
National Award for Ocean Science & Technology

Dr. Satheesh Shenoi



Dr. S. Satheesh Chandra Shenoi is currently serving as the Director of Indian National Centre for Ocean Information Services (INCOIS). Dr. Shenoi (Born on 30th May 1958, at Thuravoor in Chertala Taluka of Kerala), completed schooling from the local schools. He graduated in 1978 with major in Physics from NSS College, Chertala affiliated to University of Kerala. Thereafter he did his M.Sc. in Physical Oceanography from School of Marine Sciences, Cochin University of Science & Technology, Kochi (1980). Dr. Shenoi completed his Ph.D. also from Cochin University of Science & Technology, Kochi (1984).

Dr. Shenoi's contribution to the Indian marine science is in two areas, marine science research and marine science management. The former dominated his career from 1983, when he joined the National Institute of Oceanography (NOI), Goa till 2009. Since he started serving as Director, INCOIS in 2009 a significant portion of his time is spent on management of the institute. However, he still continues to participate in and lead research at INCOIS.

Dr. Satheesh Shenoi has more than 28 years of research experience in Physical Oceanography. He played a lead role in Department of Science & Technology (Govt. of India) Arabian Sea Monsoon Experiment (ARMEX), which changed our traditional view from a passive role for the ocean in monsoonal processes to an active role in the monsoonal air-sea coupling. He showed that the regional optimization of the algorithm coefficients could improve the estimation of Sea Surface Temperature, over the Indian Ocean, using satellite based infrared sensors by 50%.

After the tsunami struck the Indian coast in 2004, he coordinated the research that described quantitatively the tsunami off the Indian coast and enabled an improved estimate of the extent of the tsunami source region. This work helped in improving the tsunami early warning centre at INCOIS and leading the setting up of an Ocean State Forecasting System using numerical models. This system of regular predictions has transformed the ocean science in India from its academic and descriptive nature to a quantitative operational science. This has placed India among half a dozen countries with capabilities in ocean forecasts.

He was a senior member of the group that carried out hydrographic observations during 1987-1994 to map the seasonal cycle of circulation off the Indian coast. This work facilitated the development of theoretical framework to explain the seasonal cycle of currents in the waters around India and changed the perception of the dynamics of Indian Ocean. He had also made current-meter observations to provide quantitative description of currents early in his career, and initiated a major programme to make direct current measurements off the Indian coasts.

Prior to joining INCOIS, he was leading a major programme making direct current measurements off the Indian coast to enable a quantitative description of the variability within a season and across years, marking a paradigm shift in our knowledge of the seas around India. Considering his contributions to the understanding of the physical oceanography of the waters around India, in 2007, he was elected as Fellow of Indian Academy of Sciences. He has authored/co-authored more than 70 research papers in journals of international repute. His professional Interests include Observational oceanography, ocean currents, impact of oceans on monsoons and satellite oceanography.

He is also involved in the setting up of an International Training Centre for Operational Oceanography (ITCOcean) for capacity building and establishing the Memorandum of Agreement (MoA) with IOC/UNESCO to cooperate in concluding training programmes in operational oceanography. The establishment of ITCOcean enhanced the visibility of INCOIS globally.

In recognition to his outstanding research contributions in the field of Ocean Science and Technology the Ministry of Earth Sciences honours Dr. Satheesh Shenoi with the “National Award in the field of Ocean Science and Technology” for the year 2018.