-term Research with Prof. Charles S. Henry at Henry Research Group, Colorado State University, CO, USA
- Research Project: "Development of Screen Printed Carbon Electrode Preparation"
- 2012 **Short-term Research** with Assist. Prof. Anawat Pinisakul, Department of Chemistry, Faculty of Science, KMUTT, Bangkok, THAILAND
- Research Project 1: "Study of Factors Affecting on Cadmium Adsorption from Aqueous Solution by Water Treatment Sludge from Treatment Plant"
- Research Project 2: "Study of Cadmium Adsorption by Sludge from Water Treatment Plant Before and After Flood Situation in Thailand"
- 2011 **Short-term Research** with Assist. Prof. Anawat Pinisakul, Department of Chemistry, Faculty of Science, KMUTT, Bangkok, THAILAND
- Research Project: "Adsorption of Cadmium from Aqueous solution by Sludge from Water Treatment Plant"

RESEARCH SKILLS

- Organic Synthesis
 - Setup synthesis of organic compounds and perform experiments
- Spectroscopy
 - NMR (JEOL Delta software), IR, UV, PL, Circular Dichroism (CD) (Good)
 - Supercritical Fluid Chromatography (SFC), GC-MS, APCI-Mass, MALDI-TOF Mass (Intermediate)
- Computational Chemistry
 - Density Functional Theory (DFT) by Gaussian program (Good)
 - Molecular Dynamics Simulation by GROMACS program (Basic)

TEACHING EXPERIENCE

- 2013 Tutoring O-Net examination in Biology subject to high school students, Chiang Mai, THAILAND under supervision of Faculty of Science, KMUTT
- 2013 Tutoring O-Net examination in Biology subject to high school students, Nan, THAILAND under supervision of Faculty of Science, KMUTT
- 2011 Teaching Chemistry and Chemistry Laboratory to high school students, KMUTT, Bangkok, THAILAND under supervision of Faculty of Science, KMUTT

LANGUAGES

- Thai (Excellent)
- English (Excellent)
- Japanese (Basic)

REFERENCE PERSON

Prof. Hidehiro Sakurai

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