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Assessing global regionalized impacts of eutrophication on freshwater fish biodiversity

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Curriculum vitae

Jinhui Zhou was born on 16th October 1992 in Changsha, China. She started to study hydrological modeling in 2013 and finished her BSc thesis with the title of *Simulation and evaluation of water resources in Dongshaoxi watershed*. She got a BSc in Engineering in Water Resources and Hydropower at Wuhan University in 2014. She continued the study of hydrological models during her MSc, finished the thesis of *Analysis of extreme rainfall and flood response under climate change in Liujiang river basin*, and got an MSc in Hydrology and Water Resources at Sun Yat-Sen University in June 2016. From 2016 to 2019, she worked as an engineer and researcher in environmental sciences, particularly, nutrient modeling.

In 2019, she started her PhD research on eutrophication's impact on global ecosystems at the Institute of Environmental Sciences (CML), Leiden University. She is supervised by Peter van Bodegom, José Mogollón, Laura Scherer, and Arthur Beusen.

List of publications

Zhou, J., Mogollón, J. M., van Bodegom, P. M., Beusen, A. H. W., & Scherer, L. (2024). Global regionalized characterization factors for phosphorus and nitrogen impacts on freshwater fish biodiversity. *Science of The Total Environment*. 912, 169108. <https://doi.org/10.1016/j.scitotenv.2023.169108>.

Zhou, J., Mogollón, J. M., van Bodegom, P. M., Barbarossa, V., Beusen, A. H. W., & Scherer, L. (2023). Effects of nitrogen emissions on fish species richness across the world's freshwater ecoregions. *Environmental Science & Technology*. <https://doi.org/10.1021/acs.est.2c09333>

Zhou, J., Scherer, L., Bodegom, P. M. van, Beusen, A. H. W., & Mogollón, J. M. (2022). A Comparison Between Global Nutrient Retention Models for Freshwater Systems. *Frontiers in Water*, 4. <https://doi.org/10.3389/frwa.2022.894604>

Zhou, J., Scherer, L., van Bodegom, P. M., Beusen, A. H. W., Mogollón, J.M. (2022). Regionalized nitrogen fate in freshwater systems on a global scale. *Journal of Industrial Ecology*, 26(3), 907–922. <https://doi.org/10.1111/jiec.13227>

Under review/In preparation

Zhou, J., Mogollón, J. M., & van Bodegom, P. M. (2023). Assessing nutrient fate from terrestrial to freshwater systems using a semi-distributed model for the Fuxian Lake Basin, China. [Under review].

Verones, F., Barbarossa, V., Boulay, A.-M., Corella-Puertas, E., Dorber, M., Douziech, M., Golsteijn, L., Hélias, A., Henderson, A., Kuipers, K., Lebrun, M., Link, A., Marques, A., Michelsen, O., Niblick, B., Pierrat, E., Pfister, S., Posthuma, L., Rosa, F., ... **Zhou, J.** (2023). A Global Consensus Life Cycle Impact Assessment Method - GLAM: Ecosystem Quality. [In preparation].

Zhuang, Y., Liu, X., **Zhou, J.**, Sheng, H., Yuan, Z., Zengwei Y. (2023). Connecting phosphorus emissions with freshwater eutrophication potential using improved environmental fate factors based on existing methods. [In preparation].

Presentations

Oral presentation at 11th International Conference on Industrial Ecology (ISIE2023), 2nd-5th July 2023. Special Session: "Biodiversity Loss and Impact Indicators".

Oral presentation at virtual UNEP GLAM expert workshop on ecosystem quality impacts related to marine and freshwater eutrophication, 23rd-26th May 2023. Online. Session: "Freshwater eutrophication impact category".

Oral presentation at Nederlands Aardwetenschappelijk Congres (NAC), 23rd-24th March 2023. Utrecht, the Netherlands. Session: "Human Impacts on the Biosphere".

Oral presentation at the XXI International Nitrogen Workshop (NWorkshop), 24th-28th October 2022. Madrid, Spain. Session: "Agro-Food system".

Oral presentation at Nederlands Aardwetenschappelijk Congres (NAC), 5th-6th September 2022. Utrecht, the Netherlands. Session: "Hydrological Sciences".

Poster presentation at the 8th Global Nitrogen Conference (INI2021), 30th May - 3rd June 2021. Online. Session: "4b. Threats for aquat. Biodiversity"