

Associate Professor Dr. Nuanchan Singkran

Faculty of Environment and Resource Studies, Mahidol University
999 Moo 5, Sai 4 Phuttamonthon Road, Salaya, Phuttamonthon,
Nakhon Pathom 73170 Thailand
Phone: +66 86 018 9006; Fax: +66 2 441 9509-10
Email: nuanchan.sin@mahidol.edu
Website: <https://ensearch.mahidol.ac.th/~nuanchan/>

EDUCATION

May 2007: Cornell University, Ithaca, New York, USA

Doctor of Philosophy (Ph.D.)
Major: Natural Resources (Aquatic Science)
Minor: Environmental Systems Engineering
Dissertation title: Ecotone properties and influences on fish distributions along habitat gradients of complex aquatic systems.

May 1999: Chulalongkorn University, Bangkok, Thailand

Master of Science (M.Sc.), Environmental Science
Thesis title: Species composition of fish in mangrove canals as reflected from coastal land use at Trat Bay.

March 1993: Chulalongkorn University, Bangkok, Thailand

Bachelor of Science (B.Sc.), Marine Science (Marine Biology)
Special problem title: Effects of oyster spat densities and flow rates of water on the growth of *Saccostrea cucullata* rearing in pumped upwelling system.

RESEARCH FIELDS OF INTEREST

- Environmental Risk Assessment
- Material Flow Analysis
- System Dynamics Modeling
- Urban Greening and Carbon Sequestration
- Water Resources Management

WORKING EXPERIENCES

1. Full-time university professor (October 2012–present)

Faculty of Environment and Resource Studies, Mahidol University, Nakhon Pathom, Thailand

- Major course teaching
ENAT 502: Material Flow Analysis for Natural Productivity
ENAT 510: Computer Simulation Techniques
ENLS 516: Urban metabolism and material flow analysis for livable city management
ENNM 351: Water Resources Management
ENNM 472: System Dynamic Analysis and Modeling
- Co-teaching
ENAT 503: Research Methodology and Seminar in Appropriate Technology and Innovation for Environment
ENEN 231: Hydrology and Water Resource Management
ENEN 321: Wastewater Treatment Technology
ENEN 352: Renewable Energy Technology
ENNM 224: Hydrology

2. Invited lectures

2024

- Lecture title: Food loss & waste reductions: Think globally, act locally, September 29, 2024. The Centre on Integrated Rural Development for Asia and the Pacific, Bangladesh. The online lecture via Zoom meeting platform.
- Lecture title: Natural disaster reduction and a proposed management framework, October 14, 2024. The Centre on Integrated Rural Development for Asia and the Pacific, Bangladesh. The online lecture via Zoom meeting platform.

2022–2023

- Lecture title: Flood risk management and lessons learnt from the mega flood in 2011 of Thailand, November 20, 2022 & November 21, 2023. The Centre on Integrated Rural Development for Asia and the Pacific, Bangladesh. The online lecture via Webex (2022) and Zoom meeting (2023) platforms.

2019

- Lecture title: Effective management and development of water resources in Southeast Asia, October 21. Thailand & Korea International Cooperation Agencies, K-water Academy, Republic of Korea.

2016–2019

- Lecture title: Oil pollution monitoring and management (annual lecturing to Asian trainees), March 9, 2016 (Phuket); July 12, 2017; July 11, 2018–2019 (Prachuap Khiri Khan).
The International Ocean Institute, Thailand

2017

- Lecture title: Environmental impacts from flooding and flood risk management, November 29.
Office of Natural Resources and Environmental Policy and Planning, Asia Hotel, Bangkok, Thailand
- Lecture title: Effects of climate change on water system and adaptation (lecturing to Asian trainees), June 9.
Faculty of Environment and Resource Studies, Mahidol University, Nakhon Pathom, Thailand.
- Lecture title: Introduction to material flow analysis and a case study & eco-design for environmental improvement (lecturing to local private sectors in Lampang Province), March 25–26.
Lampang Learning Center, Faculty of Environment and Resource Studies, Mahidol University, Lampang, Thailand.

2016

- Lecture title: Thailand's water quality & management (lecturing to Myanmar Trainees), November 21.
Thai Meteorological Department, Bangkok, Thailand.
- Lecture title: Water resources management with appropriate technologies (EM 7203), Master program, September 14.
School of Environmental Development Administration, National Institute of Development Administration
Place and date: Bangkok, Thailand.
- Lecture title: Innovative technology & eco-design for environmental improvement (lecturing to private sector), February 24, Mar 23, and Apr 27.
Thailand Environment Institute Foundation, KU Home Hotel, Bangkok, Thailand.
- Lecture title: Oral presentation preparation & techniques (Course 516 491), Bachelor program, January 18.
Faculty of Science, Silapakorn University, Nakhon Pathom, Thailand.

2015

- Lecture title: Deep understanding of water resources and environmental protection (lecturing to the Asian trainees), May 20.
Faculty of Environment and Resource Studies, Mahidol University, , Nakhon Pathom, Thailand.

2013

- Lecture title: Mathematical fundamentals about surface-marine water models and applications, December 25.
Office of Natural Resources and Environmental Policy and Planning, Grand Tower Inn, Bangkok, Thailand.
- Lecture title: Oral presentation preparation & techniques, the Master students, November 27.
Food Engineering Department, Faculty of Engineering, Kasetsart University, Nakhon Pathom, Thailand.
- Lecture title: Environmental modeling and applications, the Master student, September 21.
Department of Environmental Science, Faculty of Science, Silapakorn University, Nakhon Pathom, Thailand.

2009

- Lecture course: Science, society, and environment (CMD 371), Bachelor program, the 1st semester.
School of Architecture and Communication Design, King Mongkut's University of Technology Thonburi, Bangkok, Thailand.
- Lecture title: Water quality measurement and wastewater management (lecturing to the visiting engineering experts from Sudan), January 22.
Esco Building, Bangkok, Thailand.
- Lecture title: Industrial management, EIA and environmental management (NM614), the MBA program, June 5–6, & 13.
Master of Business Administration Program, Ramkhamhaeng University, Bangkok, Thailand
- Lecture title: Water quality sampling and monitoring, the 7th grade students, October 30.
KIS International School, Bangkok, Thailand

2008

- Lecture title: Environmental risk assessment (ENV 613), the Master program in Environmental Engineering, the 1st semester.
Department of Environmental Engineering, King Mongkut's University of Technology Thonburi, Bangkok, Thailand.
- Lecture title: Water quality sampling and monitoring, the 7th grade students, October 9
KIS International School, Bangkok, Thailand.
- Lecture title: Thailand's water resources: Situation & management policy (lecturing to the master students from the University of Malaya, Malaysia), June 11.
Pollution Control Department, Bangkok, Thailand.
- Lecture title: Chao Phraya River: Situation and management policy, the 7th grade students, March 5.
KIS International School, Bangkok, Thailand.

3. Governmental agency & others

- Environmentalist, Professional Level (January 2008–September 2012).
Water Quality Management Bureau, Pollution Control Department, Ministry of Natural Resources and Environment, Bangkok, Thailand.
- Postdoctoral Researcher to Assoc. Prof. Dr. Mark Bain (January–November 2007).
Department of Natural Resources, Cornell University, Ithaca, New York, USA.
- Research Assistant to Prof. Dr. Frank W. Munger (June – August 2006, January–June 2007).
New York Law School, New York, USA.
- Teaching Assistant to Dr. Ngampit Jagacinski (August–December 2001).
Department of Asian Studies, Cornell University, Ithaca, New York, USA.
- Research Assistant to Assoc. Prof. Dr. Mark B. Bain (June–August 2001).
Department of Natural Resources, Cornell University, Ithaca, New York, USA.
- Public relations officer & the editor for Thailand Research Magazine (January 1999–February 2000).
I&I Company Ltd., Bangkok, Thailand
- Investigative and Environmental news reporter of the Bangkok Post, English daily newspaper (February 1994– February 1996).
The Post Publishing Public Company Ltd., Bangkok, Thailand.
- Social and environmental news reporter of the Krungtepturakit, Thai daily newspaper (March 1993– January 1994).
Nation Publishing Groups Company Ltd., Bangkok, Thailand.

ACADEMIC SERVICES

Senior project advisor

2022-2023

- Mr. Kris Léon Cachot, Bachelor of Science
International College and Faculty of Environment and Resource Studies, Mahidol University, Thailand
Senior project title: Determining overall coastal water quality indices and comparing them among coastal areas in Thailand and some Asian countries.

Thesis co-advisor

2019–2021

- Ms. Balasuriyage Thulangi Gayathma Balasuriya, Master of Engineering
Department of Civil and Environmental Engineering, Faculty of Engineering, Mahidol University, Thailand
Thesis title: Eutrophication and Acidification Assessment of Fertilizer Consumption in Agricultural Systems in Thailand.

2016–2017

- Ms. Tania Kanchanarak, Master of Science
Department of Evolutionary Biology and Environmental Studies, University of Zurich, Switzerland
Thesis title: Analysis of mangrove restoration projects in Southern Thailand.

Thesis committee

2016–2019

- Ms. Sarinya Kirtphai boon, Ph.D. candidate (Environmental Technology)
Joint Graduate School of Energy and Environment, King Mongkut's University of Technology Thonburi, Thailand
Thesis title: Determining population dynamics of rice blast fungal, distribution rate, and pattern of outbreak of rice blast disease in paddy fields of Thailand.

2011

- Ms. Ataya Jongwisuttisun, Master of Science
Interdisciplinary Department of Environmental Science (International course), Chulalongkorn University, Thailand
Thesis title: Influence of pH and EC on settling velocity of lead contaminated sediment.
- Ms. Pairchompu Chadutae, Master of Engineering
Department of Environmental Engineering, Faculty of Engineering, King Mongkut's University of Technology Thonburi, Thailand
Thesis title: Water quality assessment in the Kwai Noi River using mathematical model.

INTERNATIONAL ACADEMIC SERVICES

Invited expert, conference committee/editor

- The expert member of the Center on Integrated Rural Development for Asia and the Pacific (CIRDAP) (July 2021 – present)
- The researcher and committee of the Innovation Center for Clean Water and Affordable Sustainable Energy Nexus (WISE) founded by the cooperation between Tsing Hua University, Taiwan and Thailand's National Metal and Materials Technology Center (MTEC) (November 2021 – October 2024).

- The international committee of The 4th International Symposium Green and Sustainable Technology 2021 (ISGST 2021). Universiti Tunku Abdul Rahman (UTAR), Ipoh, Perak, Malaysia (October 3 – 6, 2021)
- Technical program committee of the International Symposium on Water Pollution and Treatment (ISWPT) (2019 – present)
- Co-guest editor of the ISWPT (2019 – 2020)

International Journal reviewer

- Frontiers in Marine Science (2024)
- Journal of Urban Medicine (2024)
- Journal of Material Cycles and Waste Management (2022)
- Technology Analysis & Strategic Management (2021)
- Journal of Water and Climate Change (2020–present)
- Environmental Monitoring and Assessment (2020)
- Water Research (2019)
- International Journal of Water Resources Development (2016)
- Water Resources Management (2015–present)
- Environmental Management (2015)
- International Journal of Hydrology Science and Technology (2015)
- Marine Pollution Bulletin (2015)

SELECTED PUBLICATIONS

- Singkran, N.** 2023. Evaluating urban park ecosystem services and modeling improvement scenarios. *Heliyon* 9(12): e22002. <https://doi.org/10.1016/j.heliyon.2023.e22002>.
- Singkran, N.** 2022. Carbon sink capacity of public parks and carbon sequestration efficiency improvements in a dense urban landscape. *Environmental Monitoring and Assessment* 194(10):750. <https://doi.org/10.1007/s10661-022-10432-x>.
- Singkran, N.** 2021. Spatiotemporal flood risk determination and management for a large river basin. *Applied Environmental Research* 43(3): 92–106. <https://doi.org/10.35762/AER.2021.43.3.7>.
- Singkran, N., N. Intharawichian, and P. Anantawong.** 2021. Determining land use influences on the hydrologic regime of the Chao Phraya River Basin, Thailand. *Physics and Chemistry of the Earth* 121: 102978. <https://doi.org/10.1016/j.pce.2021.102978>.
- Singkran, N.** 2020. Flood risk assessment for the central river basin of Thailand. *WIT Transactions on Engineering Sciences* 129: 111–119. <https://doi.org/10.2495/RISK200101>.
- Singkran, N.** 2020. Assessment of urban product consumption and relevant waste management. *Journal of Material Cycles and Waste Management* 22(4): 1019–1026. <https://doi.org/10.1007/s10163-020-00992-w>.
- Singkran, N., P. Anantawong, and N. Intharawichian.** 2020. BOD load analysis and management improvement for the Chao Phraya River Basin, Thailand. *Environmental Monitoring and Assessment* 192(7): 413. <https://doi.org/10.1007/s10661-020-08350-x>.
- Singkran, N., P. Anantawong, N. Intharawichian, and K. Kunta.** 2019. The Chao Phraya River Basin: water quality and anthropogenic influences. *Water Science and Technology-Water Supply* 19(5): 1287–1294. <https://doi.org/10.2166/ws.2018.167>.
- Singkran, N.** 2018. Urban product analysis and management of Bangkok Metropolis. *Technology Analysis & Strategic Management* 30(11): 1269–1282. <https://doi.org/10.1080/09537325.2018.1458981>.
- Singkran, N.** 2017. Flood risk management in Thailand: Shifting from a passive to a progressive paradigm. *International Journal of Disaster Risk Reduction* 25: 92–100. <https://doi.org/10.1016/j.ijdrr.2017.08.003>.
- Singkran, N.** 2017. Water budget analysis and management for Bangkok Metropolis, Thailand. *Water Science and Technology* 76(6): 1545–1554. <https://doi.org/10.2166/wst.2017.350>.
- Singkran, N.** 2017. Determining overall water quality related to anthropogenic influences across freshwater systems of Thailand. *International Journal of Water Resources Development* 33(1): 132–151. <https://doi.org/10.1080/07900627.2016.1142862>.
- Singkran, N., and J. Kandasamy.** 2016. Developing a strategic flood risk management framework for Bangkok, Thailand. *Natural Hazards* 84(2): 933–957. <https://doi.org/10.1007/s11069-016-2467-x>.
- Singkran, N.** 2015. Water quality and TMDL determinations for the Chaopraya River, Thailand. Pages 27–32 in *Proceedings of the 2014 5th International Conference on Environmental Science and Information Application Technology (ESIAT 2014)*, Hong Kong, November 7–8, 2014. Taylor & Francis Group.
- Singkran, N., J. Tosang, D. Waijaroen, N. Intharawichian, O. Vannarart, P. Anuntawong, K. Kunta, P. Wisetsopa, T. Tipvong, N. Janjirawuttikul, F. Masthawe, S. Anornpatanawat, and S. Kirtsang.** 2015. Influences of land use and climate changes on hydrologic system in the northeastern river basin of Thailand. *Journal of Water and Climate Change* 6(2): 325–340. <https://doi.org/10.2166/wcc.2014.127>.
- Singkran, N.** 2014. Contingency plan improvement for managing oil spills in the coastal waters of Thailand. *Marine Pollution Bulletin* 89(1–2): 149–159. <http://dx.doi.org/10.1016/j.marpolbul.2014.10.013>.
- Singkran, N.** 2013. Classifying risk zones by the impacts of oil spills in the coastal waters of Thailand. *Marine Pollution Bulletin* 70(1–2): 34–43. <http://dx.doi.org/10.1016/j.marpolbul.2013.02.004>.

- Singkran, N.** 2012. Determining water patterns in Chakmak Canal and Pradoo Bay, Rayong province, Thailand. In: Assawinchaichote, W. (ed.), *Proceedings of the IASTED Asian Conference on Modelling, Identification, and Control (AsiaMIC 2012)*, Phuket, Thailand. ACTA Press, London. pp. 215–220. <http://dx.doi.org/10.2316/P.2012.769-011>.
- Singkran, N.** 2010. Determining water conditions and carrying capacity of the Thachin River, Thailand (Best Paper Award). *The 3rd Technology and Innovation for Sustainable Development International Conference*. Royal Mekong Nong Khai Hotel, Nong Khai, Thailand, March 4–6, 2010. Faculty of Engineering, Khon Kaen University.
- Singkran, N., A. Yenpiem, and P. Sasitorn.** 2010. Determining water conditions in the northeastern rivers of Thailand using time series and water quality index models. *Journal of Sustainable Energy & Environment* 1(2): 47–58.
- Bain, M. B., **N. Singkran**, and K. E. Mills. 2008. Integrated ecosystem assessment: Lake Ontario Water Management. *PLoS ONE* 3(11): e3806. <https://doi.org/10.1371/journal.pone.0003806>.
- Singkran, N., and M. B. Bain.** 2008. Abundance exchange models of fish assemblages along the Hudson River estuary gradient, New York. *Water Science and Technology* 58(11): 2133–2142. <https://doi.org/10.2166/wst.2008.827>.
- Singkran, N., and M. M. Meixler.** 2008. Influences of habitat and land cover on fish distributions along a tributary to Lake Ontario, New York. *Landscape Ecology* 23 (5): 539–551. <https://doi.org/10.1007/s10980-008-9212-0>.
- Singkran, N.** 2007. An abundance exchange model of fish assemblage response to changing habitat along embayment-stream gradients of Lake Ontario, New York. *Ecological Modelling* 201(3–4): 453–467. <https://doi.org/10.1016/j.ecolmodel.2006.10.012>.
- Singkran, N., and S. Sudara.** 2005. Effects of changing environments of mangrove creeks on fish communities at Trat Bay, Thailand. *Environmental Management* 35(1): 45–55. <https://doi.org/10.1007/s00267-003-0173-4>.
- Singkran, N., and S. Sudara.** 1999. Species composition of fish in mangrove canals as reflected from coastal land use at Trat Bay, Thailand. In: Sumantakul, V., Havanond, S., Charoenrak, S., Amornsanguansin, J., Tubthong, E., Pattanavibool, R., Muangsong, P. and Kansupa, R. (eds.), *Enhancing Coastal Ecosystem Restoration for the 21st Century. Proceedings of Regional Seminar for East and Southeast Asian Countries: Ecotone VIII*, Ranong and Phuket Provinces, Thailand, May 23–28, 1999. p. 133–139. National MAB Committee of Japan.

SELECTED ORAL PRESENTATIONS

2023

- Carbon sink capacity of public parks and carbon sequestration efficiency improvement in a dense urban landscape. The 1st Workshop of Asian Urban Forests Networks (AUFN) for People & Environment. The Asia Pacific Association of Forestry Research Institutions (APAFRI). Avante Hotel, Kuala Lumpur, Malaysia, January 10.

2022

- The mega flood in 2011 of Thailand and paradigm shift in flood risk management. The NCKU Overseas Hub in Malaysia's webinar on "How the world is coping with the new normal of massive flooding?" The online presentation via Webex Meetings and Facebook Live platforms, December 12.
- Flood risk assessment and management for a large river basin. The online webinar series on integrated rural development in 2022 via Webex Meetings platform. The Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP); October 13.
- Carbon sequestration of public parks and urban greening improvements in a megacity. The online webinar series on integrated rural development in 2022 via Webex Meetings platform. The Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP); August 7.

2021

- Greenhouse gas assessment & impact mitigations in the Lower Mekong Basin's Watershed Networks in Thailand. The 2021 Special Symposium on SDGs and Water-Energy in Mekong River via Cisco Webex Meetings; December 7.
- Pandemic disease prediction and management: A case of the outbreaks of COVID-19 in Thailand. The online webinar series on integrated rural development in 2021 via Webex Meetings platform. The Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP); September 16.

2020

- Flood risk assessment for the central river basin of Thailand. The 12th International Conference on Risk Analysis and Hazard Mitigation. The online conference on the conference website; June 23.
- Determining land use influences on hydrologic regime of the Chao Phraya River Basin, Thailand. The International Conference of Sustainable Earth Resources Engineering 2020. The online conference on a closed-Facebook group; May 4.

2019

- Nutrient flow assessment reflected by anthropogenic activities in the Chao Phraya River Basin, Thailand. 2019 The 2nd International Symposium on Water Pollution and Treatment (ISWT 2019). Bangkok, Thailand; October 18.

- BOD load analysis for the Chao Phraya River Basin, Thailand.
International Conference on Clean Water, Air & Soil. University of Transport, Ho Chi Minh City, Vietnam; July 27.
- Influences of climate changes on hydrologic system in the Lamtakhong River Basin of Thailand.
The 8th World Climate Congress. Avani Atrium Bangkok, Thailand; May 10.
- 2018**
 - The Chao Phraya River Basin: Water quality and anthropogenic influences.
The 3rd Regional IWA Diffuse Pollution Conference. The Empress Hotel Chiang Mai, Thailand; November 21.
- 2017**
 - Urban product analysis and management of Bangkok Metropolis.
UEM Congress 2017: Disruptive Technologies and Innovations in Transportation, Energy, & Commerce. Sasin Graduate Institute of Business Administration of Chulalongkorn University, Thailand; August 16.
 - Urban consumption efficiency & improvement for livable city.
The 7th International Congress of Energy and Environment Engineering and Management. Las Palmas de Gran Canaria, Canary Islands, Spain; July 18.
- 2016**
 - Flood overview and flood risk management for the Chao Phraya River Basin, Thailand.
Discussion panel: Impacts of droughts and floods in cities: policies and governance. 2016 World Water Week. Stockholm, Sweden; August 31.
- 2015**
 - Influences of land use and climate changes on hydrologic system in the northeastern river basin of Thailand.
Research Seminar. School of Geography, Planning and Environmental Management. The University of Queensland, Brisbane, Australia; July 23.
 - 2011 Thailand flood: Situations & disaster management. Environmental Engineering Research Seminar. School of Civil and Environmental Engineering. University of Technology Sydney, Australia; July 17.
- 2014**
 - Water quality and TMDL determinations for the Chaopraya River, Thailand.
2014 5th International Conference on Environmental Science and Information Application Technology. Hong Kong; November 7.
 - Determining hydrology regime and sedimentation pattern of the Lamtakhong Basin, Thailand.
The 2013 Final Regional Meeting on National Studies. Mekong River Commission, Can Tho City, Vietnam; March 4.
- 2013**
 - Influences of land use changes on flow patterns in the Lamtakhong, Thailand.
The 4th International Conference on Conservation Agriculture in Southeast Asia. University of Battambang, Battambang, Cambodia; December 11.
 - Classifying risk zones by the impacts of oil spills in the coastal waters of Thailand.
Pacem in Maribus XXXIV, International Forum on Sustainable Governance of the Ocean. Bangkok, Thailand; September 5.
 - 2011 Thailand flood situations & disaster management.
The training of Trainer course on Integrated Urban Flood Management. Jakarta, Indonesia; March 21.
- 2012**
 - Determining flow & influences of land use change on water conditions in the Lamtakhong, Nakhonratchasim province, Thailand.
The 2012 Final Regional Workshop on National Pilot Studies. Mekong River Commission, Luangprabang, Lao P.D.R.; December 20.
 - Determining water patterns in Chakmak Canal and Pradoo Bay, Rayong province, Thailand.
The 31st IASTED Asian Conference on Modeling, Identification and Control. Phuket, Thailand; April 2–4.
- 2010**
 - Oil slick dispersion and risk areas to oil spills in marine waters of Thailand.
Marine Conference 2010. Department of Marine and Coastal Resources, Ministry of Natural Resources and Environment, Royal Phuket City, Phuket, Thailand; June 28–30
 - Determining water conditions and carrying capacity of the Thachin River, Thailand.
The 3rd Technology and Innovation for Sustainable Development International Conference (TISD 2010). Faculty of Engineering, Khon Kaen University, Royal Mekong Nong Khai Hotel, Nong Khai, Thailand; March 4–6.
- 2009**
 - Determining Thailand's water conditions using time series and water quality index models.
The commemorative International Conference of the Occasion of the 4th Cycle Anniversary of KMUTT, Sustainable Development to Save the Earth: Technologies and Strategies Vision 2050 (SDSE2008). King Mongkut's University of Technology Thonburi, Millennium Hilton Bangkok Hotel, Bangkok, Thailand; April 8.
- 2008**
 - Abundance exchange models of fish assemblages along the Hudson River estuary gradient, New York.
The 12th International Conference on Integrated Diffuse Pollution Management (IWA DIPCON). Faculty of Engineering, Khon Kaen University, Sofitel Raja Orchid Khon Kaen Hotel, Khon Kaen, Thailand; August 26.
 - Terrestrial and aquatic ecosystem: situation, problem, and management policy.

- Guest speaker for a local meeting in the South of Thailand, National Human Rights Sub-Committee, Diamond Plaza Hotel, Muang, SuratThani, Thailand; January 30.
- 2007**
- Detecting ecotones & modeling fish assemblage along lentic-lotic gradients of Lake Ontario, New York. Department of Forest Resources, Green Hall, University of Minnesota, Minnesota; September 19.
- 2006**
- Ecotone, habitat, and land cover effects on fish distribution in freshwater systems. American Fisheries Society 136th annual meeting, Lake Placid, New York; September 12.
 - Detecting ecotones & modeling fish distribution along a freshwater gradient of Lake Ontario. Fernow Hall, Department of Natural Resources Symposium. Cornell University, New York; March 28.
- 2005**
- An abundance exchange model of fish assemblage responses to changing physical habitat on an embayment-stream gradient of Lake Ontario.
 - International Association for Great Lakes Research Conference. University of Michigan, Ann Arbor; May 24
 - Great Lake Research Consortium. Syracuse University, New York; March 18.
 - Department of Natural Resources Symposium. Cornell University, New York; January 20.
- 2004**
- Ecotones and their influence on the flux of fish across the complex lotic-lentic systems of Lake Ontario embayments.
 - International Association for Great Lakes Research Conference. Waterloo University, Canada; May 28.
 - Department of Natural Resources Symposium. Cornell University, New York; January 20.
- 1999**
- Effects of coastal land use on mangrove fish at Trat Bay, Thailand. Ecotone VIII conference: Enhancing Coastal Ecosystem Restoration for the 21st Century” UNESCO Man and the Biosphere (MAB) Program. Regional Seminar for East and Southeast Asian Countries, Ranong Province, Thailand, May 24.

SELECTED SCHOLARSHIPS/FELLOWSHIPS/AWARDS

- 2019**
- Fellowship for participating in the “2020 Southeast Asia International Joint-Research and Training Program on Low Carbon and Green Energy” at National Tsing Hua University, Hsinchu, Taiwan, February 4–15, 2020. Awarded by the Ministry of Science and Technology, Taiwan.
- 2017**
- Best paper entitled “Urban product analysis and management of Bangkok Metropolis”, August 16. Awarded by the 8th Industrial Automation and Electronic Engineering Conference, Sasin Graduate Institute of Business Administration of Chulalongkorn University, Bangkok, Thailand.
 - A 2-year research fellowship (\$1,500,000 Thai Baht), fiscal year fellowship of 2017. Awarded by Mahidol University.
- 2016**
- Fellowship for participating in the panel discussion of the 1-day workshop on “Policies and governance to enhance urban resilience: impacts of droughts and floods” at the World Water Week 2016, Stockholm, August 28–September 2, 2016. Awarded by the Institute of Water Policy, Lee Kuan Yew School of Public Policy, National University of Singapore.
 - A 1-year research fellowship (\$150,000 Thai Baht), Talent Management Program. Awarded by Mahidol University.
- 2015**
- A 1-year research fellowship (\$115,000 Thai Baht). Awarded by the Korea Foundation for Advanced Studies’ Asia Research Center, Chulalongkorn University
- 2014**
- A 2-month visiting fellow at School of Civil and Environmental Engineering, University of Technology Sydney (UTS), Australia (\$11,000 AUD). Awarded by Department of Education’s 2015 Endeavour Executive Fellowship, the Australian Government.
- 2013**
- A 1-year young researcher scholarship (\$250,000 Thai Baht). Awarded by the Coordinating Center for Thai Government Science and Technology Scholarship Students, National Science and Technology Development Agency, Ministry of Science and Technology.
- 2010**
- Best paper entitled “Determining Water Conditions and Carrying Capacity of the Thachin River, Thailand”. Awarded by the 3rd Technology and Innovation for Sustainable Development International Conference, Faculty of Engineering, Khon Kaen University, Khon Kaen, Thailand.

- The scholarship for attending the Training Program on Environmental Protection for Thailand-Life Cycle Assessment (≈\$100,000 Yen), December 7–17.
Awarded by the Ministry of Economy, Trade and Industry, Japanese Government.

2008–2009

- A 2-year postdoctoral researcher position (\$40,000 USD/year), but cancelled the fellowship for returning to Thailand as requested by the Thai government).
Awarded by the School of Natural Resources & Environment, University of Michigan, Ann Arbor, USA.

June 2006–May 2007

- A one-year Hudson River Graduate Fellowship (\$16,000 USD).
Awarded by the Hudson River Foundation, New York, USA.
- The Bear Banner of Cornell Ph.D. graduation ceremony in May 2007 (Class of 2007).
Awarded by the Cornell Graduate School, New York, USA.

August–December 2006

- Partly tuition support for the fall semester of 2006 (\$8,000 USD).
Awarded by College of Agriculture and Life Science, Cornell University, New York, USA.

2002–2006

- Funding supports for field observations, academic training, and conference meetings.
Awarded by Cornell Biocomplexity Project, funded by National Science Foundation, New York, USA.

2001–June 2006

- The full scholarship support for studying a Ph.D. program in Natural Resources at Cornell University (~\$188,000 USD).
Awarded by the Royal Thai Government, Bangkok, Thailand.

1997–1999

- The Biodiversity Research Grant for completing a Master research (\$80,000 Thai Baht).
Awarded by the Biodiversity Research and Training Program (BRT), Bangkok, Thailand.

1996–1999

- The environmental scholarship for studying a Master Program in Environmental Science (\$200,000 Thai Baht).
Awarded by the Chin Sophonpanich Foundation for Environment, Bangkok, Thailand.

1994

- The Outstanding Environmental News Reporter Award.
Awarded by the Siam Environmental Club, Bangkok, Thailand.

1993

- The 2nd award on the Environmental Article for Supporting Eco-tourism of Thailand.
Awarded by the Tourism Authority of Thailand, Bangkok, Thailand.

1989

- The Creative Short Story Award.
Awarded by Thailand's Five Leading Governmental Universities' Literature Association.

MEMBERSHIPS

- Council of Science and Technology Professionals, Thailand
- Cornell-Thai Student Association, USA
- Endeavour Alumni Network, Australia

SELECTED TRAINING PARTICIPATIONS**2020**

- The 12-day training program on low carbon and green energy, February 4–15.
National Tsing Hua University, Hsinchu, Taiwan.

2018

- The 1-day training program on non-point source modeling: Pesticide accumulation and leaching risk, November 20.
The 3rd Regional IWA Diffuse Pollution Conference, the Empress Hotel Chiang Mai, Thailand.

2014

- The 4-day national training on 1-D hydrodynamic model using ISIS program, November 18–21.
Mekong River Commission, Bangkok, Thailand.
- The 2-day network management and strategic planning workshop, November 13–14.
Siam Water Network, Mahidol University, Nakhon Pathom, Thailand.
- The 2-day regional training for trainers on ISIS mapping analysis, March 6–7.
Mekong River Commission, Can Tho City, Vietnam.

2013

- The 5-day training on integrated urban flood management, March 18–22.
Provincial Government of Jakarta, UNESCO-IHE, Capnet, and CKnet, Jakarta, Indonesia.

2012

- The 3-day Thailand National Modeling Core Team training on the Lamtakhong modelling, October 16–18.
Department of Water Resources, Bangkok, Thailand.
- The 3-day regional training on the updated MRC Toolbox, May 8–10.
Mekong River Commission, Hanoi City, Vietnam.

2011

- The 5-day regional training on ARCSWAT 2009 program, September 5–9.
Mekong River Commission, Ho Chi Minh City, Vietnam.
- The 3-day training program on Artificial Neural Networks, February 23–25.
The Royal Irrigation Department, Nonthaburi, Thailand.
- The 2-day training program on the introductory SWAT, January 4–5.
Nong Lam University, Ho Chi Minh City, Vietnam.

2010

- The 9-day training program on life cycle assessment, December 8–16.
AOTS Tokyo Kenshu Center, Tokyo, Japan.
- The 3-day training course entitled “In Search of Excellence in Teamwork, February 19–21.
Integrated Intelligence Development Group, Kasetsart University-Nakhonprathom Campus, Thailand.

2009

- The 2.5-day OILMAP software training course, July 20–22.
Pollution Control Department, Sofitel Centara Grand Bangkok Hotel, Bangkok, Thailand.
- The 9-day MIKE 11 software operational training course, March 19–31.
Pollution Control Department, Bangkok, Thailand.

2004

- The 1-week intensive course on complex physical, biological, and social systems: A coherent program of study of complex systems concepts and methods, January 5–9.
Massachusetts Institute of Technology, Cambridge, Massachusetts, USA.

1991

- The 4-week ship-board training program in marine fisheries and oceanographic experiments on the Andaman Sea, summer of 1991.
The Royal Fisheries Department, Bangkok, Thailand.

1990

- The 6-week training program in fisheries technology.
The Southeast Asian Fisheries Development Center (SEAFDEC), Samutprakan, Thailand