

List of Publications

Journal Publications

1. **Prusty, P.**, Mohakud, S. K., Mandal, A. R., Parray, K. A., and Farooq, S. H. (2025) Assessment of heavy metal contaminations in groundwater and surface water resources of Sukinda valley, Odisha, India. *Geological Journal*, 1-15. <https://doi.org/10.1002/gj.5227>
2. Barik, S.S., Singh, R.K., Tripathy, S., Farooq, S.H., and **Prusty, P.** (2022) Bioavailability of metals in coastal lagoon sediments and their influence on benthic foraminifera. *Science of the Total Environment*, 825, 153986, pp 1-12, ISSN: 0048-9697. <https://doi.org/10.1016/j.scitotenv.2022.153986>
3. **Prusty, P.**, Farooq, S.H. (2021) Understanding the effects of periodic freshening and salinization on coastal water quality and aquifer sediments through laboratory-based column experiments. *Journal of Hydrology*, 603, Part C, December 2021, 127060, pp 1-16, ISSN: 0022-1694. <https://doi.org/10.1016/j.jhydrol.2021.127060>
4. Zimik, H.V., Farooq, S.H., **Prusty, P.** (2021) Source characterization of trace elements and assessment of heavy metal contamination in the soil around Tarabalo geothermal field, Odisha, India. *Arabian Journal of Geosciences*, 14, (11), 988, pp 1-14, ISSN: 1866-7538. <https://doi.org/10.1007/s12517-021-07366-y>
5. **Prusty, P.**, Farooq, S.H. (2020) Application of water quality index and multivariate statistical analysis for assessing coastal water quality. *Environmental Processes*, 7, September 2020, pp 805-825, ISSN: 2198-7505. <https://doi.org/10.1007/s40710-020-00453-4>
6. **Prusty, P.**, Farooq, S.H. (2020) Seawater intrusion in the coastal aquifers of India - A review. *HydroResearch*, 3, pp 61–74, ISSN: 2589-7578. <https://doi.org/10.1016/j.hydres.2020.06.001>
7. **Prusty, P.**, Farooq, S.H., Swain, D., Chandrasekharam, D. (2020) Association of geomorphic features with groundwater quality and freshwater availability in coastal regions. *International Journal of Environmental Science and Technology*, 17, pp 3313–3328, ISSN: 1735-2630. <https://doi.org/10.1007/s13762-020-02706-z>
8. Barik, S.S., **Prusty, P.**, Singh, R.K., Tripathy, S., Farooq, S.H., Sharma, K. (2020) Seasonal and spatial variations in elemental distributions in surface sediments of Chilika Lake in response to change in salinity and grain size distribution. *Environmental Earth Sciences*, 79, 269, pp 1-18, ISSN: 1866-6299. <https://doi.org/10.1007/s12665-020-09009-z>
9. Barik, S.S., Singh, R.K., Jena, P.S., Tripathy, S., Sharma, K., **Prusty, P.** (2019) Spatio-temporal variations in ecosystem and CO₂ sequestration in coastal lagoon: A foraminiferal perspective. *Marine Micropaleontology*, 147, March 2019, pp 43–56, ISSN: 0377-8398. <https://doi.org/10.1016/j.marmicro.2019.02.003>
10. Farooq, S.H., **Prusty, P.**, Singh, R.K., Sen, S., Chandrasekharam, D. (2018) Fluoride contamination of groundwater and its seasonal variability in parts of Purulia district, West

Bengal, India. *Arabian Journal of Geosciences*, 11, 709, pp 1-13, ISSN: 1866-7538.
<https://doi.org/10.1007/s12517-018-4062-9>

11. **Prusty, P.***, Farooq, S.H., Zimik, H.V., Barik, S.S. (2018) Assessment of the factors controlling groundwater quality in a coastal aquifer adjacent to the Bay of Bengal, India. *Environmental Earth Sciences*, 77, 762, pp 1-15, ISSN: 1866-6299.
<https://doi.org/10.1007/s12665-018-7943-z>
12. Zimik, H.V., Farooq, S.H., **Prusty, P.** (2017) Geochemical evaluation of thermal springs in Odisha, India. *Environmental Earth Sciences*, 76, 593, pp 1-12, ISSN: 1866-6299.
<https://doi.org/10.1007/s12665-017-6925-x>

Chapters in Book

13. **Prusty, P** and Farooq, S H (2022) Chapter 13 – Potential tools for identification of saltwater intrusion into the coastal aquifers: A case study from East coastal regions of India. In: Tiwari, A.K., Kumar, A., Singh, A.K., Singh, T.N., Suozzi, E., Matta, G., Russo, S. Lo (Eds.), *Water Scarcity, Contamination and Management*. Vol 5, Elsevier Inc., pp. 247–269, ISSN: 2542-7946. <https://doi.org/10.1016/B978-0-323-85378-1.00013-1>
14. Nallusamy, B, Aslam, MA, and **Pursty, P** (2023) Assessment of groundwater quality in Chikballapur and Sidlagatta areas, Karnataka using multivariate statistical analysis. In: N., Babu, Aslam, M., Gandhi M, S., Hussain, S. M. (Eds.), *Geological Developments in Anthropocene*. Excel India Publishers, New Delhi, pp. 1-13, ISBN: 9789391355173

Publications in National and International Conferences

1. **Prusty, P**, Farooq, SH (2023) Understanding of sediment-water interaction processes in coastal aquifers through laboratory-based column experiments. *Goldschmidt Abstracts*, 13667, July 09-14, Lyon, France. <https://doi.org/10.7185/gold2023.13667>
2. **Prusty, P***, Farooq, SH (2020): Changes in aquifer sediments and water quality due to periodic exposure of aquifer to freshwater and seawater. *Goldschmidt Abstracts*, 2126, June 21-26, Virtual (Honolulu, USA). <https://doi.org/10.46427/gold2020.2126>
3. **Prusty, P***, Farooq, SH (2019): Saltwater Intrusion Vulnerability of a Coastal Aquifer along the Bay of Bengal, India. *Goldschmidt Abstracts*, 2718, August 18-23, Barcelona, Spain
4. **Prusty, P***, Farooq, SH (2019): Saltwater Intrusion: An Emerging Coastal Hazard along the East Coast of India. 3rd National Geo-Research Scholars' Meet, June 6-8, WIHG, Dehradun, Uttarakhand, India
5. **Prusty, P***, Farooq, SH (2019): Occurrence of freshwater in a saltwater intruded coastal aquifer along the Puri coast, Odisha. National Science Day Poster presentation (9th Researcher Scholars' Day), February 28, IIT Bhubaneswar, India (Best Poster Award)

6. **Prusty, P**, Farooq, SH, Zimik, HV (2018): Assessment of Groundwater Quality and Seasonal Variability of Trace Elements in Coastal Groundwater of Puri District, India. Goldschmidt Abstracts, 2073, August 12-17, Boston, USA
7. **Prusty, P**, Farooq, SH, Zimik, HV (2017): Geomorphic Control on Occurrence of Fresh Groundwater in a Saltwater Intruded Coastal Aquifer. Geological Society of America Abstracts, 49, 6, October 23-25, Washington, USA
8. **Prusty, P**, Farooq, SH, Zimik, HV (2017): Extent of Seawater Intrusion and Identification of Freshwater Zones in the Coastal Aquifer of Puri District, India: A Geochemical Approach. Goldschmidt Abstracts, 3226, August 13-18, Paris, France