Dr.Smitha B.R.

Dr. Smitha obtained her Ph.D. in Marine Science, from Cochin University of Science and Technology (CUSAT), Cochin, India on the topic of "Coastal upwelling of the south eastern Arabian Sea-an integrated approach" and her MSc. was in Oceanography from CUSAT. Currently she is working in the Centre for Marine Living Resources and Ecology (CMLRE), Kochi. Thrust research area of Dr. Smitha is Physical processes in the ocean and its biological responses. Her research activities include, Coastal upwelling of the south eastern Arabian Sea and its role in regulating the pelagic fishery, Eddy dynamics/meso-scale processes and the associated biological response, estimation of the sustainable potential yield through trophodynamics, and circulation pattern using ADCP etc.

Major achievements of Dr. Smitha include, 1) Delineation of coastal upwelling of the south eastern Arabian Sea to different zones based on the forcing mechanism and intensity, 2) Explanation of meso-scale processes that regulate the bloom dynamics of the north eastern Arabian Sea, 3) Estimation of potential yield in the tertiary level through trophodynamics approach- based on in-situ, satellite and model data sets 4) Studies on Arctic fjord ecosystems: Sub-seasonal variations in fjord dynamics in response to the differential advection rates in Kongsfjorden, Svalbard, 5) Explanation on the dynamics of subsurface chlorophyll maxima in the eastern Arabian Sea in response to physical forcing, 6) Explanation on upper layer circulation, hydrography and biological response of the Andaman waters during winter monsoon, and 7) Studies on climate change and ecosystem plasticity with special reference to eastern Arabian Sea. Her other major contributions are 1) Species identification of mixed algal bloom in the northern Arabian Sea using Remote Sensing techniques, 2) Explanation on the early developmental stages of the Indian mackerel Rastrelliger kanagurta (Cuvier) along the Kerala-Mangalore coast of south eastern Arabian Sea etc. Also she has been involving in the up keeping of FORV Data Centre in CMLRE.

Presently she is involved in the activities related to the development of predictive capabilities on marine fishery especially the pelagic in association with INCOIS and NOAA, USA. In addition, she is also associated with the MLR-REIS component Biodiversity and Ecology of the Lakshadweep Archipelago in the scenario of changing climate, to take care of the regular monitoring of the coralline ecosystem, and its environment.

She is a working member of the Maximum Sustainable Yield (MSY) Revalidation Committee of Department of Animal Husbandry, Dairying and Fisheries, Government of India during 2010 and 2018. She has participated in more than 25 scientific cruises (~400 sea days) onboard FORV Sagar Sampada including one International cruise to Oman and she was a team member of India Arctic Expedition during 2016 summer. The paper co-authored by her received Dr. S. Z. Qasim Memorial award for the best paper on 'Developmental stages of the Indian mackerel Rastrelliger kanagurta' in 2017.

Dr. Smitha B.R. is awarded the Certificate of Merit for his outstanding contributions in the field of Ocean Science and Technology.