

# Indo-German Workshop on Marine Sciences and Coastal Sustainability

## Agenda



Photo by Ulrich Saint-Paul, ZMT

The picture shows a mangrove reforestation project in India.

# August 20-21, 2018

Leibniz Centre for Tropical Marine Research (ZMT) GmbH  
Fahrenheitstraße 6, 28359 Bremen, Germany

MON 20

- 11:30 Arrival and Sandwich Buffet
- 12:00 – 12:20 Welcome and introduction by ZMT (Hildegard Westphal, Scientific Director)
- 12:20 – 12:45 Welcome (Shri R. Madhan - Indian Counsellor for Science & Technology & Dr. P. Madeswaran - Indian Chair of delegation, Ministry of Earth Sciences, NCCR introducing the Centre for Marine Living Resources and Ecology in Kochi)
- 12:45-13:45 **Session 1 Coastal Zone Biogeochemistry**
- Individual presentations of scientists from India and Germany**  
(Short introduction (*approx. 5 min*) of personal experiences, research interests and collaboration ideas, expectations for future cooperation, ...)
- Proposed topics include:
- Ocean Carbon cycle and Ecosystem variability – Vinu Valsala, IITM
  - Understanding organic carbon in estuaries and Ocean: Microbial mineralization, diversity and response to changing climatic scenario – Lata Gawade, NIO/ZMT
  - Carbon Dynamics and Anthropogenic Stressors in Aquatic Systems – Katrin Premke, IGB
  - Response of the Indian monsoon to global warming and ocean acidification – Henry Wu, ZMT
  - Submarine groundwater discharge: Nutrient transport into coastal waters (Kerala mud-banks) – D.S. Suresh Babu, NCESS
  - Submarine groundwater discharge as a potential resource and pollution pathway to coastal ecosystems – Nils Moosdorf, ZMT
- 13:45 – 14:15 **Session 2 Coastal planning – Part I**
- Individual presentations of scientists from India and Germany**
- Proposed topics include:
- Coastal Vulnerability Mapping and Risk Assessment – R. S. Mahendra (INCOIS)
  - Understanding microbially mediated biogeochemistry in oxygen-deficient marine ecosystems - investigations in the Arabian Sea OMZ – Klaus Jürgens, represented by David Kaiser, IOW
  - Translating sea level change along high-density urban coasts – Rapti Siriwardane & Anna-Katharina Hornidge, ZMT
  - The use of drones in science – Elisa Casella, ZMT
  - Imprint of the agglomeration centre Calcutta on the Bay of Bengal via the rivers Ganges and Hooghly – David Kaiser, IOW
  - Modelling Spatial Interactions in Coastal Habitats – Hauke Reuter, ZMT
  - Governing Land Sea Interaction – Achim Schlüter, ZMT
  - Community perceptions of coastal processes and sea level rise: The case of Lakshadweep, India – Himani Upadhyay, FU Berlin
- 14:15 – 14:45 **Coffee break**

14:45 – 15:15

**Session 2 Coastal planning – Part II**

15:15 – 16:15

**Session 3 Biodiversity/Ecosystem functioning**

**Individual presentations of scientists from India and Germany**

Proposed topics include:

- Address Eutrophication, Acidification: Mesocosm Studies – K.Venkatarama Sharma, NCCR
- Spatial distribution of microbial communities and its drivers in mangrove ecosystems: a multi-strata approach combining remote-sensing, chemical and molecular ecology – Véronique Helfer, ZMT
- Marine microbial diversity in the 'omics era – Christiane Hassenrück, ZMT
- Indo-German Initiatives for accounting coastal aquatic ecosystem services and managing anthropogenic nitrogen – P. Madhwaran, NCCR
- Deep-sea biodiversity studies in the Atlantic and Pacific Oceans – Angelika Brandt, SGN
- Development of traditional agrarian societies in South-Asia under the conditions of climate change and biodiversity preservation actions – Prof. Dr. Harald Kächele – ZALF

16:15 – 16:45

**Coffee break**

16:45 – 17:00

**Presentation on Capacity and Human Resource Development – Janine Reinhard, ZMT**

17:00 – 18:00

**Guided tour through ZMT's MAREE (Marine Experimental Ecology Facility)**

18:00

**Get-together at ZMT (including Dinner)**

**TUE 21**

09:00 – 09:40	<b>Presentation on legal aspects, Nagoya protocol, permits, etc. – Thomas Greiber, BfN</b>
09:40 – 10:00	<b>Presentation on funding possibilities – Martin Goller, IB</b>
10:00 – 10:15	<b>Short Coffee Break</b>
10:15 – 11:15	<b>Discussions in “World Café” - style to identify general topics and “big challenges” for break-up in individual working groups</b>
11:15 – 12:30	<b>Break-up into parallel thematic workshops to address the “big challenges”, e.g.</b> <ul style="list-style-type: none"><li><b>1. Coastal Zone Biogeochemistry</b></li><li><b>2. Coastal Planning</b></li><li><b>3. Biodiversity / Ecosystem functioning</b></li></ul>
12:30 – 13:30	<b>Lunch Buffet</b>
13:30 – 15:00	<b>Parallel thematic workshops (continued)</b>
15:00 – 15:15	<b>Coffee Break</b>
15:15 – 15:45	<b>Presentation of results of individual working groups</b>
15:45 – 16:00	<b>Final remarks</b>
16:00	<b>End of workshop</b>

## List of participants:

### Participants from Indian side:

- Indian Embassy in Berlin, Counsellor for Science & Technology
  - o Shri R. Madhan, Jose Muttathu
- Indian National Centre for Ocean Information Services (INCOIS), Hyderabad
  - o R. S. Mahendra
- National Centre for Coastal Research (NCCR), Chennai
  - o Dr. P. Madeswaran, K.V. Sharma
- National Centre for Earth Science Studies (NCESS), Kerala
  - o Dr. D.S. Suresh Babu
- Indian Institute of Tropical Meteorology (IITM), Pune
  - o Dr. Vinu Valsala

### Participants from German side:

- Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Berlin
  - o Dr. Katrin Premke
- Leibniz Institute of Baltic Sea Research (IOW), Warnemünde
  - o Dr. David Kaiser, Dr. Joachim Kuss
- Leibniz Centre for Agricultural Landscape Research (ZALF), Müncheberg
  - o Prof. Dr. Harald Kächele
- Senckenberg Gesellschaft für Naturforschung (SGN), Frankfurt
  - o Prof. Dr. Angelika Brandt
- Freie Universität Berlin, Disaster Research Unit
  - o Himani Upadhyay
- International Bureau of the Ministry of Education and Research (IB)
  - o Dr. Martin Goller
- Senator for Science, Health and Consumer Protection, Bremen
  - o Dr. Heide Ahrens
- Bremen Overseas Research & Development Association, BORDA e.V.
  - o Alex Viwat Campbell & Alex Wolf
- Federal Agency for Nature Conservation (BfN)
  - o Thomas Greiber

### Participants from Leibniz Centre for Tropical Marine Research (ZMT), Bremen:

- Dr. Elisa Casella
- Dr. Lata Gawade, guest scientist from NIO, Goa
- Dr. Christiane Hassenrück
- Dr. Véronique Helfer
- Prof. Dr. Anna-Katharina Hornidge
- Dr. Nils Moosdorf
- Dr. Janine Reinhard
- Dr. Hauke Reuter
- Dr. Alessio Rovere
- Prof. Dr. Achim Schlüter
- Dr. Rapti Siriwardane
- Dr. Mirta Teichberg
- Prof. Dr. Hildegard Westphal
- Dr. Henry Wu
- Prof. Dr. Martin Zimmer