

Curriculum Vitae - Nguyễn Trường An

Contact	Nguyễn Trường An, PhD truongan9393@yahoo.com Phone: +33 662 04 98 13	
Currently	I am a postdoc researcher with the interests in: <div><i>Water quality modelling in rivers and estuaries.</i> <i>Eutrophication, greenhouse gases emissions and biogeochemical processes.</i></div>	
Education	PhD thesis in the Environmental Science	11/2018-12/2021
	University of Grenoble Alpes (UGA, France) <i>Biogeochemical modeling in a tropical estuary and eutrophication management</i>	
	Master degree in Hydraulic	09/2017-08/2018
	Grenoble Institute of Technology (Grenoble INP, France) <i>Modeling nutrient dynamics in the Saigon River Estuary, Vietnam</i>	
	Bachelor degree in Environmental management	09/2011-02/2016
	Ho Chi Minh City University of Technology (HCMUT, Vietnam) <i>Antibiotic pollution in the Saigon River, Vietnam</i>	
Professional Experience	Postdoctoral researcher (24 months)	05/2024-04/2026
	Institut Géosciences Environnement (IGE), Institut de recherche pour le développement (IRD) <i>TROPECOS project, Past, Present, and Future Greenhouse gases of Tropical Estuaries</i>	
	Postdoctoral researcher (22 months)	05/2022-02/2024
	INRAE, l'Institut national de recherche pour l'agriculture, l'alimentation et l'environnement <i>Studying the evolution of carbonate system at Loire River by using high resolution datasets</i>	
	Job searching (4 months)	01/2022-04/2022
	After completing my doctoral contract, I applied for several postdoctoral positions in Europe	
	Doctoral contract (37 months)	11/2018 – 12/2021
	Institute of Environmental Geosciences (IGE), France. <i>Water quality monitoring (nutrients, carbon, phytoplankton, greenhouse gases) and develop a biogeochemical model (1D reactive transport) for tropical estuaries</i>	
	PhD Application and vacation (5 months)	07/2018-10/2018
	Preparing and submitting applications for PhD programs in France, included a brief period of vacation.	
	Master program (6 months internship)	08/2017-07/2018
	Institute of Environmental Geosciences (IGE), France.	

Implementation of a nutrient dynamics model for the Saigon River using C language

Principal Investigator (6 months) 12/2016-08/2017

Young Investigator Project, HCMUT, Vietnam

Design of a pilot scale constructed wetland and analysis of water
NguyenTruongAn_CVs

Lab technician (18 months) 12/2015-06/2017

Asian Center for Water Research (CARE-RESCIF), Vietnam.

Water sampling and operation of ICP-OES analyzer, TOC-V

Bachelor internship (6 months) 06/2015-12/2015

Project: development of “passive sampling” for the analysis of antibiotics in river

Sampling and pretreatment of NguyenTruongAn_CVs for antibiotics measurement

Competences

Numerical

Extensive knowledge in Python, C & C++ languages for water quality modelling

Data analysis

Data analysis and statistical analysis with Python and R on large datasets

Visualization

Mapping and spatial analysis with QGIS and ArcGIS

Languages

Vietnamese (native)

English (proficient, level B2)

French (basic, level B1)

Publications

Journals

1. Nguyen, A. T., Abril, G., Diamond, J. S., Lamouroux, R., Martinet, C., & Moatar, F. (preprint). Multidecadal trends in CO₂ evasion and aquatic metabolism in a large temperate river. EGU sphere, 2025, 1-27. [10.5194/egusphere-2025-1478](https://doi.org/10.5194/egusphere-2025-1478)
2. Le, T. M. T., Nguyen, T. A., Nguyen, T. T., Nguyen, T. T., Nguyen, P. D., Némery, J., & Baduel, C. (2025). Assessing Spatial Trends and Land Use Impacts on Surface Water Quality: A Case Study of the Saigon and Vam Co Rivers in Southern Vietnam. Case Studies in Chemical and Environmental Engineering, 101225. [10.1016/j.cscee.2025.101225](https://doi.org/10.1016/j.cscee.2025.101225)
3. Thi-Minh-Tam Le , Trung-Tin Nguyen, Truong-An Nguyen, Thi-Huyen-Trang Nguyen and Phuoc-Dan Nguyen (2025). Water Quality Assessment of Urban Canals in Ho Chi Minh City, Vietnam: Effectiveness of Renovation Efforts in Minimizing Pollution. Journal of Water Management Modeling. [10.14796/JWMM.S545](https://doi.org/10.14796/JWMM.S545)
4. Diamond, J. S., Truong, A. N., Abril, G., Bertuzzo, E., Chanudet, V., Lamouroux, R., & Moatar, F. (2025). Inorganic carbon dynamics and their relation to autotrophic community regime shift over three

- decades in a large, alkaline river. *Limnology and Oceanography*. [10.1002/lno.70016](https://doi.org/10.1002/lno.70016)
5. Caracciolo, R., Escher, B. I., Lai, F. Y., Nguyen, T. A., Le, T. M. T., Schlichting, R., Tröger, R., Némery, J., Wiberg, K., Nguyen, P. D., & Baduel, C. (2023). Impact of a megacity on the water quality of a tropical estuary assessed by a combination of chemical analysis and in-vitro bioassays. *Science of The Total Environment*, 877(February), 162525. [10.1016/j.scitotenv.2023.162525](https://doi.org/10.1016/j.scitotenv.2023.162525)
 6. Garnier, J., Billen, G., G Laruelle, G., Le Gendre, R., Némery, J., Nguyen, A., Romero, E., Thieu, V., & Wei, X. (2023). Coastal marine system and estuary functioning is driven by the upstream river basin. In *Reference Module in Earth Systems and Environmental Sciences* (p. B9780323907989000093). Elsevier. [10.1016/B978-0-323-90798-9.00009-3](https://doi.org/10.1016/B978-0-323-90798-9.00009-3)
 7. Nguyen, A. T., Dao, T. S., Strady, E., Nguyen, T. T. N., Aimé, J., Gratiot, N., & Némery, J. (2022). Phytoplankton characterization in a tropical tidal river impacted by a megacity: The case of the Saigon River (Southern Vietnam). *Environmental Science and Pollution Research*, 29(3), 4076–4092. [10.1007/s11356-021-15850-x](https://doi.org/10.1007/s11356-021-15850-x)
 8. Nguyen, A. T., Némery, J., Gratiot, N., Dao, T. S., Le, T. T. M., Baduel, C., & Garnier, J. (2022). Does eutrophication enhance greenhouse gas emissions in urbanized tropical estuaries? *Environmental Pollution*, 303(September 2021). [10.1016/j.envpol.2022.119105](https://doi.org/10.1016/j.envpol.2022.119105)
 9. Camenen, B., Gratiot, N., Cohard, J. A., Gard, F., Tran, V. Q., Nguyen, A. T., Dramais, G., van Emmerik, T., & Némery, J. (2021). Monitoring discharge in a tidal river using water level observations: Application to the Saigon River, Vietnam. *Science of the Total Environment*, 761, 143195. [10.1016/j.scitotenv.2020.143195](https://doi.org/10.1016/j.scitotenv.2020.143195)
 10. Nguyen, A. T., Némery, J., Gratiot, N., Garnier, J., Dao, T. S., Thieu, V., & Laruelle, G. G. (2021). Biogeochemical functioning of an urbanized tropical estuary: Implementing the generic C-GEM (reactive transport) model. *Science of the Total Environment*, 784, 147261. [10.1016/j.scitotenv.2021.147261](https://doi.org/10.1016/j.scitotenv.2021.147261)
 11. Nguyen, T. T. N., Némery, J., Gratiot, N., Garnier, J., Strady, E., Nguyen, D. P., Tran, V. Q., Nguyen, A. T., Cao, S. T., & Huynh, T. P. T. (2020). Nutrient budgets in the Saigon–Dongnai River basin: Past to future inputs from the developing Ho Chi Minh megacity (Vietnam). *River Research and Applications*, 36(6), 974–990. [10.1002/rra.3552](https://doi.org/10.1002/rra.3552)
 12. Noncent, D., Strady, E., Némery, J., Thanh-Nho, N., Denis, H., Mourier, B., Babut, M., Nguyen, T. A., Nguyen, T. N. T., Marchand, C., Desmet, M., Tran, A. T., Aimé, J., Gratiot, N., Dinh, Q. T., & Nguyen, P. D. (2020). Sedimentological and geochemical data in bed sediments from a tropical river-estuary system impacted by a developing megacity, Ho Chi Minh City—Vietnam. *Data in Brief*, 31, 105938. [10.1016/j.dib.2020.105938](https://doi.org/10.1016/j.dib.2020.105938)
 13. Nguyen, T. T. N., Némery, J., Gratiot, N., Garnier, J., Strady, E.,

- Tran, V. Q., Nguyen, A. T., Nguyen, T. N. T., Golliet, C., & Aimé, J. (2019). Phosphorus adsorption/desorption processes in the tropical Saigon River estuary (Southern Vietnam) impacted by a megacity. *Estuarine, Coastal and Shelf Science*, 227(August), 106321. [10.1016/j.ecss.2019.106321](https://doi.org/10.1016/j.ecss.2019.106321)
14. Nguyen, T. T. N., Némery, J., Gratiot, N., Strady, E., Tran, V. Q., Nguyen, A. T., Aimé, J., & Peyne, A. (2019). Nutrient dynamics and eutrophication assessment in the tropical river system of Saigon – Dongnai (southern Vietnam). *Science of the Total Environment*, 653, 370–383. [10.1016/j.scitotenv.2018.10.319](https://doi.org/10.1016/j.scitotenv.2018.10.319)
 15. Nguyen, T. A. (2018). Antibiotics And Pesticides In Water And Sediments From Intensive Shrimp Farms In Southern Vietnam. *Vietnam Journal of Science and Technology*, 54, 146. [10.15625/2525-2518/54/4B/12035](https://doi.org/10.15625/2525-2518/54/4B/12035)
 16. Dinh, Q. T., Nguyen, T. A., Moreau-Guigon, E., Alliot, F., Teil, M. J., Blanchard, M., & Chevreuil, M. (2017). Trace-Level Determination of Oxolinic Acid and Flumequine in Soil, River Bed Sediment, and River Water Using Microwave-Assisted Extraction and High-Performance Liquid Chromatography with Fluorimetric Detection. *Soil and Sediment Contamination*, 26(3), 247–258. [10.1080/15320383.2017.1276154](https://doi.org/10.1080/15320383.2017.1276154)
 17. Nguyen, A. T., Le, T. M. T., Tran, V. Q., Truong, V. N., Nguyen, L. T., Nguyen, P. H. T., & Nguyen, T. H. T. (2017). Effect of oxygen states in horizontal subsurface flow constructed wetlands on the removal of organic matter, nutrients, some metals and octylphenol. *VNUHCM Journal of Science and Technology Development*, 20(K9), Article K9. [10.32508/stdj.v20iK9.1676](https://doi.org/10.32508/stdj.v20iK9.1676)
 18. Nguyen, T. A., Tam, L. T. M., Viet, T. Q., Viet, T. N., Luan, N. T., Minh, N. V., Trang, N. T. H., & Tuc, D. Q. (2017). Recommendation of optimal design and operation parameters for constructed wetland for sludge treatment based on the effect of hydraulic retention time, sludge loading rate and vegetation. *VNUHCM Journal of Science and Technology Development*, 20(K8), Article K8. [10.32508/stdj.v20iK8.1669](https://doi.org/10.32508/stdj.v20iK8.1669)

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2. T.A. Nguyen, et al., (2022). Eutrophication management scenarios in the Saigon River by using C-GEM, an estuarine biogeochemical model. ECSA 59 Using the best scientific knowledge for the sustainable management of estuaries and coastal seas, September 5-8, 2022, Kursaal, San Sebastian, Spain. Poster
3. T.A. Nguyen, et al., (2022). Impact of anthropogenic inputs on greenhouse gas emissions in the tropical Saigon River Estuary. International Symposium on Water Sustainability & Green Technologies, November 25-26, 2022, Ho Chi Minh City, Vietnam. Poster

4. T.A. Nguyen, et al., (2022). Modeling the seasonal nutrients dynamics and phytoplankton development in Saigon River Estuary, Vietnam. International Symposium on Ecohydraulics, July 4-8, 2022, Lyon, France. Poster
5. T.A. Nguyen, et al., (2020). Modelling scenarios by C-GEM, an estuarine biogeochemical model. International Conference on Water, Megacities and Global Change, December 1-4, 2020, Paris (Web-Seminar), Vietnam. Oral
6. T.A. Nguyen, et al., (2020). Evaluating estuarine responses to modification of nutrient loads from megacity by a generic reactive-transport model. International Symposium on Ecohydraulics, December 23-24, 2019, Lyon, France. Oral
7. T.A. Nguyen, et al., (2019). Self-purification capacity of a tropical estuary using a generic reactive-transport estuarine model. Green Technologies for Sustainable Water, December 1-5, 2019, Ho Chi Minh City, Vietnam. Poster
8. T.A. Nguyen, et al., (2019). Modelling nutrient dynamics in a tropical estuary under human pressure: case study of the Saigon tidal River (Southern Vietnam). International Conference on Water Resources and Coastal Engineering, April 25, 2019, Da Nang City, Vietnam. Oral
9. T.A. Nguyen, et al., (2016). Analysis of antibiotic and pesticide residues in shrimp farm waters using passive sampling. SETAC Asia/Pacific Conference, September 16-19, 2016, Singapore. Oral

References

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