India-EU Workshop on Marine Primary Production

12th -15th March 2013
Cochin
Co-organized with
KERALA UNIVERSITY OF FISHERIES AND OCEAN STUDIES (KUFOS), PANANGAD, COCHIN

Agenda

Venue: KUFOS Auditorium, Panangad, Cochin – 682 506.

Tuesday 12th March 2013 – Morning session

9.00 am - Registration

9.30 am	WELCOME – **Dr. Ajith Joseph. K,** Director, NERCI & **Prof. Ola. M. Johannessen**, Chairman, Steering committee, INDO-MARECLIM
9.40 – 9.50 am	Presidential address – **Prof. B. Madhusoodana Kurup,** Vice-Chancellor, KUFOS, Kochi.
9.50 – 10.05 am	**INAUGURATION** **Dr. V. N. Sanjeevan,** Director, Centre for Marine Living Resources & Ecology (CMLRE), Cochin Presentation on " MSY estimation from satellite based Chlorophyll estimates".
10.05 – 10.15 am	Felicitations Dr. C. Mohanakumaran Nair, Pro-Vice Chancellor, KUFOS
10.15 – 10.25 am	**Prof. N. R. Menon,** Co-ordinator, INDO-MARECLIM & **Lasse H. Pettersson,** Deputy Co-ordinator, INDO-MARECLIM Overview of the EU project INDO-MARECLIM
10.25 – 10.40 am	**Prof. Trevor Platt,** Executive Director, POGO,PML,UK & **Prof. N. R. Menon**, Co-ordinator, INDO-MARECLIM Introduction to the Workshop
10.40 – 10.45 am	Vote of thanks **Dr. Nandini Menon. N**
10.45 – 11.15 am	*TEA BREAK*

This event is supported by the European Commission via the Seventh Framework programme (INCO-LAB)

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11.15 – 11.30 am	**Prof. B. Madhusoodana Kurup**, Vice Chancellor, KUFOS Presentation on "Biofloc technology in shrimp aquaculture"
11.30 – 12.15 pm	Lecture: **Prof. N.R. Menon,** NERCI Indian seas – an ecological approach
12.15 – 1.00 pm	Lecture: **Dr. G.V.M. Gupta**, CMLRE Biogeochemistry of estuarine and coastal regions of southeastern Arabian Sea
1.00 – 2.00 pm	*LUNCH BREAK*
2.00 – 3.00 pm	Lecture: **Dr. Shubha Sathyendranath**, PML The bio-optical controls on primary production
3.00 – 3.30 pm	**Prof. Harilal. B. Menon**, Goa University Variability of case II water optical properties and associated remote sensing reflectance - implications to optical remote sensing of pri. Productivity
3.30-4.00 pm	*TEA BREAK*

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4.00 – 6.00 pm	*Presentations by participants on status of their primary production programmes (why, where and how often). Each presentation to be no more than fifteen minutes duration. Shiva Kumar Magada : Development of primary productivity index scale and model for ocean waters off Karnataka coast Thangaradjou Thirunavukarasu: Work plan for primary productivity and pCO2 measurements along the Tamilnadu coast Iva Talaber: Phytoplankton primary production and scales of variability in the photosynthetic parameters in a shallow coastal sea (Gulf of Trieste, Adriatic sea). Anilkumar Vijayan: Methods of estimation of primary production-comparison and assessment. Mini Raman: Estimation of euphotic zone primary production from Indian ocean colour satellites Mira Morovic: Remote sensing data and products versus in-situ data in the Middle Adriatic Sea Annette Samuelsen: Intercomparison between modelled and satellite based primary production in the Arctic.

* Setting the stage for the focussed working groups

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Wednesday 13th March 2013 – Morning session

9.30 – 10.30 am	Lecture: **Dr. K. H. Rao**, NRSC The sources of ocean colour data for Indian waters, and some applications.
10.30 – 11.30 am	Lecture: **Prof. Trevor Platt,** PML Regional estimation of Primary Production
11.30 – 12.00 pm	*TEA BREAK*
12.00 – 1.00 pm	Lecture: **Dr. Heather Bouman**, Oxford University Community Structure and Primary Production
1.00 – 2.00 pm	*LUNCH BREAK*
2.00 – 4.00 pm	Presentations by participants on status of their primary production programmes (why, where and how often). Each presentation to be no more than fifteen minutes duration. V.V.S.S. Sharma: Importance of episodic events on marine primary production Shalin Saleem: Chl. a and associated physical processes in the Arabian sea Manjira Roy: Interannual variability of chlorophyll concentration in the Arabian Sea using GIS Seenivasen Ramasubbu: Investigations on phytoplankton ecology and chl. a concentration in the Gulf of Mannar biosphere reserve, SE coast of India using remote sensing techniques Sanilkumar. M. G: Phytoplankton community composition Daffne C. López-Sandoval: The importance of dissolved primary production in contrasting ecosystems and its relation with cell size and taxonomic affiliation. Elena Garcia-Martin: Applying new O_2 sensors to estimate plankton metabolism: Advantages and disadvantages compared to the standard light/dark incubation method Kalyani Devasena Chikka: Marine biogeochemical cycles of the Indian Ocean using ocean model simulations and data
4.00 – 4.30 pm	*TEA BREAK*

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Wednesday 13th March 2013 – Afternoon session (contd..)

4.30 – 6.15 pm	Presentations by participants on status of their primary production programmes (why, where and how often). Each presentation to be no more than fifteen minutes duration). Ranjith. L: Remote sensing assisted biodynamic forecasting paradigm for Indian Marine Fishery Resources Vijay Kumar: Predicting the seasonal variability of Plankton and Marine Fish Grinson George: Fisheries potential in the EEZ of India - estimation procedures vis-à-vis veracities Zarko Kovac: Different mathematical formalisms for vertical structure of primary production models and relation to light forcing Mohamed Hatha Abdulla: Occurrence of Diatom-diazotrophic cyanobacterial association (DDA) during Trichodesmium bloom in the southeastern Arabian Sea: An addendum to Nitrogen budget S. K. Dash: Ecosystem modelling in the Southwest coast of India – Remote sensing approach Séverine Fournier: Spatio-temporal Coherence between Spaceborne Measurements of Salinity and light Absorption in the Amazon Plume Region

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Thursday 14th March 2013

9.30 – 10.30 am	Lecture: **Dr. Anna Hickman**, Univ. of Southampton Modelling primary production and the need for data
10.30 – 11.00 am	Formulation of Discussion group(s) aiming to find common ground among various programmes in primary production What we are looking for: • To what extent do we have common methodologies in the various programmes on primary production? • What is the spatial and temporal variability of the data coverage (primary production) for Indian waters? • What are the prospects for integration and coordination among them? • What actions might be taken to increase the value added for these data? • What might a national plan look like for assessment of primary production in Indian waters? • What are the potential barriers preventing sharing of data sets among Indian institutions? • How can the Indian data contribute to global estimates of primary production? • How can we (INDO-MARECLIM) help to accelerate progress in this work? Possible outputs: 1. A plan for field survey in support of primary production assessment (Indian waters) using remote sensing. 2. Some commitments to implement the plan.
11.00 – 11.15 am	*TEA BREAK*
11.15- 12.15 pm	Lecture: **Dr. Grinson George,** CMFRI, Cochin Fishery resources and the dynamic chlorophyll field in the coastal waters of India
12.15 – 1.15 pm	Lecture: **Dr. V.V.S.S. Sharma,** NIO, Vishakhapatnam Monsoonal forcing and Biogeochemistry of Indian waters
1.15 – 2.00 pm	*LUNCH BREAK*
2.00 – 3.30 pm	Discussion group activity
3.30 – 4.00 pm	*TEA BREAK*
4.00 – 6.00 PM	Continuation of Discussion group activity

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Friday 15th March 2013

9.30 – 11.00 am	Continuation of Discussion group activity
11.00 – 11.30 am	*TEA BREAK*
11.30 – 1.00pm	Final session of working group activity.
1.00 – 2.00 pm	*LUNCH BREAK*
2.00 – 4.00 pm	Synthesis, conclusions and decision on way forward. Session Chair- **Prof. Dr. N. R. Menon,** Co-ordinator, INDO-MARECLIM & **Lasse. H. Pettersson**, Deputy co-ordinator, INDO-MARECLIM
4.00 – 4.30 pm	Tea and Departure

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