

<b>NAME</b>	Dr. Renjith V R	
<b>DESIGNATION</b>	Assistant Professor III	
<b>EMAIL ID</b>	renjithvr@amity.edu	
<b>CONTACT NUMBER</b>	+919834154645	
<b>RESEARCH INTERESTS</b>	Marine environmental modelling, Marine pollution monitoring and management, Coupled human environment system, Assimilative capacity of coastal waters.	

**EDUCATIONAL QUALIFICATIONS:**

Name of College / University	Degree	Year
CSIR-National Institute of Oceanography & Goa university	Ph.D. Marine Science	2016
Cochin University of Science and Technology	M.Sc. oceanography	2007
Kerala University	B.Sc. Physics	2004

**Title of Ph.D. thesis:**

*“Waste assimilative capacity studies of select regions along the west coast of India”*

**EXPERIENCE (in chronological order):**

Designation	Type of post held (teaching/ research)	Name of the Institute	Year (From-To)
Assistant Professor III	Teaching and research	Amity Institute of Marine Science and Technology (AIMST), AUUP, Noida, India	2022 – till date
Post-doctoral fellow	Research	Harbor Branch Oceanographic Institute-Florida Atlantic University, USA	2021 - 2022
Institute Post-doctoral fellow	Research	Indian Institute of Technology Bombay (IIT Bombay)	2019 - 2021
National Post-Doctoral Fellow (DST-SERB)	Research	IIT Bombay	2017 - 2019
Instructor	Teaching	Jain Irrigation Systems Ltd., Jalgaon, India	2016 - 2017
Part-time Research Assistant	Research	Mangosuthu University of Technology, South Africa	2014 - 2016
Research Assistant	Research	University of KwaZulu-Natal, South Africa	2014 - 2015
Project Assistant	Research	CSIR National Institute of Oceanography (CSIR-NIO), Goa, India	2013 - 2014

Visiting Research Student	Research	International Islamic University Malaysia, Malaysia	2011
CSIR-Senior Research fellow	Research	CSIR-NIO, Goa, India	2010 - 2013
CSIR-Junior Research fellow	Research	CSIR-NIO, Goa, India	2008 - 2010
<b>No. of Ph.D. students supervised</b>	0		
<b>No. of Post-Doc</b>	0		
<b>No. of M.Sc. Students supervised:</b>	4		
<b>No. of B.Sc. Students supervised:</b>	0		
<b>PUBLICATIONS</b>	Annexure I		
<b>PATENTS</b> ( <i>total no.</i> )	nil		
<b>RESEARCH PROJECTS</b> Completed: 2 Ongoing: 0	Annexure I		
<b>AWARDS &amp; HONOURS/ DISTINCTIONS</b>	Annexure I		
<b>MEMBERSHIP</b> with Professional/ Academic bodies	International Water Association Asian Marine Educators Association		

## Annexure I

### PROJECT DETAILS

Harbor Branch Oceanographic Institute, USA: Coupled physical-biogeochemical modeling of water quality and harmful algal blooms (HABs) in Florida coastal region (Funding: NASA and HBOI Foundation).

IIT Bombay, India: Impacts of climate change on the water quality along the coastal megacities (Funding: DST-SERB).

University of Kwazulu-Natal, South Africa: Water quality modeling-simulation of pollutant transport, sediment concentration and nutrient budget for uMgeni River (Funding: Water Research Commission, South Africa).

International Islamic University Malaysia, Malaysia: Development of coastal modelling network and assimilative capacity estimation for the west coast of India (Funding: CSIR-NIO).

CSIR-NIO, India: Waste assimilative capacity studies of select regions along the west coast of India (Funding: Integrated Coastal and Marine Area Management (ICMAM-PD), Ministry of Earth Sciences, India).

### PUBLICATIONS

#### **a. Peer-reviewed**

**2022** Sreekanth, G. B., ..... **VishnuRadhan, R.**, Chakurkar, E. B. Exploring the ecosystem health of a tropical Indian estuary using mass-balanced ecosystem model. Aquatic Sciences.  
<https://doi.org/10.1007/s00027-022-00880-5>

**2022** **VishnuRadhan, R.**, Anil Lonappan., Eldho, T. I. A microwave-based technique as a feasible method to detect plastic pollutants in environmental samples. Journal of Hazardous Materials.  
<https://doi.org/10.1016/j.jhazmat.2022.128224>

**2021** **VishnuRadhan, R.**, Thresyamma, D. D., Eldho, T. I., Dhiman, R., & Bhavan, S.G. On the emergence of a health-pollutant-climate nexus in the wake of a global pandemic. Environmental Science and Pollution Research.  
<https://doi.org/10.1007/s11356-021-16392-y>

- 2021 VishnuRadhan, R.,** Divya David T., Eldho, T. I. Atmospheric plastics- a potential airborne fomite with an emerging climate signature. *The Journal of Climate Change and Health*.  
<https://doi.org/10.1016/j.joclim.2021.100037>
- 2020 Dhiman, R., VishnuRadhan, R.,** Inamdar, A. B., & Eldho, T. I. Web-GIS integrated open source mashup technology as a cue for integrated management in coastal megacities. *Journal of Coastal Conservation*.  
<https://doi.org/10.1007/s11852-020-00734-y>
- 2019 VishnuRadhan, R.,** Eldho, T. I., & David, T. D. Can plastics affect near surface layer ocean processes and climate? *Marine Pollution Bulletin*.  
<https://doi.org/10.1016/j.marpolbul.2019.01.052>
- 2019 Dhiman, R., VishnuRadhan, R.,** Eldho, T. I., & Inamdar, A. Flood risk and adaptation in Indian coastal cities: recent scenarios. *Applied Water Science*.  
<https://doi.org/10.1007/s13201-018-0881-9>
- 2018 VishnuRadhan, R.,** Eldho, T. I., Vethamony, P., Saheed, P. P., & Shirodkar, P. V. Assessment of the environmental health of an ecologically sensitive, semi-enclosed, basin-A water quality modelling approach. *Marine pollution bulletin*.  
<https://doi.org/10.1016/j.marpolbul.2018.10.035>
- 2017 VishnuRadhan, R.,** Zainudin, Z., Sreekanth, G. B., Dhiman, R., Salleh, M. N., & Vethamony, P. Temporal water quality response in an urban river: a case study in peninsular Malaysia. *Applied Water Science*.  
<https://doi.org/10.1007/s13201-015-0303-1>
- 2016 Sreekanth, G. B., ManjuLekshmi, N., Chakraborty, S. K., Jaiswar, A. K., Zacharia, P. U., VishnuRadhan, R.,..... & Pazhayamadom, D. G.** Effect of monsoon on coastal fish diversity of Goa: an example from gill net fishery. *Indian Journal of Fisheries*.  
[DOI: 10.21077/ijf.2016.63.2.45862-02](https://doi.org/10.21077/ijf.2016.63.2.45862-02)
- 2015 VishnuRadhan, R.,** David, T. D., Sarma, K., George, G., Shirodkar, P., & Vethamony, P. Influence of natural and anthropogenic factors on the water quality of the coastal waters around the South Andaman in the Bay of Bengal. *Natural Hazards*.  
<https://doi.org/10.1007/s11069-015-1715-9>
- 2015 VishnuRadhan, R.,** Sagayadoss, J., Seelan, E., Vethamony, P., Shirodkar, P., Zainudin, Z., & Shirodkar, S. Southwest monsoon influences the water quality and waste assimilative capacity in the Mandovi estuary (Goa state, India). *Chemistry and Ecology*.  
<https://doi.org/10.1080/02757540.2014.961435>

- 2015** Ratheesh Kumar, R., Purushothaman, C. S., Sreekanth, G. B., ManjuLekshmi, N., **VishnuRadhan, R.**, Sandeep, K. P., & Pandey, P. K. State of Water Quality of Two Tropical Urban Lakes Located at Mumbai Megacity. *International Journal of Science and Research*.  
<http://krishi.icar.gov.in/jspui/handle/123456789/3838>
- 2014** **VishnuRadhan, R.**, Vethamony, P., Zainudin, Z., & Kumar, K. V. Waste Assimilative capacity of coastal waters along Mumbai Mega City, West Coast of India using MIKE-21 and WASP simulation models. *CLEAN–Soil, Air, Water*.  
<https://doi.org/10.1002/clen.201200549>
- 2012** **VishnuRadhan, R.**, Zainudin, Z., & Vethamony, P. Introduction to water quality modeling, JURUTERA, *Bulletin of Engineers, Malaysia*.  
<http://www.malrep.uum.edu.my/rep/Record/my.iium.irep.3394/Details>

## **b. Other publications**

**VishnuRadhan, R.**, Eldho, T. I., Misra, A., Jayakrishnan, P. R., & Zainudin, Z. (2021). Repercussions of monsoon in the Indian sub-continent during COVID-19. In Springer Nature Book COVID-19: Systemic Risk and Resilience.

**VishnuRadhan, R.**, Eldho, T. I., Misra, A., Jayakrishnan, P. R., & Zainudin, Z. (2020). COVID-19 Pandemic–Possible implications and effects of monsoons in the Indian sub-continent.? *EarthArXiv* May 31 <https://doi.org/10.31223/osf.io/6784w>.

**VishnuRadhan, R.**, Divya David T., Eldho, T. I., Zaki Z, Casey K. C., & Jamal H. H. (2020). Baseline research timing in turbulent times. E-letter comment on ‘Research opportunities in pandemic lockdown’ *Science*, Vol. 368, Issue 6491, pp. 594-595.  
<https://science.sciencemag.org/content/368/6491/594/tab-e-letters>

**VishnuRadhan, R.**, Divya David T., Eldho, T. I., & Bhagat, J. (2020). Do atmospheric plastics act as fomites for novel viruses? *EarthArXiv*. April 15  
<https://doi.org/10.31223/osf.io/2vj8m>.

Vethamony, P., Behera, M.R., Samiksha S.V., Suneel, V., **VishnuRadhan, R.**, & Mehra P. (2018). The need to understand coastal processes: case studies along the coast of India. *Quarterly Newsletter of the Ocean Society of India*, 5(1), 2-9.

## **PRESENTATIONS/CONFERENCE PUBLICATIONS**

**VishnuRadhan, R**, Eldho T I. Trade-offs between climate factors and water quality along the coastal waters of Mumbai megacity. AdCoRe IP, Chennai, India, 2019.

Divya David T, FinloCottier, **VishnuRadhan R**, Anil Kumar N. Embedded NAO footprint in the observed temperature variability in Kongsfjorden. National Conference on Polar Science Goa, India, 2019.

Divya David T, Subeesh M, **VishnuRadhan R**, Ravichandran M, Anil Kumar N. Recent regional variabilities reflected in Kongsfjorden; an IndARC perspective. Polar 2018, Davos – Switzerland, 15-26 June 2018.

**VishnuRadhan R**, Eldho T I, Divya David T. On the effect of environmental changes induced by coastal megacities. International Conference on Water Resources - ICWR, University of Kerala, India, 15-17 March 2018.

**VishnuRadhan R**, P Vethamony. Anthropogenic impacts on the coastal waters along the west coast of India: Observations and simulations. IIOE conference, CSIR-NIO Goa, December 2015.

**VishnuRadhan, R**. Estimating the health of a semi-enclosed gulf using water quality modelling. 7th International congress of environmental research. December 26-28, 2014, Bangalore, India, December 26-28, 2014.

**VishnuRadhan R** and M. K. V. Sam. Preliminary results of water quality modelling of uMgeni River, KwaZulu Natal, South Africa, Ethekwini municipality water and sanitation department, Durban, South Africa, October 2014.

Sreekanth G. B, ManjuLekshmi N, Chakraborty, S. K, Jaiswar A K, Zacharia P. U, **VishnuRadhan R**, Sreenath, R, Divu, D. and Singh, N. P. Approximation of temporal variation of species abundance in a coastal ecosystem using fishermen assisted gillnet fishing experiments along Goa, India, 10th Indian fisheries and Aquaculture forum, Lucknow, India, 2014.

Presented the results of Govt. Aided Project “Waste assimilative capacity of select Indian coastal waters through measurements and simulations” during ICMAM PD (Integrated Coastal and Marine Area Management Project Directorate, Ministry of Earth Sciences (MoES), Government of India) project review and expert committee meeting at NIOT (National Institute of Ocean Technology) Chennai, 3<sup>rd</sup> February 2012.

## **PROJECT REPORTS**

Waste Assimilative Capacity of Coastal waters of Gulf of Cambay, Mangalore, and Mumbai, ICMAM, MoES, Chennai, December 2012.

Waste assimilative capacity of coastal waters of Mumbai region, Part - I: Coastal environment of Mumbai, ICMAM, MoES, Chennai, October 2010.

Waste assimilative capacity of coastal waters of Mangalore region, Part - I: Coastal environment of Mangalore, ICMAM, Integrated Coastal and Marine Area Management Project Directorate (ICMAM PD), Ministry of Earth Sciences (MoES), Chennai, September 2009.

## **AWARDS & HONOURS/ DISTINCTIONS**

IOCCG-SCOR fellowship (2019) for Advanced Training Course on Ocean Colour Remote Sensing. Hangzhou, China, 2019.

2019's highly downloaded article on the subject Water (one of the 60 research disciplines in Springer Nature).

National Post-Doctoral Fellowship, Department of Science and Technology, Government of India, 2017.

Shortlisted for Shyama Prasad Mukherjee fellowship, CSIR, India (Top 25 CSIR- JRF awardees in India in the subject of Earth, Atmospheric, Ocean & Planetary science), 2007.

CSIR-Junior Research Fellowship, India, 2007.

National Eligibility Test for lectureship, CSIR India, 2006.

## **PEER REVIEW SERVICE**

Reviewer for African Journal of Environmental Science and Technology, AMBIO, Applied Water Science, Cities, Desalination and Water Treatment, Environmental Monitoring and Assessment, Environmental Research Communications, Environmental Research Letters, Environmental Science and Pollution Research, Environment Systems and Decisions, Exposure and Health, Heliyon, Indian Journal of Geo-Marine Sciences, Journal of Environmental Chemical Engineering, Journal of Water and Climate Change, Marine Pollution Bulletin, Microbial Ecology, Natural Hazards, Risk Analysis, Sustainable Water Resources Management, Water Research, Sustainability.

## **SELECTED MEDIA/NEWS COVERAGE**

<https://researchmatters.in/news/microwave-radiation-detect-tiny-plastic-pollutants>

<https://www.iitb.ac.in/en/research-highlight/microwave-radiation-to-detect-tiny-plastic-pollutants>

<https://www.mid-day.com/mumbai/mumbai-news/article/iit-b-technique-can-spot--killer-plastics-in-the-air-23238919>

Research work on microplastic detection reported in current science Current Science, Vol. 122, no. 10, 25 May 2022

<https://www.currentscience.ac.in/Volumes/122/10/1117.pdf>

IIT Bombay research highlights in 2019 and 2022

<https://india.mongabay.com/2020/03/keralas-fishing-beaches-littered-with-large-amounts-of-fishing-debris/>

<https://scroll.in/article/955051/most-of-the-plastic-debris-along-keralas-coast-comes-from-fishing-waste>

<https://www.hakaimagazine.com/news/how-enough-floating-plastic-could-change-the-sea/>

<http://www.iitb.ac.in/en/research-highlight/floating-plastics-nothing-to-be-buoyant-about>

<https://researchmatters.in/news/floating-plastics-nothing-be-buoyant-about>

<https://weather.com/news/news/2019-05-01-tropical-cyclone-fani-impacts>

<https://economictimes.indiatimes.com/news/science/floating-ocean-plastics-can-contribute-to-global-warming-find-indian-researchers/articleshow/70398702.cms>

<https://www.businessdaylight.co.uk/floating-ocean-plastics-can-contribute-to-global-warming-find-indian-researchers/>

<https://www.iamsp.org/attachments/newsletter/25%20%E2%80%932023%20Jun%202019.pdf>

[https://www.huffingtonpost.in/entry/oceans-covered-with-plastic\\_in\\_5d5f6f7ee4b0dfcbd48b283d](https://www.huffingtonpost.in/entry/oceans-covered-with-plastic_in_5d5f6f7ee4b0dfcbd48b283d)

<https://www.dnaindia.com/mumbai/report-research-by-iit-bombay-ncpor-shows-harms-of-plastic-pollution-in-seas-2785530>

<https://nice.ncbs.res.in/2019/09/04/paradise-lost-climate-change-and-microplastics-two-faces-of-the-same-coin/>

<https://india.mongabay.com/2019/08/what-would-happen-if-the-oceans-are-completely-covered-with-plastic/>

<https://thewire.in/environment/what-would-happen-if-the-oceans-are-completely-covered-with-plastic>

<https://www.cntraveller.in/story/mumbai-sea-will-plastic-fish-years/>

<https://www.parley.tv/updates/2019/06/21/state-of-the-oceans>

### **OTHER INTERESTS**

Environmental management in ancient civilizations  
Environmental psychology  
Marine archeology  
Citizen science  
Philately

### **PROFESSIONAL PROFILES**

<https://www.researchgate.net/profile/Renjith-Vishnuradhan>

<https://scholar.google.com/citations?user=TC3yVW0AAAAJ&hl=en>

\*Updated August 2022\*