

IAHR Western-India Young Professionals Network

Our vision and mission

- 1. Knowledge Exchange: Organizing technical talks, research discussions, and panel sessions on hydro-environmental advancements.*
- 2. Professional Growth: Conducting skill-building workshops, mentorship programs, and career guidance initiatives.*
- 3. Networking and Collaboration: Connecting young professionals with industry experts, academia, and policymakers for meaningful discussions and opportunities.*
- 4. Innovation and Research Promotion: Encouraging interdisciplinary research, project collaborations, and contributions to IAHR publications and events.*
- 5. Industry-Academia Linkage: Strengthening partnerships between universities, research institutions, and industry stakeholders in the water and environment sectors.*

Main goals and key objectives

To foster activities which bring together graduate students, young faculty members from universities and young professional engineers in local firms and organizations interested in sharing knowledge and experiences in the field of hydro-environment engineering and research. Foment close links between researchers and practitioners at the local level and at the same time encouraging connections with the wider IAHR community such as through the IAHR world or regional congresses.

The IAHR Western-India YPN will develop some or all of the following activities:

- Research and "state of the art" seminars, discussions or workshops
- Field trips to visit local hydraulic and environmental engineering projects and infrastructure
- Group research projects

- Social networking events to foster closer links between researchers in academia engineers in practice
- Group trips to IAHR symposia, workshops and congresses
- Informal collaborative activities with neighbouring YPNs
- Fundraising efforts to garner support for member participation in IAHR Congresses and other forums
- Twinning with other groups for cultural exchange

Activities during this year

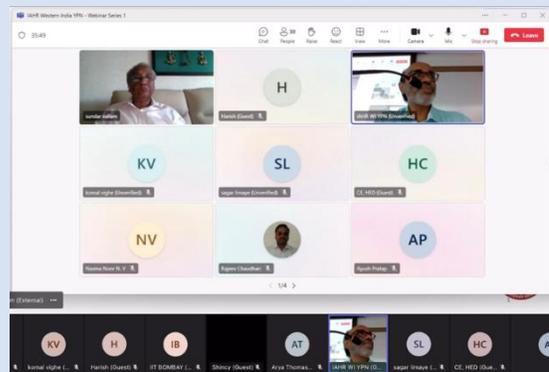
- **Name:** Few Multi-Functional Structures for Blue Economy (Aa an Inaugural event)
- **Date:** 26-03-2025
- **Venue:** IIT Bombay, Mumbai, India.
- **Objectives:**
- **Description:**

Speaker:

Dr. [Sundar Vallam](#) presented on "Few Multi-Functional Structures for the Blue Economy."

Dr. [Hans Bihs](#) delivered a session on "REEF3D - An Open-source Framework for Coastal Modelling."

IAHR Western India YPN! As part of our initiative to foster collaboration and expert discussions, we have introduced a webinar series. The inaugural webinar, titled "Recent Developments in Coastal and Marine Engineering," featured insightful talks by renowned experts Dr. V. Sundar and Dr. Hans Bihs on key topics in coastal engineering, wave hydrodynamics, and computational fluid dynamics.



- **Name:** Understanding when and where coastal wetlands can cost-effectively reduce storm surge damages
- **Date:** 06-06-2025
- **Venue:** IIT Bombay, Mumbai, India.
- **Objectives:**
- **Description:**

👤 **Speaker:** Prof. [Siddharth Narayan](#)

📍 **Assistant Professor, Dept. of Coastal Studies, East Carolina University**

🔗 **Know more about the speaker:**
<https://lnkd.in/dvYfqKHf>

There is a lot of interest in the ability of natural coastal wetlands to serve as a buffer against storm surge and cyclones. However, the effectiveness of wetlands against storm surge flooding depends on several factors, from storm and coastline characteristics to the relative locations of the wetlands and affected properties. In this talk, I will explore storm surge hazard modeling research in our group in collaboration with private industry and conservation NGOs, to quantify when and where wetland, and wetland restoration projects can effectively reduce property damages from storm surges.



- **Name:** Advances in Water Resources (AWaRe) 2025 (Conference)
- **Date:** 10th to 12th June 2025
- **Venue:** [Maulana Azad National Institute of Technology](#) Bhopal
- **Objectives:**
- **Description:** IAHR YPN Activities
Representing our network were Prof. [Eldho T.I.](#), Prof. [Manasa Ranjan Behera](#), Prof. [Ananth W.](#) and Research Scholar [Ayush Pratap.](#)



The IAHR Special Events in AWARE 2025 featured insightful discussions on IAHR and its Young Professionals Networks (YPNs) across India and globally, under the theme “Building a Hydro-Environment Network.”

Prof. Eldho T.I. addressed the gathering on behalf of IAHR–Western India YPN, led by IIT Bombay, highlighting its impact and benefits within the research community. The event was further enriched by the presence and collaboration of Prof. Zulfeqar Ahmed (IAHR–India YPN advisor) and Prof. [Sannasiraj S A](#) (IAHR–Southern India YPN advisor).

A panel discussion and IDEATHON on Water and Environment were also held. Prof. Ananth contributed valuable perspectives on coastal environment and engineering, outlining future research directions along with Prof. [Manish Pandey](#) (IIT Kharagpur), Scientist Umesh Kumar Singh (NIH Roorkee), and Prof. Binit Kumar (MNNIT Allahabad).

As part of our contribution, we also planned and prepared the IAHR–YPN Quiz for the conference participants.



- **Name:** Understanding the Impact of Tropical Cyclones on Coral Reefs in the Great Barrier Reef (Webinar)
- **Date:** 20th August 2025
- **Venue:** IIT Bombay, Mumbai, India
- **Objectives:**
- **Description:**

As part of the IAHR YPN Western India gathering, we had the privilege of attending a talk by Prof. [Ananth W.](#), who shared his pioneering work experience along with a team of multi-disciplinary researchers at [The University of Queensland](#) on how tropical cyclones affect coral reef systems, focusing on the Great Barrier Reef, Australia.

His presentation combined experimental research, field measurements and numerical modeling to explore the complex interactions between extreme weather events and reef health.

Key highlights: Field campaigns capturing real-time changes in reef morphology.

Laboratory experiments simulating cyclone-induced hydrodynamic forces. Long-term impacts of cyclone activity on coral resilience and ecosystem recovery. The need for integrated monitoring and adaptive management strategies..



- **Name: Coastal Development and Its Impact on Marine Environment (Webinar)**
- **Date: 3rd September 2025**
- **Venue: IIT Bombay, Mumbai, India**
- **Objectives:**
- **Description:**
 - 🎤 **Speaker: Dr. Velamala Simhadri Naidu**

Dr. Velamala Simhadri Naidu, Former Senior Principal Scientist at CSIR–National Institute of Oceanography, Mumbai, delivered an insightful seminar on “Coastal Development and Its Impact on Marine Environment.”

Dr. Naidu shared his vast expertise on environmental impact assessments, coastal regulation, effluent disposal modeling and the challenges of balancing infrastructure growth with marine ecosystem sustainability. His career journey ranging from developing the buoyant jet model to training scientists, contributing to CRZ clearances has truly inspired the participants.

The session not only deepened our understanding of the environmental implications of coastal development but also emphasized the importance of responsible and science-based decision-making for a sustainable future.



- **Name: Understanding Futuristic Needs of the Water Sector.**
- **Date: 18th December 2025**
- **Venue: National Institute of Technology, Rourkela**
- **Objectives:**
- **Description:**

“Understanding the Futuristic Needs of the Water Sector,” providing an engaging platform to discuss emerging challenges, evolving skill requirements, interdisciplinary collaboration, and the critical role of young professionals in shaping the future of the water sector.

The session was chaired by Prof. [Soumendhra Nath Kuiry](#) (IIT Madras) and moderated by Dr. [V K Srineash](#) (IIT Bombay), with a special talk by Prof [P K Suresh](#) (MSEC).

The panel featured insightful contributions from:

- Dr. [Naresh Lakku](#) Kumar Goud (IIT Bombay)
- Dr. [Ashutosh Sharma](#) (IIT Roorkee)
- Mr. [Elanchezhiyan. D](#) (IIT Madras)
- Dr. [Bandita Barman](#) (IIT Dhanbad)
- Dr. [Vengadesan Palanimanickam P](#) (IIT Madras).



Partnerships and collaboration

Communication channels

Linked In |

https://www.linkedin.com/company/106917376/admin/?lipi=urn%3Ali%3Apage%3Ad_flagship3_feed%3BkHGTZngySNeqXFStyqwtLQ%3D%3D

Website |

https://www.iahr.org/index/committe?m_id=5121