CURRICULUM VITAE

Name: Yuanbi Yi

M/F: Male

Date of Birth: 30.07.1993

Nationality: China

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Affiliations

2022-present Postdoctoral Fellow, The Hong Kong University of

Science and Technology, Hong Kong, (Host: Prof. Ding

He)

2021-2022 Visiting Ph.D. student, University of Oldenburg,

(Supervisor: Prof. Thorsten Dittmar)

Educations

2018-2022 Ph.D., Environmental science, Tianjin University, Tianjin,

China, (Supervisor: Prof. Si-liang Li)

2016-2018 M.A., Environmental science, Tianjin university, Tianjin,

China, (successive master-doctor program, Supervisor:

Prof. Si-liang Li)

2012-2016 B.A., Applied Chemistry, Tiangong University, Tianjin,

China

Research interests

- 1) Using a variety of methods, including isotope and high-resolution mass spectrometry, to study the transport and transformation of organic matter in aquatic systems and its impact on climate change.
- 2) Using machine learning to study organic matter from a global



perspective based on big data.

Research activities

- 1) **Primary Convener**, Biogeosciences session, Asia Oceania Geosciences Society, 2024, South Korea
- 2) **Invited speaker**, X-MAS international conference, 2022, Xiamen, China
- 3) **Poster**, Goldschmidt conference, 2023, Lyon, France
- 4) **Reviewer** for Global and Planetary Change, Science of the Total Environment, Marine Pollution Bulletin and Frontiers in Earth Science, etc.

Awards

Outstanding graduates of Tianjin University, 2022

Previous relevant research work

Yuanbi YI conducts relevant research on the source, transport, and transformation of dissolved organic matter (DOM) in natural aquatic systems, especially in rivers, reservoirs, estuaries, and China's coastal seas. Yi uses machine learning and big data techniques to study DOM from different perspectives, and his main research goal is to investigate how DOM responds to environmental changes and their climate impacts on aquatic systems.

Publications (# co-first author; * co-corresponding author)

Selected key publications (total > 30):

- Yi Y., Liu T.*, Merder J., He C., Bao H., Li P., Li S., Shi Q., He D.* (2023): Unraveling the Linkages between Molecular Abundance and Stable Carbon Isotope Ratio in Dissolved Organic Matter Using Machine Learning[J]. *Environmental Science & Technology*.
- 2. Yi Y., He C., Klaproth K., Merder J., Li P., Qi Y., Fu P., Li S., Dittmar T., Shi Q.*, He D.* (2023): Will various interpretation strategies of the

- same ultra-high-resolution mass spectrometry data tell different biogeochemical stories? A first assessment based on natural aquatic DOM [J]. *Limnology and Oceanography: Methods*.
- 3. Li S.*, Zhang H., Yi Y.*, Zhang Y., Qi Y., Mostofa K., Guo L., He D., Fu P., Liu C. (2023): The potential impacts of climate and anthropogenic-induced changes on DOM dynamics among the major Chinese Rivers [J]. *Geography and Sustainability*.
- 4. Zhao C., Hou Y., Wang Y., Li P., He C., Shi Q., <u>Yi Y.*</u>, He D.* (2023). The variations in photochemical reactivity of dissolved organic matter along the salinity gradient of the Yangtze River Estuary in China: implications for carbon cycling. <u>Water Research</u>.
- 5. Chen Z., Yi Y.*, Zhang H., Li P., Wang Y., Yan Z., Wang K., He C., Shi Q., He D.* (2023). Differences in Dissolved Organic Matter Molecular Composition along Two Plume Trajectories from the Yangtze River Estuary to the East China Sea. *ACS Environmental Au*.
- 6. Yi Y., Li S.*, Zhong J., Wang W., Chen S., Bao H., He D. (2022): The influence of the deep subtropical reservoir on the karstic riverine carbon cycle and its regulatory factors: Insights from the seasonal and hydrological changes[J]. *Water Research*, 226: 119267.
- 7. Yi Y., Zhong J., Bao H.*, Mostofa K., Xu S., Xiao H., Li S.* (2021): The impacts of reservoirs on the sources and transport of riverine organic carbon in the karst area: a multi-tracer study[J]. *Water Research*, 194: 116933.
- 8. Wang W.#, Yi Y.#, Zhong J., Kumar A., Li S.* (2020): Carbon biogeochemical processes in a subtropical karst river–reservoir system[J]. *Journal of Hydrology*, 591: 125590.
- 9. <u>Yi Y.</u>, Xiao M.*, Mostofa K., Xu S., Wang Z. (2019): Spatial Variations of Trace Metals and Their Complexation Behavior with DOM in the Water of Dianchi Lake, China[J]. <u>International Journal of Environmental Research and Public Health</u>, 16(24): 4919.

10. 易沅壁 , 王万发 , 王宝利 , 等 . 中国西南喀斯特地区水库溶解 态与颗粒态碳研究进展 [J]. 地质科技通报 ,2022,41(5): 341-346...

Submitted publications with peer review process:

1. Yi Y., Li S.*, Zhong J., Wang K., Merder J., Bao H., Qi Y., He D., Xu S., Li S., Dittmar T.*, Liu C., Understanding the Dynamics of Dissolved Organic Matter and its Impact Factors in the Reservoir: Implications for River Carbon Cycling. *Water Research*