LIST OF PUBLICATIONS

Faculty: Dr Shoji D Thottathil

Department of Environmental Sciences

JOURNAL PUBLICATIONS

Patel, L., Singh, R., **Thottathil, S.D.** (2023). Land use drivers of riverine methane dynamics in a tropical river basin, India. *Water Research*, 228: 119380. https://doi.org/10.1016/j.watres.2022.119380

Thottathil, S.D., Reis, PCJ., Prairie, Y.T. (2022). Variability and controls of stable carbon isotopic fractionation during aerobic methane oxidation in temperate lakes. *Frontiers in Environmental Science,*10:833688. https://doi.org/10.3389/fenvs.2022.833688

Thottathil, S.D., Reis, PCJ., Prairie, Y.T. (2022). Magnitude and drivers of oxic methane production in small temperate lakes. *Environmental Science & Technology,* 56 (15), 11041–11050. https://doi.org/10.1021/acs.est.2c01730

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Thottathil, S. D., & Prairie, Y. T. (2021). Coupling of stable carbon isotopic signature of methane and ebullitive fluxes in northern temperate lakes. *Science of The Total Environment*, 777, 146117. https://doi.org/10.1016/j.scitotenv.2021.146117

Reis, P. C., **Thottathil, S. D.,** Ruiz-González, C., & Prairie, Y. T. (2020). Niche separation within aerobic methanotrophic bacteria across lakes and its link to methane oxidation rates. *Environmental Microbiology*, 22(2), 738-751. https://doi.org/10.1111/1462-2920.14877

Thottathil, S. D., Reis, P. C., & Prairie, Y. T. (2019). Methane oxidation kinetics in northern freshwater lakes. *Biogeochemistry*, 143(1), 105-116. https://doi.org/10.1007/s10533-019-00552-x

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Thottathil, S.D., K. Hayakawa, Y. Hodoki, C. Yoshimizu, Y. Kobayashi, S. Nakano (2013). Biogeochemical control on fluorescent dissolved organic matter dynamics in a large freshwater lake (Lake Biwa, Japan). *Limnology and Oceanography* 58: 2262-2278. https://doi.org/10.4319/lo.2013.58.6.2262

Nishino H., Hodoki Y., **Thottathil, S.D.,** Obayashi K., Takao Y., Nakano S (2015). Identification of species and genotypic composition of Cryptomonas (Cryptohyceae) populations in the eutrophic lake Hira, Japan using single-cell PCR. *Aquatic Ecology* 49: 263-272. https://doi.org/10.1007/s10452-015-9520-9

Thottathil, S.D., Balachandaran K.K, Madhu N.V, Gupta G.V.M, Nair, S. (2008). Influence of allochthonous input on autotrophic-heterotrophic switch-over in shallow waters of a tropical ecosystem (Cochin Estuary), India*. Estuarine Coastal and Shelf Science* 78: 551-562. https://doi.org/10.1016/j.ecss.2008.01.018

Thottathil, S.D., Balachandran, K.K., Jayalakshmi, K.V., Gupta, G.V.M., Nair, S. (2008). Tidal switch on metabolic activity: Salinity induced responses on bacterioplankton metabolic capabilities in a tropical estuary. *Estuarine Coastal and Shelf Sciences* 78: 665-673. https://doi.org/10.1016/j.ecss.2008.02.002

Gupta, G.V.M., **Thottathil, S.D.,** Balachandran, K.K., Madhu, N.V., Madeswaran, P., Shanta Nair (2009). CO2 supersaturation and net heterotrophy in a tropical estuary (Cochin, India): Influence of anthropogenic effect. *Ecosystems* 12: 1145-1157. https://doi.org/10.1007/s10021-009-9280-2

Madhu N.V., Balachandran, K.K., Martin, G.D., Jyothibabu, R., **Thottathil, S.D.,** Maheswari Nair, Joseph, T., Kusum, K.K (2010). Short-term variability of water quality and its implications on phytoplankton production in a tropical estuary (Cochin Backwaters –India). *Environmental Monitoring and Assessment* 170: 287-300. https://doi.org/10.1007/s10661-009-1232-y

Ramaiah, N., Jane T. Paul, Veronica Fernandes, T. Raveendran, O. Raveendran, D. Sundar, C. Ravichandran, D. M. Shenoy, G.Mangesh, Siby Kurian, V .J. Jerson, **Thottathil, S.D.,** N. V. Madhu, S. Sreekumar, P. A. Lokabharathi, S. R. Shetye. 2005. The September 2004 stench off the southern Malabar Coast – A consequence of holococcolithophore bloom. *Current Science,* 88 (4): 551-554 http://www.jstor.org/stable/24110252

Funded Research Projects (as Principal Investigator)

Project Title: Methane emissions from tropical aquatic networks: Elucidating the underpinning mechanisms and landscape-level drivers.

Funding Agency: Science and Engineering Research Board (SERB)- Department of Science and Technology (DST), Govt. of India

Total Project Layout: 30.2 Lakhs

Duration: 20 November 2019 – 19 May 2022

EDITORIAL ROLES

Associate Editor – Limnology (Springer Nature - https://www.springer.com/journal/10201)