



**International Training Centre for Operational Oceanography (ITCOcean)**

-A Category-2-Centre of UNESCO

**IOPredict-2024- An International Oceanography Workshop**

Day-1	9 <sup>th</sup> December 2024 (Monday)		
0800-0900	Registration		
0900-0915 hrs	Opening Session		
0915-1000 hrs	Lead Talk	S. S. C. Shenoi	The Importance of Ocean Forecasts and Services: Safeguarding Lives, Ecosystems, and Marine <a href="#">Presentation</a>
1000-1300 hrs (25 min talk + 5 min Q&A) and Tea break (30 min.)	Invited talks	Arya Paul	Improving circulation in north Indian Ocean through data assimilation <a href="#">Presentation</a>
		Sreenivas P	The Ocean observations - methods of data assimilation and its importance <a href="#">Presentation</a>
		Biswamoy Paul	Ensemble Forecast Sensitivity to Observations: A modified Observing System Experiment for a stratified ocean <a href="#">Presentation</a>
		Jayaram Valluru	Role of Hybrid Machine Learning Algorithms for Ocean State Prediction
		Balaji B	Improving ENSO Forecast Accuracy: Multi-year Predictions with Bayesian Convolutional Neural Networks <a href="#">Presentation</a>
1300-1400 hrs	Lunch Break		
1430-1530 hrs (25 min talk + 5 min Q&A) + Tea Break (30 min)	Invited talks	Nikesh Narayanan	Adding Surface wave coupling in a global coupled modeling system
		Semanth M.	Improving Ocean wave forecast in the Indian Ocean through Data Assimilation
		PLN Murty	Towards the improved storm surge and inundation computations along the Indian coasts
1600-1720 hrs (17 min talk + 3 min Q&A)	Invited/ contributed talks	Meenakshi Sreejith	The past, present and future of Indian Ocean wave climate using CMIP6 GCM winds <a href="#">Presentation</a>
		Abhijith Raj	Winds and waves over the Oceans-revisiting windstress over the Bay <a href="#">Presentation</a>
		Gideon Ovwuwonye	Sea surface conditions in the Bermuda Sea.
		Mithun Sudhakar	Assessment of wave energy potential in the Indian EEZ <a href="#">Presentation</a>
Day-2	10 <sup>th</sup> December 2024 (Tuesday)		
0915-1000 hrs	Lead talk	Rashmi Sharma	Major advances in the space-based observations for oceanographic research <a href="#">Presentation</a>
1000-1300 hrs (25 min talk + 5 min Q&A) and Tea Break (30 min)	Invited talks	Tata Sudhakar	Observations Using Moored buoys <a href="#">Presentation</a>
		Praveen Kumar	Air-Sea Fluxes: Understanding and Mitigating Uncertainties
		Girish Kumar	Motivations and Insights from the INCOIS Processes Specific Observation Campaign in the Arabian Sea <a href="#">Presentation</a>
		Amol Prakash	West India Coastal Current: Observations and Theoretical Studies <a href="#">Presentation</a>
		Siva Srinivas	Enhancing Observations Data: A Machine-Learning Approach to Fill Gaps in the Moored Buoy Data <a href="#">Presentation</a>
1300-1400 hrs	Lunch Break		



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1430-1530 hrs (25 min talk + 5 min Q&A) + Tea Break (30 min)	Invited talks	Kevin Martins Sanil Kumar Remya P. G.	Ocean waves contribution to nearshore circulation: observations and predictions, with a focus on extreme water levels Wind waves in the Indian Shelf Seas: Influencing factors and temporal variations <a href="#">Presentation</a> Drivers of Wave-Induced Coastal Flooding in the Indian Ocean <a href="#">Presentation</a>
1600-1730 hrs	Visit to INCOIS Facilities		
<b>Day -3</b>	<b>10<sup>th</sup> December 2024 (Tuesday)</b>		
0915-1000 hrs	Lead talk	Vinayachandran P. N.	High resolution (~ 1 km) simulations of the Bay of Bengal Circulation <a href="#">Presentation</a>
1000-1200 hrs (25 min talk + 5 min Q&A) + Tea Break (30 min)	Invited Talks	Abhishek Chatterjee Jithin Abrahams Soumya Mukhopadhyay	Impact of model resolution on the Indian Ocean simulation: an operational ocean perspective. <a href="#">Presentation</a> Tide-induced internal gravity waves in the Bay of Bengal Observation and Numerical Modelling <a href="#">Presentation</a> Prolonged La Niña events and the associated heat distribution in the tropical Indian Ocean <a href="#">Presentation</a>
1200-1300 hrs (17 min talk + 3 min Q&A)	Contributed talks	Saraswathi Sabu Midhila Varan Athulya K.	Pathway of ASHW intrusion into Bay of Bengal and its interannual variability <a href="#">Presentation</a> Mesoscale eddies in the Eastern Arabian Sea <a href="#">Presentation</a> Diurnal Variability in Air-Sea Interactions Induced by the Land Breeze in the Bay of Bengal During Summer <a href="#">Presentation</a>
<b>1300-1400 hrs</b>	<b>Lunch Break</b>		
1400-1700 hrs (25 min talk + 5 min Q&A) + Tea Break (30 min)	Invited Talks	Sudheer Joseph Sandhya K G Harikumar R. Shubham Krishna Nur Hidayah Abdulla	Blue Energy: Prospects and Challenges- Global & Indian Scenario <a href="#">Presentation</a> Development of Small Vessel Advisory Services for the Indian Coast <a href="#">Presentation</a> Studies and services on oceanographic and marine met features and processes in the Indian Ocean for Industry-demanded ocean consultancy projects/services: a boost to blue economy <a href="#">Presentation</a> Cascading and Multi-Stressor Effects in Coastal Ecosystems <a href="#">Presentation</a> Leveraging the Blue Economy for Sustainable Growth and Ocean Health in Malaysia: The Role of Higher Education
<b>Day-4</b>	<b>12<sup>th</sup> December (Thursday)</b>		
0915-1000 hrs	Lead Talk	V. V. S. S. Sarma	Status of biogeochemical models for Indian Ocean: A way forward <a href="#">Presentation</a>
1000-1300 hrs (25 min talk)	Invited Talks	Vinu Valsala	Predicting the climate variability of small pelagic Fishery of Indian West coast using Dynamic Modelling of Fishery



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			Population <a href="#">Presentation</a>
		Sandip Mukhopadhyay	Biogeochemical dynamics and fluxes in the estuaries of the Sundarbans <a href="#">Presentation</a>
		Aneesh Lotlikar	Remote Sensing of HABs with an emphasis on Noctiluca <a href="#">Presentation</a>
		AnuGopinath	Anthropogenic stressors and the ecosystem health of Coral reefs of Lakshadweep - Inter - island variability <a href="#">Presentation</a>
		Kunal Chakraborty	Indian Ocean Acidification: Development of societally relevant predictions and projections <a href="#">Presentation</a>
<b>1300-1400 hrs</b>	<b>Lunch Break</b>		
1400-1700 hrs  (17 min talk + 3 min Q&A) + Tea Break (30 min)	Contributed talks	Apurva Joshi	Development of a ML-based Surface Total Alkalinity Data Product for the North Indian Ocean <a href="#">Presentation</a>
		Prasanna Kanti Ghoshal	Use of an advanced machine learning algorithm to improve a bio-physical model-simulated surface pCO <sub>2</sub> : A Hybrid Approach <a href="#">Presentation</a>
		Sankirna Joge	Dimethyl Sulfide (DMS) predictions using the machine learning model <a href="#">Presentation</a>
		Jhinook Mitra	Is the natural fish population of the Indian Sundarbans stressed? : A comparative account of five species in relation to environmental variables <a href="#">Presentation</a>
		Oluwadunsin Samuel	geochemical concentration of the heavy metals in Ayetoro, Coastal Area of Ondo State, Nigeria.
		Rupam Kalita	Evaluating the sensitivity of the Carbon-Based Productivity Model (CbPM) in the Arabian Sea <a href="#">Presentation</a>
		Sridevi Bobbili	Towards Improving Model Simulations: A New Climatology of the Nitracline Depth in the Bay of Bengal <a href="#">Presentation</a>
<b>Day-5</b>	<b>13 December (Friday)</b>		
0915-1000 hrs  (25 min talk + 5 min Q&A) + Tea Break (30 min)	Lead Talk	Gnanaseelan C.	Gnanaseelan (Lead) (MC) 13 <sup>th</sup> How predictable is Indian Ocean up to a decade in advance <a href="#">Presentation</a>
	Invited talks	Nidheesh A G	Global-to-local sea-level change: A climate perspective <a href="#">Presentation</a>
		Bajish C. C.	Understanding the Unprecedented Shift in Weddell Sea Maximum Sea Ice Extent in 2023 <a href="#">Presentation</a>
1130-1310 hrs  (17 min talk + 3 min Q&A)	Contributed talks	Clea Welch	Subsurface manifestation of MHWs in the South West Indian Ocean <a href="#">Presentation</a>
		Athul C. K	A Machine Learning Framework for predicting daily-averaged sea level anomaly and surface currents with a lead time of 7 days
		Arya Rajan	Machine Learning integrated Ensemble Kalman Filter Data Assimilation Algorithm for real-time Sea Surface Temperature Prediction <a href="#">Presentation</a>



Indian National Centre for Ocean Information Services (INCOIS)

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		Tallulah Graziani	Evaluation of the trends in temperature in the tropical Indian Ocean
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