

FACULTY PROFILE



Dr. Anu Gopinath

Professor in Chemical Oceanography & Head,
Department of Aquatic Environment Management

Contact Information:

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- **Research Profiles:**
 - Google Scholar: scholar.google.com/citations?hl=en&user=hVy5eF8AAAAJ
 - ResearchGate: www.researchgate.net/profile/Anu-Gopinath
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Dr. Anu Gopinath, Professor and Head of the Department of Aquatic Environment Management at Kerala University of Fisheries and Ocean Studies (KUFOS), is a distinguished expert in marine biogeochemistry and environmental monitoring with over 20 years of research experience. Her work spans critical topics including trace metals, microplastics, persistent organic pollutants (POPs), and coral reef health, with a regional focus on the Arabian Sea, Indian Ocean, and polar ecosystems.

Dr. Anu leads several major projects; Department of Science and technology, Government of India funded project titled "Mycosporine - like amino acids from Corals and associated Dinoflagellates – Their Role in Preventing Coral Bleaching – A Case study of Lakshadweep Archipelago"; Space Application Centre, ISRO, Government of India funded project "Development of algorithms for monitoring carbon and nitrogen-based productivity and distribution in coastal ocean Bay of Bengal and Arabian Sea and their role on biogeochemistry using in situ and satellite datasets"; and INCOIS, Hyderabad under Ministry of Earth Sciences funded "Spatio-temporal variability of the environmental parameters in the Lakshadweep Coral

Ecosystems and their implications on the Coral health – An integrated Study”. She has also participated in Indian Arctic Expeditions in 2014, 2016, and 2017 and collaborates on projects within the Indian Antarctic and Southern Ocean Expeditions.

A dedicated educator and mentor, Dr. Anu has guided 7 Ph.D. and 4 postdoctoral students. She has also developed a UGC-approved MOOC course on Indian Arctic Policy, helping broaden public understanding of India’s role in Arctic research. Her role as coordinator of UArctic activities at KUFOS and she is the present coordinator of the NAAC committee further demonstrate her commitment to institutional excellence. Dr Anu also served as the UGC 12 B team visit to KUFOS as part of 12B accreditation.

Dr. Anu’s extensive publication record includes over 50 international and 20 national peer-reviewed articles, along with 13 authored books in the fields of Analytical Chemistry, Environment , Ecology and Human Rights and Fundamentals of Chemistry catering to the demands of CBCSS and OBE frameworks of Indian Universities. Her research, widely published on issues like marine pollution and microplastics in polar environments, has solidified her as a prominent voice in marine science. Through her comprehensive approach, combining research, education, and public outreach, Dr. Anu is making a significant impact on marine conservation and resource management.

Educational Background

- **Ph.D.** in Chemical Oceanography, Cochin University of Science and Technology, 2004
- **Master’s Degree in Hydrochemistry**, Cochin University of Science and Technology, 1998
- **Bachelor’s Degree in Chemistry**, Mahatma Gandhi University, Kottayam, 1996

Experience

- **Assistant Professor (Department of Chemistry):** St. Teresa’s College, Ernakulam (2005 - 2015)
- **Assistant Professor in Chemical Oceanography:** KUFOS (2015 - 2019)
- **Associate Professor & Head:** KUFOS (2019 - Present)

Teaching:

- Aquatic Pollution.
- Soil and Water Chemistry
- Analytical techniques in Environmental Science

- Chemical Interactions in Aquatic Environment.

Research Interests

- **Biogeochemistry of Coastal Environments:** Arabian Sea, Indian Ocean
- **Trace Metals and Emerging Contaminants:** Lakes, estuaries, and coastal oceans
- **Polar Studies:** Arctic, Antarctic and Southern Oceans (Sedimentary organic compounds, trace metals, microplastics and POPs)
- **Coral Reef Monitoring:** Pollution and Mycosporine-like Amino Acids from Lakshadweep Archipelago

Key Management roles:

- NAAC Coordinator
- Head, Department of Aquatic Environment Management
- Academic Council Member: St Teresa's College (Autonomous), Ernakulam.
- Empanelled Research Guide of Indian Maritime University, Chennai.
- Executive Member: Indian Society of Analytical Scientists
- Principal Investigator of the Soil and Water Analysis Lab, KUFOS
- Coordinator for UGC 12B Team Visit (2019–2021).
- Board of Studies Member in Chemistry for St. Teresa's College (Vice Chancellor's nominee).
- Board of Studies Member in Chemistry for Sacred Heart College, Kochi (Vice Chancellor's nominee).
- Board of Studies Member for Marine Chemistry (Master's) at KUFOS

Publications:

- Google Scholar: scholar.google.com/citations?hl=en&user=hVy5eF8AAAAJ
- ResearchGate: www.researchgate.net/profile/Anu-Gopinath
- ORCID: orcid.org/my-orcid?orcid=0000-0002-9246-6582

Books Authored

- Chemistry Core- I Methodology of Chemistry as a discipline of science (2010). **Anu Gopinath**, Chandradasan Dominic Thomas. For Semester I of CBCSS BSc Programme of MG University Kottayam and Kannur University ISBN: 978-93-82956-40-2.
- Theoretical and Inorganic Chemistry (2010). **Anu Gopinath**, Chandradasan & Dominic Thomas. For Semester II of CBCSS B.Sc programme of MG University Kottayam and Kannur University ISBN: 978-93-82956-71-6.

- Environmental Chemistry (2010) **Anu Gopinath** & Chandradasan. For Open Course in Semester V and Choice Based Course in Semester VI of CBCSS programme of MG University Kottayam and Kannur University ISBN: 978-93-82956-42-6.
- General and Analytical Chemistry (2018) **Anu Gopinath** and Chandradasan for Semester I - CBCSS programme of MG University Kottayam ISBN: 978-81-934025-2-8.
- Environmental studies (2019) **Anu Gopinath** and Chandradasan for Semester V of Core Course in Chemistry of MG University Kottayam ISBN: 978-93-87015-85-2.
- Chemistry Core-II Theoretical and Inorganic Chemistry. (2018) **Anu Gopinath**, Geetanjali Kaushal and Chandradasan. For the CBCSS Programme of MG University Kottayam ISBN: 978-93-87015-13-5.
- Environment Ecology and Human Rights (2019) **Anu Gopinath** and Stany Thomas. For the 5th Semester B.Sc Core Chemistry programme of Mahatma Gandhi University Kottayam ISBN: 978-93-89292-02-2.
- Soil and Water Chemistry (2019) **Anu Gopinath**, Resmi P and Jitha G. ISBN: 978-93-89292-17-6.
- An Introduction to Environmental Studies (2020) **Anu Gopinath**, Jitha P, Resmi G and Jasmine P. ISBN 978- 93—89292-37-4, (For all Indian Universities).

Achievements/Awards/Fellowship

- Participated in three Arctic Expeditions as part of the Ministry of Earth Sciences, India
- Collaborated with Southern Ocean Expedition, Government of India
- Developed a UGC SWAYAM MOOC Course on the Indian Arctic Policy (IAP)
- Commonwealth Fellow, 2012, University of Southampton, U.K.
- Honorary Fellowship of Indian Society of Analytical Scientist, 2024.
- DST Woman Scientists Fellowship (2005).

Major Projects

1. "Hypoxia and its Consequences in the Coastal Waters of Kochi" funded by INCOIS, Ministry of Earth Sciences Government of India: **Completed.**
2. "Establishment of wave observation at two locations off Kerala coast – verification and dissemination of forecasts advisories and user interaction workshops" funded by INCOIS and Ministry of Earth Sciences: **Completed.**

3. "Biogeochemical factors and Ecosystem Dynamics of Coral Reefs of Lakshadweep Archipelago" DST – Department of Science and Technology - Fast Track Scheme: **Completed.**
4. "Biogeochemistry of Coral Reef Ecosystem of Lakshadweep Archipelago" DST Women Scientists Fellowship Scheme: **Completed.**
5. "Mycosporine - like amino acids from Corals and associated Dinoflagellates – Their Role in Preventing Coral Bleaching – A Case study of Lakshadweep Archipelago" Department of Science and technology, Government of India: **Ongoing.**
6. "Development of algorithms for monitoring carbon and nitrogen-based productivity and distribution in coastal ocean Bay of Bengal and Arabian Sea and their role on biogeochemistry using in situ and satellite datasets" Space Application Centre, ISRO, Government of India: **Ongoing.**
7. "Spatio-temporal variability of the environmental parameters in the Lakshadweep Coral Ecosystems and their implications on the Coral health – An integrated Study", INCOIS, Hyderabad under Ministry of Earth Sciences: **Ongoing.**