

CIRRICULUM VITA

Nichanun Sirasunthorn



WORKING EXPERIENCES

Current Academic Position:Lecturer.....

University / School (Unit / Department / Faculty / Institute)

.....Department of Chemistry, Faculty of Science, Silpakorn University.....

Province:Nakorn Pathom..... Postal Code:73000.....

Work Phone:+66 34-255797... Fax: ...+66 34-271356.....

Mobile Phone:+66 65-5474239..... E-mail: ...Sirasunthorn_n@su.ac.th.....

EDUCATION

| Degrees | University | Faculty | Major Subject | Period |
|---------|---|----------------------------|---|-------------|
| BSc. | Silpakorn University, Nakhonpathom, Thailand | Science | Chemistry | 2007 - 2010 |
| MSc. | Mahidol University, Bangkok, Thailand | Science | Applied Analytical and Inorganic Chemistry | 2011- 2013 |
| Ph.D. | Wake Forest University Winston-Salem, North Carolina, USA | Department of Chemistry | Chemistry | 2014 - 2019 |

EXPERTISES

1. Analytical chemistry
2. Bioanalytical Chemistry
3. Enzyme Inhibition-based Biosensor
4. Method development in Separation techniques for agricultural samples
5. Microfluidic devices
6. Site-specific biochemical probes

HONORS AND AWARDS:

Development and Promotion of Science and Technology Talents Project (DPST)
(Royal Government of Thailand scholarship) 2004 -2019

DPST Research Grant 2013
University of North Carolina at Chapel Hill, NC, USA

Center of Excellence for Innovation in Chemistry (PERCH-CIC) Scholarship
Bangkok, Thailand 2011 – 2013

Alumni Student Travel Award 2017 – 2018
Wake Forest University, NC, USA

Outstanding senior graduate student award 2018
Wake Forest University, NC, USA

Outstanding teaching assistant of the year 2018
Wake Forest University, NC, USA

PUBLICATION:

Sirasunthorn, N.; Phornphakawat, J.; Tamdee, P.; Sirirak, J. Cyantraniliprole As Papain Inhibitor and Its Action in Molecular Docking Studies. *Agr. Nat. Resour.* 2022, 56, 1191–1196.

Kwannimit, T.; Ruang_Rit, K.; **Sirasunthorn, N.** Dissipation kinetics of cyantraniliprole residues in melon grown in field trials using QuEChERS and HPLC-UV, *APST*, 2022, 27(2), APST-27-02-21.

Sirasunthorn, N.; Jailwala, A.; Gerber, A.; Comstock, L.R. Evaluation of N-mustard analogues of S-Adenosyl-L-methionine with DNA Methyltransferase 1, *ChemistrySelect*, 2019, 4(35), 10525-10531.

Uba, F.L.; Pullagurla, S.R.; **Sirasunthorn, N.**; Wu, J.; Park, S.; Chantiwas, R.; Cho, Y.K.; Shin, H. ; Soper, S. A. Surface charge, electroosmotic flow and DNA extension in chemically modified thermoplastic nanoslits and nanochannels, *Analyst*, 2015, 140, 113-126.

Proceedings

Phornphakawat, J.; **Sirasunthorn, N.** (2022) Papain-based Biosensors for Determination of Cyantraniliprole. In proceedings of Challenging Biotechnology and Disruptive Solutions: Inspirational Tools toward Sustainability: (pp. 288-292). Thailand: Thai society for biotechnology international conference online.

Atta, N.; **Sirasunthorn, N.** (2022) A Preliminary Analysis on How Cyantraniliprole Bind to Acetylcholinesterase. In proceedings of Challenging Biotechnology and Disruptive Solutions: Inspirational Tools toward Sustainability: (pp. 278-282). Thailand: Thai society for biotechnology international conference online.

Kwannimit, T.; **Sirasunthorn, N.** (2021) Analysis of Insecticide Cyantraniliprole in Melon using QuEChERS Extraction and HPLC-UV. In Proceedings of Green energy and zero waste society: (pp. 534- 541). Thailand: Thai society for biotechnology international conference online.

Suwannapattana, P. ; **Sirasunthorn, N.** (2021) Colorimetric acetylcholinesterase inhibition- based biosensor for novel insecticide cyantraniliprole determination. In Proceedings of Sustainable development for better lives: (pp. 399-405). Thailand: Thai institute of chemical engineering and applied chemistry, Suranaree university of technology, Nakhon Ratchasima.

Sirasunthorn, N.; Jiraphan, N.; Sumantakul, S.; Siripinyanond, A.; Amornsakchai, T.; Nacapricha, D.; Chantiwas, R. (2014) “Lab-ON-Paper” For Quantitative analysis with detection using digital camera. In Proceedings of ASEAN Plus Three Graduate Research Congress: (pp.166). Thailand: Faculty of Graduate Studies, Mahidol university, Bangkok

PRESENTATIONS:

Phornphakawat, J.; Sawatdee, C.; **Sirasunthorn, N.** (2022) Papain inhibitory activities applied to the on-field determinayion of cyantraniliprole. The 48th International Congress on Science, Technology and Technology-based Innovation (STT 48), Thailand, November 29-30 November to 1 December, 2022 (Poster presentation)

Atta, N.; **Sirasunthorn, N.** (2022) A Preliminary Analysis on How Cyantraniliprole Bind to Acetylcholinesterase. Challenging Biotechnology and Disruptive Solutions: Inspirational Tools toward Sustainability, Thai society for biotechnology international conference online, Thailand, April 29,2022 (Poster presentation)

Sawatdee, C.; **Sirasunthorn, N.** (2022) Development of Biosensors for Determination of Secondary Plant Nutrients. Challenging Biotechnology and Disruptive Solutions: Inspirational Tools toward Sustainability, Thai society for biotechnology international conference online, Thailand, April 29, 2022 (Poster presentation)

Suwannapattana, P. ; **Sirasunthorn, N.** Colorimetric acetylcholinesterase inhibition-based biosensor for novel insecticide cyantraniliprole determination. Thai institute of chemical engineering and applied chemistry, Suranaree university of technology, Nakhon Ratchasima, Thailand, May 6-7, 2021 (Poster presentation)

Kwannimit, T. ; **Sirasunthorn, N.** Analysis of Insecticide Cyantraniliprole in Melon using QuEChERS Extraction and HPLC-UV. Green energy and zero waste society, Thai society for biotechnology international conference online, Thailand, April 2, 2021 (Poster presentation)

Sirasunthorn, N.; Comstock, L.R. *N*-mustard analogs of *S*-Adenosyl-L-methionine as a potential inhibitor of DNA methyltransferase 3A, *Graduate Research Day 2019, Winston-Salem, NC, March 22, 2019* (Poster presentation)

Sirasunthorn, N.; Gerber, A.; Comstock, L.R. Modification of cytosine-targeted DNA using novel *N*-mustard analogs of *S*-Adenosyl-L-methionine as DNA methylation probes, *256th ACS national meeting, Boston, MA, August 19-23, 2018* (Oral presentation)

Sirasunthorn, N.; Gerber, A.; Comstock, L.R. Modification of cytosine-targeted DNA using novel *N*-mustard analogs of *S*-Adenosyl-L-methionine as DNA methylation probes, *Summer graduate seminar series, Winston Salem, NC, August 1, 2018* (Oral presentation)

Sirasunthorn, N.; Gerber, A.; Comstock, L.R. Evaluation of novel *N*-mustard analogs of *S*-Adenosyl-L-methionine-modified DNA based on enzymatic properties of DNA methyltransferases, *Graduate Research Day 2018, Winston-Salem, NC, March 27, 2018* (Poster presentation)

Sirasunthorn, N.; Mrvos, A.; Gerber, A.; Comstock, L.R. Biochemical evaluation of novel *N*-mustard analogs of *S*-Adenosyl-L-methionine as probes of DNA methyltransferase substrates, *The southeastern regional meeting of the American chemical society (SERMACS 2017), Charlotte, NC, November 9-11, 2017* (Poster presentation)

Sirasunthorn, N.; Mrvos, A.; Gerber, A.; Comstock, L.R. Targeting DNA Methylation with *N*-mustard analogs of *S*-Adenosyl-L-methionine. *7th Cambridge symposium on Nucleic Acids chemistry and biology, Cambridge, UK, September 3-6, 2017* (Poster presentation)

Sirasunthorn, N.; Mrvos, A.; Gerber, A.; Comstock, L.R. Novel *N*-mustard analogs of *S*-Adenosyl-L-methionine as probes of DNA methyltransferases. *Graduate Research Day 2017, Winston Salem, NC, March 23, 2017* (Poster presentation)

Sirasunthorn, N. ; Comstock, L. R. Utility of *N*-mustard Analogs of S-Adenosyl-L-methionine as Biochemical Probes of DNA Methylation. *Chromatin and epigenetics keystone symposia, Whistler, British Columbia, Canada, March 23, 2016* (Poster presentation)

Sirasunthorn, N. ; Comstock, L.R. Examining the efficiency of N-mustard analogs of S-Adenosyl- L- methionine with DNA methyltransferase M. Sssl. *Center for molecular communication and signaling fall retreat, Winston salem, NC, October 16, 2015* (Poster presentation)

Sirasunthorn, N. ; Comstock, L.R. Examining the efficiency of N-mustard analogs of S-Adenosyl- L- methionine with DNA methyltransferase M. Sssl. *Ninth Chapel Hill pharmaceutical sciences conference, Chapel Hill, NC, October 15, 2015* (Poster presentation)

Sirasunthorn, N. ; Jiraphan, N. ; Amornsakchai, T. ; Nacapricha, D. ; Chantiwas, R.;; *ASSEMBLY OF IMAGE DETECTION SYSTEM FOR LAB ON PAPER*, The 9th Congress on Science and technology of Thailand, Bangkok, Thailand, May 30 – June 1, 2014 (Oral presentation)

Sirasunthorn, N. ; Chantiwas, R. ; Nacapricha, D. ; Amornsakchai, T. *Lab-on-paper for quantitative analysis with detection using digital camera*, The 2nd ASEAN Plus three graduate research congress, Bangkok, Thailand, February 5- 7, 2014 (**Best Poster Presentation Award**)

Sirasunthorn, N. ; Chimplee, D. *Determination of lead(II) in tap water and seawater samples by GF-AAS using chelex- 100 resin for matrix separation*, The 6th Science and Technology Conference for Youth, Bangkok, Thailand, March 18- 19, 2010 (Oral presentation)