



Dr. Kunal Chakraborty



Dr. Kunal Chakraborty is presently working as Scientist-D in ESSO-Indian National Centre for Ocean Information Services, Hyderabad. After completing his B.Sc. and M.Sc. degrees in Mathematics from the University of Burdwan, West Bengal, he joined Ph.D under the guidance of Prof. T. K. Kar in Indian Institute of Engineering Science and Technology, Shibpur. His research had been at the interface of applied mathematics and ecology. For his extensive work on the bioeconomic modelling and development of solution techniques for the management and conservation of fisheries, Dr. Chakraborty was awarded a Ph.D degree by Indian Institute of Engineering Science and Technology, Shibpur in 2012.

His current research interest includes ocean modelling, in particular, numerical modelling of ecosystem. Dr. Chakraborty has been working on a project leading to the development of an end-to-end model for the Indian Ocean basin which includes investigation of the distribution and the processes controlling major biogeochemical tracers that are relevant for both ocean physics and biology. The specific objectives of his research is to explore the environmental conditions, driving force controlling variability in fish populations through reproducing the observed spatial and temporal variability of both physical and biological variables in Indian Ocean (including coastal region) using a coupled bio-physical model.

He has successfully employed a coupled bio-physical model with an average resolution of ~2.25 km using Regional Ocean Modelling System (ROMS) and integrated with an ecosystem model for the west coast of India to predict its evolution in both short and long term which has further relevance to support potential fishing zone advisories of ESSO-INCOIS.

Dr. Chakraborty has published more than twenty five research articles apart from his thesis papers in the international peer reviewed journals having high impact factors and good number of citations. He proved himself to be an able mentor. Two students have been awarded Ph.D degree under his guidance.

In recognizing of his outstanding research contributions in the field of Earth System Science the Ministry of Earth Sciences honours Dr. Kunal Chakraborty with “Young Researcher Award in the field of Earth System Science” for the year 2016.