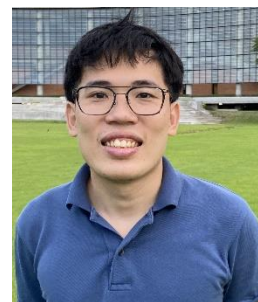


# Curriculum Vitae



Family Name:	Ta
First & Middle Name:	Anh Tuan
Academic Title:	Doctor of Philosophy
Portfolio:	<a href="https://sites.google.com/view/anhtuanta">https://sites.google.com/view/anhtuanta</a>
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Phone:	+66957939240
Date of Birth:	17/04/1991
Research Interests:	Plastic pollution, microplastic pollution, solid waste management; recovery of valuable materials from waste (anaerobic digestion, green energy); water and wastewater treatment,
Current position	Researcher at Sirindhorn International Institute of Technology, Thammasat University, Thailand

## Biography

Dr. Anh is an early-career scientist

A junior scientist with a focus on environmental problems: microplastic pollution, solid waste management, recovery of valuable materials from waste. Anh Tuan Ta earned a Ph.D. in Environmental Technology at Sirindhorn International Institute of Technology, Thammasat University, Thailand. His Ph.D topic is "Investigation of Microplastic Pollution in the Lower Chao Phraya River, Thailand" He obtained an M.Sc. degree in Environmental Technology at Thammasat University, Thailand in 2018. The topic was "Technical Feasibility of Anaerobic Digestion for Utilizing Municipal Solid Waste from Talaad Thai Market, Thailand". He obtained a B.E. degree in Environmental Technology and Management at Van Lang University in 2013 with second class honors.

## University Education

Dates:

Aug 2018 – June 2021	Doctor of Philosophy (Engineering and Technology) at SIIT, Thammasat University, Thailand
Jan 2016-Jun 2018	Master of Science (Environmental Technology) at SIIT, Thammasat University, Thailand
Jul 2009-Jul 2013	Bachelor of Engineering (Environmental Technology and Management) at Van Lang University, Vietnam (second class honors)

## Practical Training/Exchange Program

Dates:

Aug – Dec 2019	Exchange student at TU Braunschweig, Germany (under DAAD PhD exchange program).
March 30 – April 5 2020	Training of trainer at Kyushu University, Japan for project “Investigations on Microplastics Pollution in Aquatic Environment in Selected Developing Countries from Southeast Asia”
Jan 21 – Jan 30, 2018	Japan – Asia Exchange program in Science (Kobe University, Japan)
Jul 24 – Aug 2017	Summer school “Sustainable Waste Management in Emerging Economies – under the special aspects of Climate Change and Marine Litter” (DAAD, Swindon – TU Braunschweig Germany)
Aug 1 – 11, 2016	Summer school “Integrated management of the urban environment for sustainable development” (the University of Tokyo and University of Chulalongkorn University)

## Scholarships / Awards

Dates:

June 2019	Best Oral Presenter - The 5th EnvironmentAsia International Conference, Chiang Mai, Thailand
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August 2018	PhD Scholarship from The Royal Golden Jubilee, The Thailand Research Fund, Ministry of Higher Education, The Government of Thailand.
August 2017	Best Oral Presenter – 5 <sup>th</sup> International Conference on Research and Technology, University of Science, Malaysia.
Dec 2016	Master Program Scholarship from The Joint Graduate School of Energy and Environment, Ministry of Energy, The Government of Thailand.

## Work experience

Dates:

Dec 2021- Present	Researcher at Sirindhorn International Institute of Technology, Thammasat University, Thailand
August 2017 – Present	Teaching Assistant at Sirindhorn International Institute of Technology (SIIT), Thammasat University
June 2014 – May 2016	Head of research department at The Center for Environmental Technology & Environment (Centema), Vanlang University, Ho Chi Minh City, Vietnam
August 2013 – May 2014	Principal researcher at The Center for Environmental Technology & Environment (Centema), Vanlang University, Ho Chi Minh City, Vietnam

## Publications

### Journal papers

1. **Ta, A. T.**, & Babel, S. (2023). Occurrence and spatial distribution of microplastic contaminated with heavy metals in a tropical river: Effect of land use and population density. *Marine Pollution Bulletin*, 191, 114919.
2. **Ta, A. T.**, & Babel, S. (2023). Microplastics and heavy metals in a tropical river: Understanding spatial and seasonal trends and developing response strategies using DPSIR framework. *Science of The Total Environment*, 165405.
3. **Anh, T. T.**, Pupuang, P., Babel, S., & Wang, L. P. (2022). Investigation of microplastic contamination in blood cockles and green mussels from selected aquaculture farms and markets in Thailand. *Chemosphere*, 134918.
4. Babel, S., **Ta, A. T.**, Loan, N. T. P., Sembiring, E., Setiadi, T., & Sharp, A. (2022). Microplastics pollution in selected rivers from Southeast Asia. *APN Science Bulletin*.
5. **Ta, Anh Tuan**, and Sandhya Babel. "Microplastics pollution with heavy metals in the aquaculture zone of the Chao Phraya River Estuary, Thailand." *Marine Pollution Bulletin* 161 (2020): 111747.

6. **Ta, A. T.**, & Babel, S. (2020). Microplastic contamination on the lower Chao Phraya: Abundance, characteristic and interaction with heavy metals. *Chemosphere*, 127234.
7. **Ta, A. T.**, Babel, S., & Haarstrick, A. (2020). Microplastics Contamination in a High Population Density Area of the Chao Phraya River, Bangkok. *Journal of Engineering and Technological Sciences*, 52(4), 533-545.
8. **Anh Tuan Ta** and Sandhya Babel (2019). Microplastic pollution in surface water of the Chao Phraya River in Ang Thong area. *Environment Asia (Special issue)*, Volume 12, pp 48-53.
9. Sudrajat, H., Babel, S., **Ta, A. T.**, & Nguyen, T. K. (2020). Mn-doped TiO<sub>2</sub> photocatalysts: Role, chemical identity, and local structure of dopant. *Journal of Physics and Chemistry of Solids*, 109517.
10. **A. T. Ta** and S. Babel (2019). Utilization of green waste from vegetable market for biomethane production: Influences of feedstock to inoculum ratios and alkalinity. *Journal of Material cycles and waste management*. Vol 21, 6, pp 1391-1401.
11. **A. T. Ta** and S. Babel (2019). Microplastic contamination in freshwater environment: A case study in the Chao Phraya River, Bangkok. *Vietnam Journal of Construction*, Vietnam Ministry of Construction (4-2019)

### **Book Chapters**

1. **Ta, A. T.**, & Babel, S. (2022). Sources, Occurrence, and Analysis of Microplastics in Freshwater Environments. In *Plastic and Microplastic in the Environment: Management and Health Risks*: John Wiley & Sons Ltd.
2. Sandhya Babel, **Anh Tuan Ta** and Teshan Udayanga Habarakada Liyanage (2019). A book chapter entitled "Current Situation and Challenges of Waste Management in Thailand" published in book "Sustainable Waste Management Challenges in Developing Countries", pp 409-440. Publisher IGI Global, USA.
3. **Anh Tuan Ta**, Sandhya Babel (2019). A book chapter entitled "Current Status of Microplastics Contamination in Marine and Freshwater Environments" published in book "Water Perspectives in Emerging Countries Focus Issue - Microplastics in the Water Environment", Publisher Cuvillier Verlag, Germany.

### **Conference Papers**

1. Natcha Kampalanuwong, Lalittaya Panacharoenpaiboon, Narika Pramunwong, **Anh Tuan Ta**, Kritapas Laohhasurayotin, Sandhya Babel (2023). Groundwater Purification for Drinking Purposes by a Submerged Module of Layered Double Hydroxides/Graphene Oxides Membrane In Proceedings of the Forth Materials Research Society of Thailand International

Conference (MRS-Thailand 2023) at Ubon Ratchathani, THAILAND, February 28th-March 4th, 2023.

2. Nannapat Sopittakamol, Prapatsara Udomsub, Thanaporn Kharntarin, **Anh Tuan Ta**, Kritapas Laohhasurayotin, Saifon Kullyakool and Sandhya Babel (2022). Groundwater purification by LDH/GO hybrid membrane for drinking purpose. In Proceedings of the Pure and Applied Chemistry International Conference 2022 (PACCON2022) “Frontiers in Chemical Sciences for Health, Energy, and Sustainability” at KMITL Convention Hall, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand, June 30 – July 1, 2022
3. P. Tat-Eiam, P. Pupuang, A. Chientachakul, **A.T. Ta**, S. Babel (2021). Occurrence of microplastics in commercially harvested blood cockles in Thailand. In Proceedings of the International conference on sustainable Biowaste Management 2021 held at Hong Kong from April 12-15, 2021, pp 279-282.
4. Lukas Klocke, **Anh Tuan Ta**, Sandhya Babel, and Andreas Haarstick (2020). Dimensioning and Planning of an Activated Carbon Filter to Remove Microplastic Particles in the Effluent of a Wastewater Treatment Plant in Bangkok. In Proceedings of GMSARN Int. Conf. on Sustainable Energy, Environment, & Climate Change Transitions in GMS, 21-22 December 2020.
5. Rawipa Intakul, Intiporn Viriyaparp, Saisuai Thanomrod, **Anh Ta**, Sandhya Babel (2020). Microplastic Pollution in Highly Populated Area of Chao Phraya River, Tha Prachan, Bangkok. In Proceedings of 2020 Pure and Applied Chemistry International Conference (PACCON 2020) held at Bangkok, Thailand from February 13-14, 2020 (EC52-57).
6. Apirak Suwanchalouy, Uttaporn Thongphichit, Phitchapa Khemvirat, **Anh Ta**, Sandhya Babel (2020). Investigations on microplastics as vectors for heavy metals in the water. In Proceedings of 2020 Pure and Applied Chemistry International Conference (PACCON 2020) held at Bangkok, Thailand from February 13-14, 2020 (EC58-62).
7. **A. T. Ta** and S. Babel. Microplastic contamination in freshwater environment: A case study in Chao Phraya River, Bangkok. In proceedings of International conference on sustainable design and climate change adaptation held at design Van lang university, Ho Chi Minh city, Vietnam on April 10, 2019, pp 69-72.
8. **Ta, Anh** and Sandhya Babel (2019). Microplastic pollution in surface water of the Chao Phraya River in Ang Thong area. In Proceeding of the 5th EnvironmentAsia International Conference (EnvironmentAsia 2019), 13-15 June 2019, Chiang Mai, Thailand, pp. V-179 - V-188.
9. **Ta, Anh Tuan** and Sandhya Babel (2018). Renewable energy generation by anaerobic digestion of mixed vegetable waste in a lab-scale BIOCEL reactor. In Proceedings of the Water

Security and climate change conference (WSCC 2018), 3-5 December 2018, Nairobi, Kenya, Paper ID 130, pp. 146.

10. **Ta, Anh Tuan;** and Sandhya Babel (2017). Influences of waste to inoculum ratios and temperature on biogas generation of organic solid waste from market. In Proceedings of the 5th International Conference on Environmental Research and Technology (ICERT 2017), 23-25 August 2017, Penang, Malaysia, pp. 156-161.

#### Projects as Principal Investigator

1. Removal of chloride ions from wastewater through Friedel's salt chemical precipitation method with combination of UV irradiation (2023) funded by Kurita Water and Environment Foundation (KWEF), Japan. (400,000 Yen)

#### Projects as Co- principal investigator and principal researcher

1. Removal of chloride ions from wastewater through Friedel's salt chemical precipitation method with combination of UV irradiation and electrocoagulation (2023) Funded by Thammasat University Research Fund (Thailand) and National Taipei University of Technology (Taiwan).
2. Nanohybrid Membrane from Layered Double Hydroxides and Graphene Oxide for Incorporation in Groundwater Purification System (2022) Funded by National Research Council of Thailand and National Nanotechnology Center.
3. Microplastics in drinking water (2022) Funded by Cleansui Mitsubishi – Japan
4. Microplastics uptake by green mussels (*Perna Viridis*) cultured for human consumption in Thailand and Taiwan - Thammasat University Research Fund (Thailand) and National Taipei University of Technology (Taiwan) (2021- 2022)
5. Investigations on Microplastics Pollution in Aquatic Environment in Selected Developing Countries from Southeast Asia - funded by Asia-Pacific Network for Global Change Research (2019-2020).
6. Technical Feasibility of Anaerobic Digestion for Utilizing Municipal Solid Waste from Talaad Thai Market, Thailand -funded by Thammasat Research Fund (2/26/2560) (2017-2018).
7. Integrated solid waste management system leading to zero waste for sustainable resource utilization in rapid urbanized areas in developing countries from Southeast Asia - funded by Asia-Pacific Network for Global Change Research (2015-2017)
8. Composting and Vermicomposting for Biological Sludge from Wastewater Treatment Plant at Latex Processing Factory - funded by Dongnai Rubber Corporation, The Vietnam Rubber Group (2013-2014).