CURRICULUM VITAE

Dr. Roshni K

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Academic Qualification

- **Ph.D. in Marine Sciences (2017)** – Cochin University of Science and Technology (CUSAT), Kerala, India. *Thesis: Impact of an invasive cichlid (Oreochromis mossambicus) on the indigenous cichlid (Etroplus suratensis) in Vembanad Lake, Kerala*. Secured 77.5%; Awarded DST-INSPIRE and KSCSTE Fellowship.
- **M.Phil. in Environment Management (2010)** – Mahatma Gandhi University, Kerala, India. *Secured 70.8%.*
- **B.Ed. in Natural Science (2008)** – University of Calicut, Kerala, India. *Secured 65%.*
- **M.Sc. in Environmental Science (2007)** – University of Calicut, Kerala, India. *Secured 78.1%. Achieved First Rank in University.*
- **B.Sc. in Zoology (2005)** – University of Calicut, Kerala, India. *Secured 89.3%.*
- **Higher Secondary (Science) (2002)** – Board of Higher Secondary Examination, Government of Kerala, India. *Secured 69.6%.*
- **SSLC (General) (2000)** – General Education Department, Government of Kerala, India. *Secured 91.6%.*

Research Experience

Post-Doctoral Fellow: Ecology

School of Industrial Fisheries, Cochin University of Science and Technology (CUSAT), Kerala, India. Project Title: *"Studies on Trophic Niche Interactions and Risk Assessment of Invasive Fishes on Native Fishes in the Periyar River, Kerala"*.

Post-Doctoral Fellow: Ecology *(KSCSTE-WSD "Back-to-Lab" Fellowship, India)*

Department of Aquatic Environment Management, Kerala University of Fisheries & Ocean Studies (KUFOS), Kerala, India. Project Title: *"Risk Assessment and Impacts of Aquaculture Species on Native Fish Diversity in the Downstream and Upstream Areas of the Mullaperiyar Reservoir, Periyar River, Kerala"*

Post-Doctoral Fellow: Ecology *(Chief Minister's Nava Kerala Post-Doctoral Fellowship, India)*

School of Environmental Studies, Cochin University of Science and Technology (CUSAT), Kerala, India. Project Title: *"Distribution, Characterization, and Risk Assessment of Microplastics in Mangrove Ecosystems of Kerala, with Emphasis on Food Chain Bioaccumulation of Faunal Communities and Carbon Sequestration Potential Using Environmental Forensic Methods"*

Teaching Experience

Assistant Professor (Contract) – Environmental Sciences, Institute for Integrated Programmes and Research in Basic Sciences (IIRBS), Mahatma Gandhi University, Kerala, India. *14 July 2022 – 8 June 2023*

Awards and Academic achievements

- First Rank in M.Sc. Environmental Science, University of Calicut, Kerala (2007)
- Qualified National Eligibility Test (NET) in Environmental Science, ASRB, India (2013)
- Awarded INSPIRE Doctoral Fellowship, DST, Government of India (2011)
- Awarded Doctoral Fellowship, KSCSTE, Government of Kerala (2010)
- Awarded Back to Lab Women Scientist Fellowship, KSCSTE, Government of Kerala (2019)
- Secured Chief Minister's Nava Kerala Postdoctoral Fellowship, Department of Higher Education, Government of Kerala (2022-23)
- Qualified Central Teacher Eligibility Test (CTET – Paper I & II), CBSE, India (2021)

Publications

1. Renjithkumar, C.R., & Roshni, K. (2026). Demographic parameters and exploitation of the endemic cyprinid, *Hypselobarbus kurali* in small-scale fisheries from five rivers in the Western Ghats, India. *International Journal of Limnology,* 62(3):1-11. IF-0.8

2. Renjithkumar, C.R., & Roshni, K. (2026). Demographic Patterns of Two Poorly known Glassy Perchlets in Small-Scale Fisheries of Vembanad Estuary, a Ramsar Site in Southwest India. *Thalassas*: *An International Journal of Marine Sciences,* 42, 6. https://doi.org/10.1007/s41208-025-01025-9 IF-0.7

3. Renjithkumar, C.R. & Roshni. K. (2025). Fishery, growth, mortality and exploitation status of *Daysciaena albida* (Cuvier, 1830) from Vembanad Lake, a Ramsar site on the southwest coast of India. *Indian Journal of Fisheries,* 72,4. https://doi.org/10.21077/ijf.2025.72.4.163768-02 IF-0.3

4. Renjithkumar, C.R., and Roshni, K (2025) Demographic patterns of an endemic cichlid, *Etroplus suratensis*, across five rivers in the Western Ghats Biodiversity Hotspot, India *Aquatic Research,* 9(1), 63-77

5. Roshni, K., Renjithkumar, C. R., Amal, R., & Devipriya, S. P. (2025). Characterization and risk assessment of microplastics accumulated in sediments and benthic molluscs in the

mangrove wetlands along the south-west coast of India. *Marine Pollution Bulletin*, 216, 117955. https://doi.org/10.1016/j.marpolbul. 2025. 117955 IF 4.9

6. Renjithkumar, C. R., & Roshni, K. (2025). Fishery, Demographics and Exploitation of Two Sympatric Snakeheads (*Channa striata* and *Channa pseudomarulius*) in Small-scale Fisheries of the Western Ghats, India: Implications for Conservation. *Journal of Fisheries and Environment*, 49(1), 141–153 https://li01.tci-thaijo.org/index.php/JFE/article/view/263661 (Peer reviewed and UGC approved)

7. Renjithkumar, C. R., & Roshni, K. (2025). Fishery, growth, and mortality of threatened Asian sunfish, *Horabagrus brachysoma* (Günther 1864) in five rivers of Western Ghats hotspot, India. *Aquatic Sciences and Engineering*, 40(1), 1–8. IF 1.1

8. Renjithkumar, C. R., Roshni, K., & Sreekanth, G. B. (2025). Finfish harvest patterns in the largest Ramsar wetland—Vembanad estuary along the south-west coast of India. *Wetlands Ecology and Management*, 33(3). https://doi.org/10.1007/s11273-024-10022-3 IF-1.6

9. Renjithkumar, C. R., & Roshni, K. (2025). Demographic Characteristics of Asian Sea Bass *(Lates calcarifer*), A Diadromous Fish from the Vembanad Estuary on the South West Coast of India. *Thalassas: An International Journal of Marine Sciences*, 41:102. https://doi.org/10.1007/s41208-025-00861-z IF- 0.7

10. Renjithkumar, C. R., & Roshni, K. (2024). Demographics of threatened Malabar mahseer, Tor malabaricus in a small-scale fisheries of Western Ghats hotspot in India. *International Journal of Aquatic Biology*, 12(3):232–239. (Peer reviewed and UGC approved)

11. Renjithkumar, C. R., & Roshni, K. (2024). Finfish harvest trends in the Chalakudy River within the Western Ghats biodiversity hotspot in the Southwest of India. *Sustainable Aquatic Research*, 3(2):107–126. (Peer reviewed and UGC approved)

12. Renjithkumar, C. R., & Roshni, K. (2024). Demographics and reproductive characteristics of threatened Malabar puffer fish, *Carinotetraodon travancoricus* from Western Ghats hotspot, India. *Marine and Freshwater Research*, 75(5). https://doi.org/10.1071/MF23170 IF-1.5

13. Renjithkumar, C. R., & Roshni, K. (2024). Demographics and exploitation of threatened cyprinid, *Hypselobarbus kolus* in a small-scale reservoir fisheries of Western Ghats hotspot, India. *Lakes & Reservoirs: Science, Policy and Management for Sustainable Use*, 29(1), e12456. https://doi.org/10.1111/lre.12456 (Peer reviewed and UGC approved)

14. Renjithkumar, C. R., & Roshni, K. (2023). Assessment of the fishery, growth, mortality and exploitation of Indo-Pacific tarpon, *Megalops cyprinoides* (Broussonet, 1782) from a microtidal tropical estuary, South West coast of India. *Iranian Journal of Ichthyology*, 10(3), 172–181. (Peer reviewed and UGC approved)

15. Roshni, K., & Renjithkumar, C. R. (2023). Population dynamics of two sympatric native and exotic cichlids in a tropical microtidal estuary, India. *International Journal of Aquatic Biology*, 11(1), 20–29. (Peer reviewed and UGC approved)

16. Roshni, K., Renjithkumar, C. R., Sreekanth, G. B., Raghavan, R., & Ranjeet, K. (2023). Fish community structure and functional guild composition in a large tropical estuary

(Vembanad Lake, India). *Environmental Science and Pollution Research*, 30, 29635–29662. https://doi.org/10.1007/s11356-022-23642-z (Peer reviewed and UGC approved)

17. Renjithkumar, C. R., & Roshni, K. (2022). Length-weight relationships of 12 dominant fish species from a Ramsar Wetland in India: Vembanad Lake. *Lakes & Reservoirs: Science, Policy and Management for Sustainable Use*, 27(4), e12414. https://doi.org/10.1111/lre.12414 (Peer reviewed and UGC approved)

18. Renjithkumar, C. R., Roshni, K., & Ranjeet, K. (2022). Vulnerability in the feeding ecology of endemic mahseer *Tor malabaricus* (Jerdon, 1849) from Western Ghats biodiversity hotspot, India. *Inland Water Biology*, 15, 170–178. https://doi.org/10.1134/S1995082922020110 IF- 0.7

19. Roshni, K., & Renjithkumar, C. R. (2021). Length-weight relationship of four glassy perchlets from a tropical lake along the south-west coast of India. *Journal of the Marine Biological Association of India*, 63(2), 130–133. https://doi.org/10.6024/ jmbai.2021.63.2.2267-18 (Peer reviewed and UGC approved)

20. Roshni, K., Renjithkumar, C. R., Raghavan, R., & Ranjeet, K. (2021). Fish distribution and assemblage structure in a hydrologically fragmented tropical estuary on the south-west coast of India. *Regional Studies in Marine Science*, 43, 101693. https://doi.org/10.1016/j.rsma.2021.101693 IF -2.4

21. Roshni, K., & Renjithkumar, C. R. (2021). Demographics and reproductive characteristics of Orange Chromidae, *Pseudetroplus maculatus* (Bloch, 1795) from Cochin Estuary, Southern India. *Thalassas: An International Journal of Marine Sciences*, 37, 905–915. https://doi.org/10.1007/s41208-021-00305-y IF-0.7

22. Renjithkumar, C. R., & Roshni, K. (2021). Feeding habits of an endemic bagrid catfish, *Mystus oculatus* from Western Ghats of India. *Indian Journal of Ecology*, 48(4), 1165–1168. (Peer reviewed and UGC approved)

23. Roshni, K., Renjithkumar, C. R., Sreekanth, G. B., Raghavan, R., Ranjeet, K., Harikrishnan, M., & Kurup, B. M. (2021). Trophic interactions between native and exotic cichlids in a shallow tropical estuary (Lake Vembanad, India). *Marine & Freshwater Research*, 73(3), 411–416. https://doi.org/10.1071/MF20331 IF-1.5

24. Renjithkumar, C. R., Roshni, K., & Ranjeet, K. (2021). Length–weight relations of 14 fish species (Actinopterygii) from the Chalakudy River, Western Ghats, India. *Acta Ichthyologica et Piscatoria*, 51(3), 263–265. https://doi.org/10.3750/AIEP/03026 IF-1

25. Roshni, K., Renjithkumar, C. R., & Kurup, B. M. (2021). Reproductive biology of the endemic fish *Etroplus suratensis* (Cichlidae) from a tropical estuary in Southern India. *Journal of Ichthyology*, 61, 460–466. https://doi.org/10.1134/S003294522 1030124 IF-0.8

26. Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2021). Study of fish exploitation pattern of River Bharathapuzha, Kerala, India. *Fishery Technology*, 58, 11–17. (Peer reviewed and UGC approved)

27. Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2021). Food and feeding habits of the endemic fish, *Hypselobarbus thomassi* (Day, 1874) in the Kallada River, Kerala, India.

Iranian Journal of Ichthyology, 8(2), 76–82. https://doi.org/10.22034/iji. v8i2.526 (Peer reviewed and UGC approved)

28. Renjithkumar, C. R., Roshni, K., & Ranjeet, K. (2020). Exploited fishery resources in the Kallada River, Kerala, India. *Journal of Aquatic Biology and Fisheries*, 8, 93–97. (Peer reviewed and UGC approved)

29. Renjithkumar, C. R., Roshni, K., & Ranjeet, K. (2020). Food and feeding habits of Malabar butter catfish, Ompok malabaricus (Valenciennes, 1840) from the Chalakudy River, Kerala, India. *Journal of Aquatic Biology and Fisheries*, 8, 98–101. (Peer reviewed and UGC approved)

30. Roshni, K., & Renjithkumar, C. R. (2020). Reproductive ecology of an invasive cichlid, *Oreochromis mossambicus*. *Indian Journal of Ecology*, 47(4), 1180–1184. (Peer reviewed and UGC approved)

31. Roshni, K., Renjithkumar, C. R., Raghavan, R., Dahanukar, D., & Ranjeet, K. (2020). Population dynamics and management strategies for the invasive African catfish *Clarias gariepinus* (Burchell, 1822) in the Western Ghats hotspot. *Journal of Threatened Taxa*, 12(10), 16380–16384. https://doi.org/10.11609/ jott.6222.12.10. 16380-16384 (Peer reviewed and UGC approved)

32. Renjithkumar, C. R., Roshni, K., Harikrishnan, M., & Kurup, B. M. (2020). Population dynamics of *Hypselobarbus thomassi* (Day, 1874), an endemic cyprinid fish from a tropical reservoir of Southern Western Ghats, India. *Lakes & Reservoirs: Science, Policy and Management for Sustainable Use*, 25(4), 388–393. https://doi.org/ 10.1111/lre.12343 (Peer reviewed and UGC approved)

33. Roshni, K., & Renjithkumar, C. R. (2020). Length–weight relationships of four fish species from Vembanad-Kole Wetland (Kerala, India). *Journal of Applied Ichthyology*, 37(1), 135–136. https://doi.org/10.1111/jai.14118 IF.0.7

34. Renjithkumar, C. R., Roshni, K., Raghavan, R., & Ranjeet, K. (2020). First record of the Mayan cichlid *Mayaheros urophthalmus* (Günther, 1862) in South Asia and its potential implications. *Journal of Applied Ichthyology*, 36(5), 699–704. https://doi.org/10.1111/jai.14069 IF.0.7

35. Renjithkumar, C. R., Roshni, K., & Ranjeet, K. (2020). Feeding ecology of the endemic freshwater puffer fish *Carinotetraodon travancoricus* (Hora & Nair, 1941) in Western Ghats hotspot, India. *International Journal of Aquatic Biology*, 8(5), 300–310. (Peer reviewed and UGC approved)

36. Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2020). Reproductive biology of the endemic cyprinid fish *Hypselobarbus thomassi* (Day, 1874) from Kallada River in the Western Ghats, India. *Journal of Applied Ichthyology*, 36(5), 604–612. https://doi.org/ 10.1111/jai.14064 IF.0.7

37. Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2018). Length-weight relationship of two cyprinid fish species, *Hypselobarbus thomassi* (Day, 1874) and *Hypselobarbus kurali* (Menon & Rema Devi, 1995) from River Kallada, Southern Western Ghats, India. *Journal of Applied Ichthyology*, 34(3), 731–732. https://doi.org/ 10.1111/ jai.13589 IF.0.7

38. Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2017). Length-weight relationship of two ambassid fish species, *Parambassis dayi* (Bleeker, 1874) and *Parambassis thomassi* (Day, 1870) from River Pamba, Southern Western Ghats, India. *Journal of Applied Ichthyology*, 33(6), 1290–1291. https://doi.org/10.1111/jai.13504 IF.0.7

39. Roshni, K., Renjithkumar, C. R., & Kurup, B. M. (2016). Fishery of *Oreochromis mossambicus* in Poringalkuthu Reservoir of Chalakudy River, Kerala, India. *Journal of Aquatic Biology & Fisheries*, 4, 110–114. (Peer reviewed and UGC approved)

40. Roshni, K., Renjithkumar, C. R., & Kurup, B. M. (2016). Food and feeding habits of an exotic fish, *Oreochromis mossambicus* (Peters) from a tropical reservoir of Chalakudy River, Kerala. *Indian Journal of Fisheries*, 63(4), 132–136. IF-0.3

41. Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2016). Composition of non-native fishes in the exploited fishery of Bharathapuzha River, Kerala, India. *Journal of Aquatic Biology & Fisheries*, 4, 99–104. (Peer reviewed and UGC approved)

42. Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2016). Exploited fishery resources of Muvattupuzha River, Kerala, India. *Fishery Technology*, 53, 177–182. (Peer reviewed and UGC approved)

43. Roshni, K., Renjithkumar, C. R., & Kurup, B. M. (2016). Length-weight relationship of two cichlid fish species, *Etroplus suratensis* (Bloch, 1790) and *Etroplus maculatus* (Bloch, 1795) from Lake Vembanad, Kerala, India. *Journal of Applied Ichthyology*, 32(6), 1308–1309. https://doi.org/10.1111/jai.13141 IF.0.7

44. Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2016). Length-weight relationships of three freshwater cyprinid fish species from Chalakudy River, Southern Western Ghats, India. *Journal of Applied Ichthyology*, 32(6), 1340–1341. https://doi.org/ 10.1111/jai.13196 IF.0.7

45. Roshni, K., Renjithkumar, C. R., & Kurup, B. M. (2014). Record of a newly introduced fish, red-bellied pacu, *Piaractus brachypomus* (Cuvier, 1818) (Characiformes, Serrasalmidae), in a tropical wetland system, India. *Journal of Applied Ichthyology*, 30, 1037–1038. https://doi.org/10.1111/jai.12462 IF.0.7

Proceedings & Book Chapter

1.Renjithkumar, C.R and Roshni, K (2026) Nanotechnological Applications in Aquaculture Vaccine Development and Drug delivery (In: Nanotechnology in Modern Aquaculture Jyothis M, Midhun S J, Radhakrishnan EK, and Riya A (Eds)), John Wiley & Sons, Scrivener Publishing LLC. pp.95-118

2.Renjithkumar, C. R., Roshni, K., & Ranjeet, K. (2022). Population characteristics of an alien fish red bellied pacu (*Piaractus brachypomus*) (Characiformes; Serrasalmidae) from Chalakudy River, Western Ghats, India. In *Biological invasions: Issues in biodiversity conservation and management* (pp. 450-457), Kerala State Biodiversity Board, India.

3.Renjithkumar, C.R. & Roshni, K. (2022). Diet characteristic of an alien catfish, *Pangasianodon hypophthalmus* (Sauvage, 1878) from Periyar river, Southern India. 465-471 In *Biological invasions: Issues in biodiversity conservation and management* (pp. 450-457), Kerala State Biodiversity Board, India

4.Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2021). Fishery of Malabar Labeo, *Labeo dussumieri* (Val) from the major river systems of Kerala, India. In *Impact of climate change Biodiversity & Environment* (pp. 105–108). Astral International Pvt. Ltd, India.

5.Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2017). Reviving the *Labeo dussumieri* (Val) fishery from River Pampa, Kerala, India. In *Perspectives biodiversity in India* (Vol. 3, pp. 377–379). Pondicherry University.

6.Roshni, K., Renjithkumar, C. R., & Kurup, B. M. (2017). The downturn of the state fish, *Etroplus suratensis* in Vembanad Lake—a Ramsar site, Kerala, India. In *Perspectives biodiversity in India* (Vol. 3, pp. 352–354). Pondicherry University.

7.Roshni, K., Renjithkumar, C. R., & Kurup, B. M. (2017). Food and feeding habits of an invasive fish, *Cyprinus carpio* from Chalakudy River. In *Proceedings of the National Seminar on Blue Economy: Fostering Sustainable Development and Profitable Resource Utilization* (pp. 208–210). Kollam, Kerala, India.

8.Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2017). Fishery of threatened yellow catfish *Horabagrus brachysoma* (Günther) from the river system of Central Kerala. In *Mainstreaming biodiversity for sustainable development: Proceedings of the 3rd National Biodiversity Congress* (pp. 256–260). Trivandrum, Kerala, India.

9.Roshni, K., Renjithkumar, C. R., & Kurup, B. M. (2016). Length–weight relationship of the tank goby *Glossogobius giuris* (Hamilton, 1822) from Cochin Backwaters, Kerala. In *National Seminar on Marine Biodiversity and Bioprospecting for Sustainable Livelihood (MBBSL 2016)* (pp. 44–48). Kochi, India.

10.Roshni, K., Renjithkumar, C. R., & Kurup, B. M. (2016). Length–weight relationship of an endangered fish, *Tor khudree* (Sykes, 1839) from Chalakudy River system, Kerala, India. In *25th Swadeshi Science Congress* (pp. 272–275). Cochin, India.

11.Roshni, K., Renjithkumar, C. R., & Kurup, B. M. (2015). Ichthyofaunal diversity in a tropical reservoir of Western Ghats—a biodiversity hotspot, Kerala, India. In *2nd National Biodiversity Congress* (pp. 1–10). Trivandrum, Kerala, India.

12.Renjithkumar, C. R., Roshni, K., & Kurup, B. M. (2015). Composition trends of fisheries in Malampuzha Reservoir, Kerala, India. In *National Seminar on Sustainable Fisheries in an Ecosystem Perspective* (pp. 79–85). Cochin, India.