Biographical Sketch of Dr. S. SATHEESH CHANDRA SHENOI

Born on 30 May 1958 in India, Dr. Shenoi specialized in marine Science. After working as a full-time researcher in the National Institute of Oceanography, India during 1982 to 2009, he joined Indian National Centre for Ocean Information Services, Hyderabad in May 2009, a unique institution tasked with providing operational oceanographic services to researchers, government agencies, industry and the stake holders who depend on the sea for livelihood and economical activity. He led the setting up of a forecasting system for the Indian Ocean using numerical models and real time observations and that system is issuing, daily forecasts for next 5 days, on various ocean parameters like waves, currents, SST, mixed layer depth, tides and sea level at ports and harbours, etc. for India other countries (Cameron, Male, Madagascar, Seychelles, Sri Lanka). The Potential Fishing Zone (PFZ) advisories and the ocean state forecasts issued by INCOIS is popular among the Indian fishermen as that ensures their safety and guides them to potential fishing grounds. This service to fishermen avoids wasteful expenditure on fuel and thus reduces carbon emission. The independent reports have quantified the benefit due to such services to fishermen as 20 to 35 million USD per annum (reports prepared by the National Council of Applied Economic Research (NCAER, 2010 and 2015)).

Dr. Shenoi led the improvements in the tsunami early warning system, established in India in 2007, to provide location specific warnings so as to avoid the massive evacuations of the coastal population. In October 2012, IOC/UNESCO designated the Indian tsunami early warning centre as Regional Tsunami Service Provider (RTSP) and assigned the responsibility to provide the tsunami services to all countries on the Indian Ocean Rim (IOR).

Realizing the importance of operational oceanography in view of its role in translating ocean science to products for societal benefit and ocean management, Dr. Shenoi led the establishment of International Training Centre for Operational Oceanography (ITCOocean) and signed an MoA with IOC to utilize the centre for the capacity developments of IOC member states. Later, the Ocean Teacher Global Academy of IODE/IOC recognized ITCOocean as a Regional Training Centre. Since it’s establishment in 2013, ITCOocean has conducted 34 training programmes for 996 trainees of which 192 were from 36 other countries. Recently, ITCOocean has been established as a Category II Centre of UNESCO.

Other operational services developed at INCOIS under his leadership include prediction of storm surge, prediction of the trajectory of oil spill in the ocean, a tool to aid the search and rescue of missing objects at sea, ocean data archival and dissemination, Digital Ocean, etc. He also tripled the human resource and infrastructure at INCOIS since his appointment as its director. Today, INCOIS is providing more than a dozen ocean related services and products to cater the needs of various users.
During his research career at National Institute of Oceanography, Shenoi led several national projects and the CSIR, India-IRD, France collaboration in ocean research. His research stands out at understanding the circulation and air-sea interaction in the Indian Ocean. His research brought important changes in our traditional view of the Arabian Sea’s role in monsoonal processes. He also showed that the regional optimization of the coefficients in the algorithms would improve the accuracy of sea surface temperature (SST) retrieved from satellite data by 50%.

During 2010-2015 he served as the Chair of the Working Group of Intergovernmental Coordination Group for Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS) of IOC/UNESCO. The WG framed the methodologies for tsunami detection, its modeling and issue of warning in the Indian Ocean region. In 2011 he was elected as Member of the Executive Council of International Association for Physical Sciences of Ocean (IAPSO)/IUGG. He authored the reports of India on the Physical Sciences of Ocean in 2011, 2012, 2015 and 2018. He signed the Memorandum of Agreement with Intergovernmental Oceanographic Commission/UNESCO to collaborate in the capacity developmental activities of IOCs through the ITCOcean at INCOIS, Hyderabad. In 2015, Dr. Shenoi chaired the International Indian Ocean Expedition -2 (IIOE-2) Interim Planning Committee (Group of Experts) constituted by IOC/UNESCO that prepared the strategic plan for the implementation of the 2nd International Indian Ocean Expedition (IIOE-2), a major project of IOC, SCOR and IOGOOS. He is one of the three co-chairs of IIOE-2 Steering Group setup by IOC-SCOR-IOGOOS that coordinates and guides the IIOE-2 project. He established the node of International Project Office of IIOE-2 at INCOIS, Hyderabad. He is also the chair of IUGG’s Union Commission for Data and Information (UCDI) and the chair of Indian Ocean Global Ocean Observing System (IOGOOS) since 2017. He was invited to be a member of the Discussion Panel on the International Decade of Ocean Science for Sustainable Development at the 29th session of IOC Assembly held in Paris during 21-29 June 2017. The President of Japan Agency for Marine-Earth Science and Technology (JAMSTEC), Japan appointed him on JAMSTEC Advisory Board (JAB) in 2017 to review the mid-term plan of JAMSTEC.

In addition, he led the formulation and execution of several collaborative projects between INCOIS and other countries. To mention a few, Research Moored Array for African-Asian-Australian Monsoon Analysis and Prediction (RAMA) with NOAA, USA; Develop Harmful Algal Bloom monitoring and prediction system for the Indian EEZ with NOAA, USA, etc.

Recognizing his achievements in ocean science, he has been elected as the fellow of Indian Academy of Science (2007), National Academy of Sciences, India (2009), Indian Geophysical Union (2011), Andhra Pradesh Akademy of Sciences (2014), Telangana State Academy of Sciences (2015). He was also awarded with Dr. H.N. Siddiquie Memorial Lecture Award (2011) by Indian Geophysical Union and National Award in Ocean Science & Technology, by the Ministry of Earth Sciences of Govt. of India (2018). AMET University, Chennai conferred Doctor of Science (Honoris causa) on him in 2016.
He was also assigned with the additional charge of Director National Institute of Ocean Technology (NIOT), Chennai (1 Aug 2015 – 8th February 2018) and Project Director of Integrated Coastal and Marine Area Management (ICMAM), Chennai (22 Aug – 14 July 2016).

Complete list of his publications are available at
http://www.incois.gov.in/hrd/epublications.jsp?uid=001

Further details are available at https://www.incois.gov.in/portal/director.jsp