

# GUEST TALK

*Organized by*

**SCHOOL OF NAUTICAL STUDIES  
INDIAN MARITIME UNIVERSITY  
KOCHI CAMPUS**

**Deep Sea Fishes : Diversity and Ecology**

28 December, 2021



The School of Nautical Studies, Indian Maritime University, Kochi Campus, organized an online guest talk on "**Deep Sea Fishes : Diversity and Ecology**" on 28th December, 2021 at 1530 - 1700 hrs.

The welcome address was given by Campus Director Dr. Ch. Suryanarayana.

The main speaker of the event was

**Dr. Hashim Manjebrayakath, Scientist-D, Centre for Marine Living Resources and Ecology (CMLRE), Ministry of Earth Sciences, Kochi.**

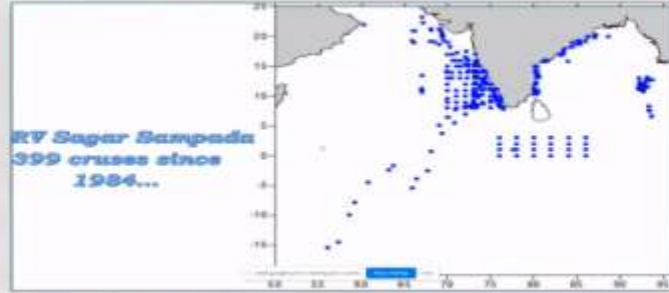




# Deep-sea Fishes: Diversity and Ecology



Dr. Hashim Manjebrajyath  
Scientist D  
Centre for Marine Fisheries Research & Ecology (CMFRE)  
Ministry of Fisheries, Government of India



## Ecosystem studies in Arctic foods

Continued monitoring of the Kongsfjord-Kongsfjord system of the western Spitzbergen, Trofjord during summer 2013 onwards



To understand response of ecosystem function and change in plankton diversity as a result of warming, studies to see the net increased Arctic sea-ice advection

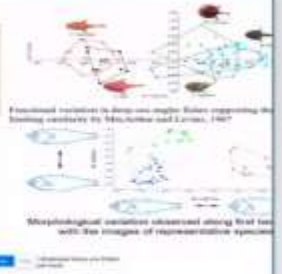
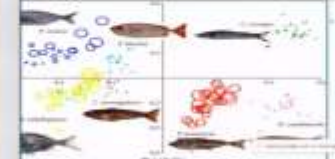


## Scientific Equipments onboard FORV Sagar Sampada



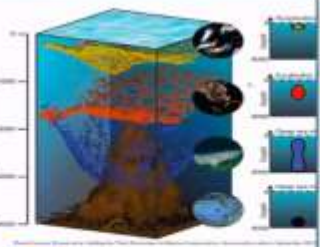
## Ecomorphological Studies

Ecomorphology - study of the relationship between the biological role of an individual and its morphological adaptations  
Efficient approach to study coexistence of species  
Insight into the degree of niche partitioning and diet overlap



## Deep-Sea Ecology

Life on earth depends on the primary production of photosynthesising organisms. In the marine realm, food availability is a function of depth, as primary production depends on light and, therefore, only occurs in the upper layer of the ocean, the euphotic zone. The deeper the ocean, the less food is available for the organisms. Deep-sea microbes (Microbial loop) are important in turning over the organic matter.



## MoE-NVAA (USA) collaborative study on Development of Predictive Capabilities on Fishery



A statistical production model based on landing data and environmental covariates have been developed



The CMFRE scientists participated in the 4th ICAO process onboard FORV Sagar Sampada on the 4th cruise during July-August 2014

An extension of the statistical modelling, analysis addressing the role of ecosystem processes and ecological concepts in fishery management which all regulate the interannual variability in fisheries along, based on long-term data sets from climatological variables, charts, satellite measurements, in-situ ocean and secondary resources on fish biology etc. is in progress

