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| **Zhou Liang** |  | |
| PhD candidate |  | |
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**Education**

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| 2020 – 2024 (expected) | **Ph.D.** in chemical oceanography at Florida State University, Tallahassee, FL. Advisor: Dr. Angela Knapp |
| 2018 – 2020 | **M.S.** in chemical oceanography at Florida State University, Tallahassee, FL. Advisor: Dr. Angela Knapp |
| 2014 – 2018 | **B.S.** in chemistry w/ marine concentration at Ocean University of China, Qingdao, China |

**Professional Experience**

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| 2022 – current | **Graduate Teaching Assistant.** Dept. of Earth, Ocean, and Atmospheric Science, Florida State University, Tallahassee, FL. |
| 2018 - current | **Graduate Research Assistant.** Dept. of Earth, Ocean, and Atmospheric Science, Florida State University, Tallahassee, FL, Dr. Angela Knapp lab collaborated with Dr. Robert Letscher at University of New Hampshire.  Project: Dissolved organic phosphorus controls on marine nitrogen fixation and export production. Funding: NSF-OCE 1829916 and 1829916 |
| 2017 - 2018 | **Undergraduate Research Assistant.** Ocean University of China, Qingdao, China. Dr. Yu Xin lab  Project: Solid phase extraction of marine dissolved organic nitrogen |
| 2017 summer | **Laboratory Technician.** Ocean University of China, Qingdao, China. Dr. Guilin Zhang lab  Project: Measurements of methane in the ocean and Huanghe River |

**Research Interests**

Nitrogen and phosphorus cycling in the ocean; inorganic and organic nutrient cycling in the ocean; dissolved organic nitrogen isotopic compositions; dissolved organic phosphorus concentration; ocean biogeochemical modeling; ocean data science.

**Publications**

\* Denotes corresponding authors

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| **2023** | **Liang, Z.\***, Marconi, D., D.M. Sigman, and Knapp, A. N., Production and consumption of dissolved organic nitrogen (DON) across the South Pacific: an isotopic perspective from a zonal transect.  **(in preparation)** |
| **2023** | Inomura, K.\*, Nishimura, Y., Armin, G., Letscher, R.T., **Liang, Z**., Pasquier, B., Lønborg, C., Deutsch, C., and Yoshizawa, S. Quantitative analysis of light harvesting by rhodopsin containing ocean prokaryotes. eLife. (**submitted**) |
| **2023** | **Liang, Z.\***, Letscher, R.T., and Knapp, A. N., Global patterns of surface ocean dissolved organic matter stoichiometry. Global Biogeochemical Cycles, 37, e2023GB007788. <https://doi.org/10.1029/2023GB007788> |
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| **2022** | **Liang, Z.\***, McCabe, K., Fawcett, S.E., Forrer, H.J., Jeandel, C., Marconi, D., Planquette, H., Saito, M.A., Sohm, J.A., Thomas, R.K., Letscher, R.T., and Knapp, A. N., A global ocean dissolved organic phosphorus (DOP) concentration database (DOPv2021), Scientific Data, 9, 722, <https://doi.org/10.1038/s41597-022-01873-7> **6 citations** |
| **2022** | **Liang, Z.\***, Letscher, R.T., and Knapp, A. N., Dissolved organic phosphorus concentrations in the surface ocean controlled by both phosphate and iron stress; Nature Geosciences, 15(8), 651-657, <https://doi.org/10.1038/s41561-022-00988-1> **14 citations** |
| **2022** | Letscher, R.T.\*, Wang, W.-L., **Liang, Z.**, and Knapp, A.N., Regionally variable contribution of dissolved organic phosphorus to marine annual net community production, Global Biogeochemical Cycles, 36, e2022GB007354. <https://doi.org/10.1029/2022GB007354>  **3 citations** |
| **2021** | Yan, Z., Yang, N., **Liang, Z.**, Yan, M., Zhong, X., Zhang, Y., Xu, W. and Xin, Y.\*, Active dissolved organic nitrogen cycling hidden in large river and environmental implications. Science of The Total Environment, 795, 148882. <https://doi.org/10.1016/j.scitotenv.2021.148882>  **12 citations** |
| **2020** | **Liang, Z.**, Pan, Y., Zhu, S., Luo, C., Tan., L.\*, Spatiotemporal distribution and influencing factors of total suspended particles in the Yangtze River Estuary adjacent sea area[J].Journal of Xiamen University(Natural Science),59(S1):50-55.<https://doi.org/10.6043/j.issn.0438-0479.202007117>(in Chinese)  **1 citation** |
| **2020** | **Liang, Z.**, Pan, Y., Zhang, J., Dong, H., Tan., L.\*, Data analysis of marine variables in the Yangtze River Estuary adjacent sea area in summer of 2016[J].Journal of Xiamen University(Natural Science),59(S1):69-74.<https://doi.org/10.6043/j.issn.0438-0479.202007115> (in Chinese) |
| **2020** | Pan, Y., **Liang, Z.**, Wang, H., Wan, L., Tan, L., Ge, T.\*, The distribution and influence factors of COD in the Yangtze River Estuary adjacent sea area[J].Journal of Xiamen University(Natural Science),59(S1):63-68.<https://doi.org/10.6043/j.issn.0438-0479.202007116> (in Chinese) |

**Data Product**

\* Denotes corresponding authors

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| **2022** | Knapp, A. N., Letscher, R. T., **Liang, Z.\*,** DOP concentration observations from the global ocean between 1990 and 2021 (DOP N2 fixation and export production project). Biological and Chemical Oceanography Data Management Office (BCO-DMO). <https://doi.org/10.26008/1912/bco-dmo.855139.4> |

**Field Work**

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| **2019** | Cruise in the Gulf of Mexico, studying carbon, nitrogen, and iron cycling. 4 days, Vessel: R/V Weatherbird |
| **2018** | Cruise in the Jiaozhou Bay and Yellow Sea, 14 days, Vessel: R/V dongfanghong 2 |
| **2016** | Cruise in Changjiang Estuary and coast investigation in zhoushan islands, Vessel: R/V Zhehaike 1 |

**Conferences and Workshops**

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| **2024** | 2024 Ocean Sciences Meeting, New Orleans, LA, United States. **(accepted for oral presentation)**  Topic: “Evaluating the Southern Ocean source of organic nutrients to the subtropical South Pacific” |
| **2023** | Chemical Oceanography Gordon Research Conference (GRC), Southern New Hampshire University, NH, United States. **(poster)**  Topic: “Dissolved organic phosphorus production and consumption in the global surface ocean” |
| **2023** | Chemical Oceanography Gordon Research Seminar (GRS), Southern New Hampshire University, NH, United States. **(invited talk)**  Topic: “Dissolved organic phosphorus concentrations in the surface ocean controlled by both phosphate and iron stress” |
| **2023** | Luncheon Seminar, Xiamen University, Xiamen, China. **(invited talk)**  Topic: “Thinking as a data scientist --- What controls dissolved organic phosphorus distribution in the global surface ocean?” |
| **2023** | Southern University of Science and Technology, Shenzhen, China. **(invited talk)**  Topic: “What controls dissolved organic phosphorus distribution in the global surface ocean?” |
| **2023** | Ocean University of China, Qingdao, China. **(invited talk)**  Topic: “What controls dissolved organic phosphorus distribution in the global surface ocean?” |
| **2023** | The Sixth Xiamen Symposium on Marine Environmental Sciences. (**virtual talk)**  Topic: “Comparative surface ocean DOC:DON:DOP stoichiometry between the Atlantic and Pacific Oceans” |
| **2022** | 2022 Ocean Sciences Meeting. (**virtual talk**)  Topic: “Dissolved organic nitrogen concentration and d15N distribution along a zonal transect in the South Pacific” |
| **2021** | 2021 ASLO meeting. (**virtual talk**)  Topic: “Phosphate and iron control global surface ocean dissolved organic phosphorus concentrations.” |
| **2020** | 2020 Ocean Sciences Meeting, San Deigo, CA, United States. (**poster**)  Topic: “Dissolved organic phosphorus (DOP) distributions in the eastern Indian Ocean and subtropical South Pacific Ocean” |
| **2019** | Tutorial-based Ocean Circulation Inverse Model (OCIM) workshop, Woods Hole, MA, United States. (**participant**) |

**Teaching Experiences**

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| **2023 Fall** | Teaching assistant, Florida State University. Assisted in “Environmental Science Capstone”, including preparing water analysis kits for field work, leading field trips and grading assignments. |
| **2023 Spring** | Invited instructor for two lectures of the course “Geochemical Ocean Tracers” at Florida State University |
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| **2023 Spring** | Teaching assistant, Florida State University. Assisted in “Introduction to Environmental Science” |
| **2022 Fall** | Teaching assistant, Florida State University. Assisted in “Introduction to Environmental Science” |

**Professional Memberships**

American Geophysical Union (AGU), American Society for Limnology and Oceanography (ASLO), US Chess Federation (rating: 1772)

**Manuscript Referee**

Marine Chemistry, Earth System Science Data, Marine Pollution Bulletin, Science of the Total Environment

**Honors and Awards**

2016-2017 Scholarship Award for Excellence in Academic Work, Ocean University of China

2015-2016 Scholarship Award for Excellent Students, Ocean University of China

2015-2016 Scholarship Award for Excellence in Academic Work, Ocean University of China

2014-2015 Scholarship Award for Excellence in Academic Work, Ocean University of China