



National Award for Ocean Science & Technology

Dr. M. Dileep Kumar



Dr. Dileep Kumar is at present serving as an Honorary Scientist at National Institute of Oceanography, Visakhapatnam. He completed Ph.D. in Chemical Oceanography in 1988. His main area of interest has been the biogeochemistry of the Northern Indian Ocean. The other research areas he contributed are Global Change, Air-Sea exchange of gases, estuarine chemistry, and control of seawater composition. Dr. Dileep Kumar was a Visiting Scientist at the University of Hawaii for six months in 1990 under Raman Research Fellowship, where he researched on regeneration of silica and radium in the Indian Ocean, and later at the University of Tokyo (Ocean Research Institute) as a JSPS Fellow (2004-05) to conduct studies on aerosols.

Dr. Dileep Kumar's contributions helped advance the understanding of carbon and sulphur biogeochemical cycles and significantly brought out the contrasting patterns between the Arabian Sea and the Bay of Bengal. His pioneering studies showed the Arabian Sea to be a source of atmospheric carbon dioxide, whereas the Bay is a seasonal sink. Strong stratification at the Bay of Bengal surface and organic carbon decomposition processes account for differences in carbon deposition rates and emissions from the North Indian Ocean. In 1988, Kumar initiated precision measurements of dimethyl sulphide (DMS) in waters of the Indian Ocean. His pioneering detection of DMS and DMSP in marine aerosols contradicts the notion that sea-to-air fluxes occur only through degassing of DMS and significantly influence atmospheric sulphur budget.

In 1988, he received the CSIR Young Scientist Award in Earth Sciences. Dr. Dileep Kumar is a Fellow of all the three science academies, the National Academy of Sciences, Indian Academy of Sciences and the Indian National Science Academy. He has won several prestigious awards and membership of professional bodies and has published several research papers in journals of repute.

In recognition of his outstanding contribution to Ocean Science & Technology, the Ministry of Earth Sciences honors Dr. M. Dileep Kumar with "National Award in Ocean Science & Technology" for the year 2016.