Curriculum Vitae - Nguyễn Trường An

Contact

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Currently

I am looking for a postdoc position with the interests in:

> *Water quality modelling in rivers and estuaries.*
>
> *Eutrophication, greenhouse gases emissions and biogeochemical processes.*

Education

PhD thesis in the Environmental Science **11/2018-12/2021**

University of Grenoble Alpes (UGA, France)

Biogeochemical modeling in a tropical estuary and eutrophication management.

Master degree in Hydraulic **09/2017-08/2018**

Grenoble Institute of Technology (Grenoble INP, France)

Modeling nutrient dynamics in the Saigon River Estuary, Vietnam.

Bachelor degree in Environmental management **09/2011-02/2016**

Ho Chi Minh City University of Technology (HCMUT, Vietnam)

Antibiotic pollution in the Saigon River, Vietnam.

Professional Experience

Postdoctoral researcher (20 months) **05/2022-02/2024**

INRAE, l'Institut national de recherche pour l'agriculture, l'alimentation et l'environnement.

Studying the evolution of carbonate system at Loire River by using high resolution datasets.

Job searching (4 months) **01/2022-04/2022**

After completing my doctoral contract, I applied for severeal postdoctoral positions in Europe.

Doctoral contract (37 months) **11/2018 – 12/2021**

Institute of Environmental Geosciences (IGE), France.

Water quality monitoring (nutrients, carbon, phytoplankton, greenhouse gases) and develop a biogeochemical model (1D reactive transport) for tropical estuaries.

PhD Application and vacation (5 months) **07/2018-10/2018**

Preparing and submitting applications for PhD programs in France. This time also 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 samples.

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 samples 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. 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. https://doi.org/10.1016/j.scitotenv.2023.162525

2. 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. https://doi.org/10.1016/B978-0-323-90798-9.00009-3

3. 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. https://doi.org/10.1007/s11356-021-15850-x

4. 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). https://doi.org/10.1016/j.envpol.2022.119105

5. 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. https://doi.org/10.1016/j.scitotenv.2020.143195

6. 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. https://doi.org/10.1016/j.scitotenv.2021.147261

7. 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. https://doi.org/10.1002/rra.3552

8. 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. https://doi.org/10.1016/j.dib.2020.105938

9. 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. https://doi.org/10.1016/j.ecss.2019.106321

10. 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. https://doi.org/10.1016/j.scitotenv.2018.10.319

11. 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. https://doi.org/10.15625/2525-2518/54/4B/12035

12. 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. https://doi.org/10.1080/15320383.2017.1276154

13. 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. https://doi.org/10.32508/stdj.v20iK9.1676

14. 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. https://doi.org/10.32508/stdj.v20iK8.1669

Conferences

1.T.A. Nguyen, et al., (2022). Spatial and temporal variation of greenhouse gas emissions in an urbanized tropical estuary (the Saigon River, Vietnam). 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

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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