Profile details

Dr. Aditya S K

Assistant Professor (Contract)
School of Environmental Studies
Thunchath Ezhuthachan Malayalam University, Tirur, Malappuram
Email: aditya.palazhy@gmail.com
Mob: +91 8089780590

Academic Background

- Ph.D : 2025, Faculty of Applied Sciences, Dept of Environmental Sciences, University of Kerala/ National Centre for Earth Science Studies, (MoES- NCESS) Akkulam, Thiruvananthapuram
  Title :"Assessment of Global Environmental Changes and Impacts in Sahyadri: A Study of Periyar Basin, India".
- M.Sc : 2016, Environmental Sciences, University of Kerala
- B.Sc : 2014, Botany and Biotechnology, University of Kerala

Professional Career

- 2025- Assistant Professor (Contract), School of Environmental Studies, Thunchath Ezhuthachan Malayalam University, Tirur, Malappuram
- 2024-2025- CSIR-SRF (Direct) Research Fellow, National Centre for Earth Science Studies, Thiruvananthapuram
- 2022-2024- Research Scholar, National Centre for Earth Science Studies, Thiruvananthapuram
- 2018-2022- Project Associate II, National Centre for Earth Science Studies, Thiruvananthapuram

Honours/Awards/Fellowship

- Qualified CSIR SRF (Direct).
- Third Rank for M.Sc. Environmental Sciences, University of Kerala, 2016
- Recipient of KSCSTE student project fellowship 2016, Govt of Kerala.

Journal publications

1. **Aditya, S. K.,** Krishnakumar, A. & Anoop Krishnan, K. (**2025**). An investigation into the influence of climate extreme on groundwater regimes and human health in the Periyar Basin: A fast growing urban centre in India. *Journal of Water and Health*, *23*(2), 111-139. https://doi: 10.2166/wh.2025.227
2. **Aditya, S. K**., Krishnakumar, A., & AnoopKrishnan, K. (**2024**). Analysis of seasonal spatio-temporal variations in the quality of river waters and its influencing factors in the Periyar River Basin, southern Western Ghats, India. *Journal of Water and Climate Change*, IWA,jwc2024136. https://doi.org/10.2166/wcc.2024.136
3. **Aditya, S. K**., Krishnakumar, A., & AnoopKrishnan, K. (**2023**). Influence of

COVID-19 lockdown on river water quality and assessment of environmental health in an industrialized belt of southern Western Ghats, India. *Environmental Science and Pollution Research*, Springer,*30*(28), 72284-72307. https://doi.org/10.1007/s11356-023-27397-0

4. Krishnakumar, A., **Aditya, S. K**., Krishnan, K. A., Vivekanandan, N., Kaliraj, S., & Jose, J. (**2023**). Establishment of Baseline Reference Geochemical Values in Tropical Soils of Western Ghats: Assessment of Periyar Basin with Special Reference to Contaminant Geochemistry. *Clean–Soil, Air, Water*,Wiley *51*(2), 2200382. https://doi.org/10.1002/clen.202200382
5. Krishnakumar, A., Jose, J., Kaliraj, S., **Aditya, S. K.,** & Krishnan, K. A. (**2022**). Assessment of the impact of flood on groundwater hydrochemistry and its suitability for drinking and irrigation in the River Periyar Lower Basin, India. *Environmental Science and Pollution Research*, Springer, *29*(19), 28267-28306. https://doi.org/10.1007/s11356-021-17596-y
6. Krishnakumar A. Revathy Das., **Aditya, S.K**., & Anoop Krishnan. (**2021**). Enrichment of potential toxic elements and environmental health implications: A study of the tropical agricultural soils in southern Western Ghats, India. *Environmental Quality Management*, Wiley, *1*, 10. https://doi: 10.1002/tqem.21792
7. Krishnakumar, A., **Aditya, S. K**., & Kannan, N. (**2021**). Geochemistry and Environmental Implications of Recent Sediments from a Tropical Urban Small Catchment River of Southern Western Ghats, India. Journal of Geosciences Research, 6(1), pp 57-67
8. **Aditya, S. K**., Asok, V. S., Jerome, J., & Reghunath, R. (**2018**). Landscape analysis using GIS and remote sensing for assessing spatial pattern in forest fragmentation in shendurney wildlife sanctuary, western ghats, India. *Indian Journal of Ecology*, *45*(2), 299-304.

Book/ Monographs /Chapters/Edited Volumes

1. Krishnakumar, A., **Aditya, S. K**., AnoopKrishnan, K., Das, R., & Anju, K. (2022). Water quality management: Development of a fuzzy-based index in hydro informatics platform. In *Current Directions in Water Scarcity Research* (Vol. 7, pp. 265-284). Elsevier. https://doi.org/10.1016/B978-0- 323-91910-4.00016-9
2. Krishnakumar, A., **Aditya, S. K**., Seenipandi, K., Krishnan, K. A., & Jose, J. (2021). Evaluation of suspended sediment concentration and heavy metal distribution in Ashtamudi Lake, a Ramsar site in the southwest coast of India using remote sensing and GIS techniques. In *Remote Sensing of Ocean and Coastal Environments* (pp. 251-275). Elsevier. https://doi.org/10.1016/B978-0-12-819604-5.00015-9
3. Krishnakumar, A., **Aditya, S.K**., Kannan, K. (2024). Assessment of Heavy Metal Contamination Using Geochemical Indices and Multivariate Statistical Techniques: A Study of the Neyyar River, Originating from Southern Western Ghats, India. In: Satheeshkumar, S., Thirukumaran, V., Karunanidhi, D. (eds) Modern River Science for Watershed Management. Water Science and Technology Library, vol 128. Springer, Cham. https://doi.org/10.1007/978-3-031-54704-1_26
4. Krishnakumar, A., **Aditya, S. K**., Anoopkrishnan, K., & Prijilal, K. G. (2024).

Geochemistry and Health Status of Soils in Agroforestry Dominated HRML Regions of Idukki, Southern Western Ghats, India. In *Sustainable Management and Conservation of Environmental Resources in India* (pp. 355- 375). Apple Academic Press. https://doi.org/10.1201/9781003469278

Conferences/Seminars/Symposia

1. **Aditya, S.K**., Krishnakumar, A., Sudhir Kumar., Anoop Krishnan,K., (2024) Stable Isotopic Variability And Quality Assessment Of Periyar River, Southern Western Ghats, India. International Conference on Future of Water Resources (ICFWR) 2024 jointly organised by Indian Water Resources Society (IWRS) and Department of WRD&M, IIT, Roorkee from 18-20 Jan 2024.
2. **Aditya S.K**., A.Krishnakumar., AnoopKrishnan.K (2022). Impacts of 2018 extreme climate events in the coastal groundwater regime of Periyar basin, Ernakulam, India:A comparative assessment with present scenario. National seminar on Marine pollution and Ecological Degradation- MPAED 2022 organised by department of Geology, Malankara Catholic College, Kanyakumari.
3. **Aditya, S.K**., Krishnakumar, A., Sudhir Kumar., Anoop Krishnan,K., (2021). Hydrochemistry and Stable Isotope Characteristics of Groundwater in the Upper Reaches of Periyar River, Southern Western Ghats, India. Proceedings of the Fourth Indian National Groundwater Conference. pp 225-231.
4. **Aditya S.K**., A.Krishnakumar., Jeenu Jose., AnoopKrishnan.K.,(2019) "Assessment Of Global Environmental Change Impacts In Sahyadri: A Comparative Evaluation Of Nutrient Levels During The Pre And Post Flood Times In Periyar River Basin, Southern Western Ghats, India." International Conference on Climate change Impacts and Vulnerabilities organised by IIT-Kharagpur, February 2019.
5. **Aditya S.K**, A. Krishnakumar, Revathy Das. "A comparative study of methane flux in the limnetic zones of three lakes, Kerala, India" National Seminar on the Environmental Status of Estuarine and Coastal Ecosystems in India (ECEI- 2019), pp. 27-30.
6. **Aditya S.K**, Pavithra V Prabhu, Krishnakumar A and Anoop Krishnan K. "Spatial distribution of heavy metals in the soils of Periyar upper catchments - a GIS based approach" Proceedings of the National Seminar on Geospatial Information systems: Emerging trends and utilities, 2017, pp.11-21.

Areas of Specialization

- Hydrogeochemistry
- Contaminant Geochemistry
- Stable Isotope hydrology
- Remote Sensing and GIS