IAHR Southern-India Young Professionals Network (IAHR SI YPN)

Our vision and mission

The vision of the IAHR Southern-India Young Professional Network (IAHR SI YPN) is to establish a dynamic, inclusive, and forward-thinking platform that empowers young professionals and students to address critical global challenges in water resources and environmental sustainability through innovation, collaboration, and impactful practices. The network seeks to promote interdisciplinary collaboration by creating avenues for professionals from diverse fields, such as hydrology, ocean engineering, and environmental sciences, to come together, share knowledge, and develop integrated solutions for sustainable water management and environmental stewardship. Recognising the importance of continuous growth, IAHR SI YPN is dedicated to supporting professional development through the organisation of workshops, training sessions, webinars, and technical competitions aimed at enhancing technical expertise, leadership capabilities, and career readiness among its members.

In addition, the network prioritises fostering a culture of knowledge sharing by providing a platform for members to present their research findings, engage in meaningful discussions, and gain valuable feedback from seasoned experts, thereby encouraging continuous learning and improvement. IAHR SI YPN is committed to build a robust and supportive network by connecting young professionals with peers, mentors, industry leaders, and academicians, cultivating opportunities for

collaboration, mentorship, and long-term professional relationships. By inspiring innovation and promoting research excellence, the network encourages its members to engage in groundbreaking research, adopt best practices, and contribute significantly to advancements in hydro-environmental sciences and related fields.

Furthermore, IAHR SI YPN actively raises awareness about the importance of sustainability by advocating for environmentally responsible practices, sustainable water management solutions, and the preservation of ecosystems through outreach programs, public engagement initiatives, and awareness campaigns. Through its collective efforts, the network envisions empowering the next generation of professionals and leaders to make meaningful contributions to address pressing water-related and environmental challenges while promoting a sustainable and resilient future for global communities.

Main goals and key objectives

1. **Promote Interdisciplinary Collaboration**
   Facilitate the exchange of ideas and knowledge among professionals from diverse fields such as hydrology, ocean engineering, environmental and data sciences to develop integrated solutions for sustainable water and environmental management.
2. **Support Professional Development**
   Organise workshops, training sessions, webinars, and technical competitions to enhance the technical and professional skills of young professionals and students.
3. **Encourage Knowledge Sharing**
   Provide opportunities for members to present their research, participate in discussions, and receive feedback from experts to foster continuous learning and improvement.

4. **Build a Strong Network**
   Connect young professionals with peers, mentors, industry leaders, and academicians to promote collaboration and mentorship opportunities.
5. **Foster Innovation and Research Excellence**
   Encourage members to engage in cutting-edge research, share best practices, and contribute to advancements in hydro-environmental sciences.
6. **Raise Awareness for Sustainability**
   Promote public awareness and advocacy for sustainable water management and environmental practices through outreach programs and campaigns

Activities during this year

- **Name:** IAHR SI YPN Panel Discussion: ICSOS 2024
- **Date:** September 11, 2024.
- **Venue: IIT Madras, Chennai, India.**
- **Objectives/Theme:** “Bridging the Gap between Ocean Engineering, Hydrology, Water Resources, and Environmental Engineering for a Sustainable Future”
- **Description:**

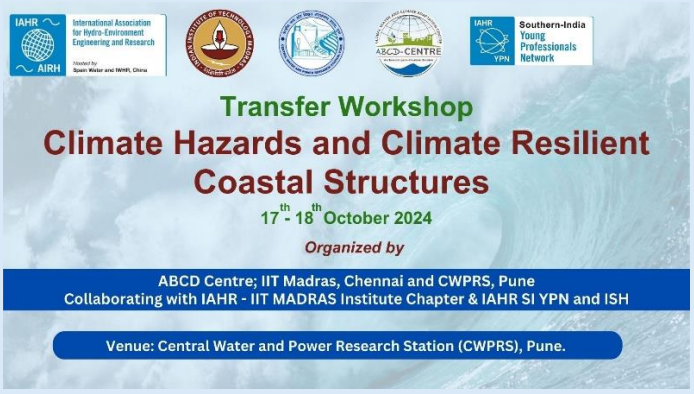
The IAHR Southern-India Young Professionals Network (IAHR SI YPN) successfully hosted its inaugural panel discussion, "Bridging the Gap between Ocean Engineering, Hydrology, Water Resources, and Environmental Engineering for a Sustainable Future," on 11th September 2024 as

part of ICSOS 2024 at IIT Madras. Chaired by Dr. Sreeparvathy Vijay, the session featured esteemed panellists: Dr. Murali Kunasekaran (Danfoss), Mr. Satya Kiran Raju Alluri (NCCR), Ms. Kasthuri Nallayarasu (COWI), and Mr. Sanjeev Kumar K (CWC). The discussion emphasized interdisciplinary collaboration to address climate change and resource management challenges while exploring innovative solutions like nature-based coastal protection and sustainable water strategies. This landmark event attended in-person and virtually, marked the beginning of a movement fostering cross-sector dialogue and solutions for global environmental challenges.

- **Event Budget:** € 500**.**

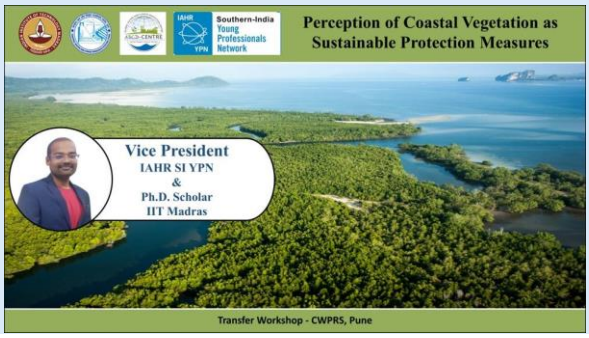
- **Name:** Transfer Workshop
- **Date:** October 17-18, 2024.
- **Venue:** CWPRS Pune, India.
- **Objectives/Theme:** “Climate Hazards and Climate Resilient Coastal Structures”
- **Description:**

The IAHR Southern-India Young Professionals Network (IAHR SI YPN) successfully hosted a Technical Transfer Workshop on "Climate Hazards and Climate Resilient Coastal Structures" on October 17-18, 2024, to address climate change impacts on coastal infrastructure



and explore innovative resilience solutions. Organised in collaboration with IAHR, IIT Madras, ABCD Centre, and CWPRS, the workshop featured distinguished speakers, including Dr. R S Kankara (CWPRS), Prof. S. A. Sannasiraj (IIT Madras), Prof. Dr.-Ing. Holger Schüttrumpf (RWTH Aachen University), Prof. Dr.-Ing. Vallam Sundar (IIT Madras) and Mr. Hari Ram N (Vice President, IAHR SI YPN), shared insights on eco-based solutions, machine learning applications, and engineered strategies for coastal resilience. The event fostered cross-disciplinary dialogue and emphasised collaborative approaches to enhance climate adaptation, leaving participants inspired to implement sustainable and innovative practices in coastal infrastructure development.

Event Budget: € 1000.



- **Name:** IAHR SI YPN Field Visit
- **Date:** October 19, 2024.
- **Venue:** Maharashtra, India.

Objectives/Theme: To provide young professionals with valuable insights into the region's hydrological networks and the engineering solutions that sustain them, while

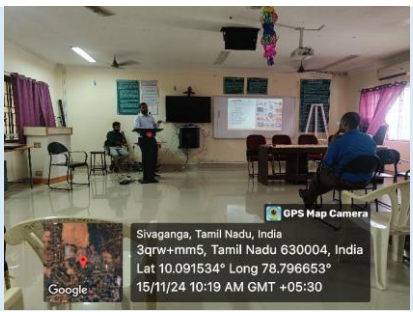
offering hands-on experience in water resource management and infrastructure.

- **Description:**

On October 19, 2024, the IAHR IIT Madras Institute Chapter, IAHR SI YPN, and ABCD Centre organised a technical visit to Maharashtra, providing young professionals with hands-on exposure to water resource management and hydrological engineering. The visit included exploring the Panchaganga region, highlighting watershed management practices sustaining five key rivers, and the Khadakwasla Dam, showcasing its vital role in water distribution and resilience after the 1961 Panshet Dam disaster. The event emphasised integrating sustainable engineering with traditional strategies, equipping participants with practical insights to address climate, urbanisation, and resource challenges, and fostering future leaders in hydro-environment engineering.

Event Budget: € 500.

- **Name:** IAHR SI YPN Young Professionals Lecture Series
- **Date:** November 15, 2024.



- **Venue:** Alagappa Chettiar Government College of Engineering & Technology (ACGCET), Karaikudi, India.
- **Objectives/Theme:** The **IAHR SI YPN Lecture Series** aimed to inspire young minds and foster interest in research, engineering, and coding. This initiative highlighted the importance of engaging students at the grassroots level to nurture the next generation of innovators and leaders in hydro-environmental engineering. Encouraged by its success, **IAHR SI YPN** remains committed to organizing similar events in the future to continue empowering and inspiring young professionals.
- **Description:**

On 15th November 2024, the IAHR Southern-India Young Professionals Network (SI YPN) organised the Young Professionals Lecture Series at Alagappa Chettiar Government College of Engineering & Technology, Karaikudi, to inspire students and foster interest in research, ocean engineering, and interdisciplinary skills. The event featured insightful sessions by IAHR SI YPN leaders—Mr. Sridhar Krishnamoorthy, President, IAHR SI YPN on research methodologies, Mr. Rushikesh Kamble, Secretary, IAHR SI YPN on opportunities in ocean engineering, and Mr. Hari Ram N, Vice President, IAHR SI YPN on the importance of

coding—along with a career development talk by Dr. Selva Ganesa Moorthi A. Supported by faculty from the host institution and guided by Prof. S. A. Sannasiraj, the initiative successfully motivated students to explore academic and professional opportunities in hydro-environmental engineering, reinforcing IAHR SI YPN's mission to empower the next generation of innovators and leaders.

Event Budget: € 300.

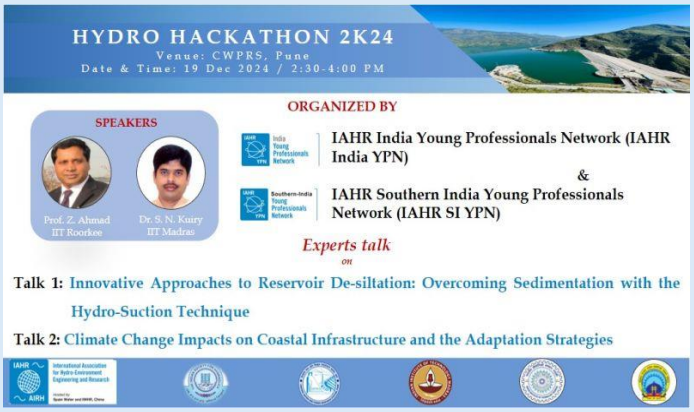
- **Name:** IAHR SI YPN Webinar
- **Date:** November 25, 2024.
- **Venue:** Online.
- **Objectives/Theme:** “Sustainable and Eco-Friendly Engineering Towards Future” (see Towards Future)”
- **Description:**

On November 25, 2024, the IAHR Southern-India Young Professionals Network (SI YPN) and the Department of Ocean Engineering, IIT Madras, hosted the webinar “Sustainable and Eco-Friendly Engineering Towards Future” (SEE Towards Future), focusing on innovative and sustainable engineering solutions for climate

resilience. Esteemed speakers included Prof. M. A. Atmanand, who emphasised the Blue Economy's potential; Prof. Manasa Ranjan Behera, on designing climate-resilient coastal structures; Dr. Sherlin Prem Nishold S, on eco-friendly use of copper slag in coastal defences; and Dr. Arnold van Rooijen, on nature-based solutions for mitigating coastal erosion. Moderated by Mr. Sridhar Krishnamoorthy, President, IAHR SI YPN, the event highlighted actionable strategies for addressing climate change impacts, balancing economic growth with marine conservation, and leveraging sustainable technologies in coastal engineering. The webinar fostered knowledge sharing and inspired attendees to adopt eco-conscious practices, contributing to global sustainability efforts.

- **Event Budge:** Nil.

- **Name:** Hydro Hackthon 2024
- **Date:** December 19, 2024.
- **Venue:** CWPRS, Pune, India.
- **Objectives/Theme:** The Hydro-Hackathon aimed to bring together young professionals, researchers, and students from diverse disciplines to collaboratively address critical water-related challenges through innovation and technical expertise. By fostering problem-



solving, leadership, and teamwork, the event sought to enhance participants' skills in hydraulics, water resources, and coastal engineering.

- **Description:**

The Hydro-Hackathon, organized on December 19, 2024, by the IAHR Southern-India Young Professionals Network (IAHR SI YPN) in collaboration with IAHR India YPN, the Indian Society for Hydraulics, and CWPRS, was a transformative initiative aimed at addressing critical water-related challenges through innovation and collaboration. Held during the prestigious 29th International Conference on Hydraulics, Water Resources, River, and Coastal Engineering (Hydro 2024), the hackathon brought together young professionals, researchers, and students from diverse disciplines to foster sustainable solutions. The event featured impactful technical talks by Prof. Ahmed from IIT Roorkee, who presented on "Innovative Approaches to Reservoir De-siltation Using Hydro-Suction Technique," and Dr. Soumendra Nath Kuiry from IIT Madras, who discussed "Climate Change Impacts on Coastal Infrastructure and Adaptation Strategies." Spearheaded by visionary leaders such as Mr. Hari Ram N, Vice President of IAHR SI YPN, the hackathon showcased the potential of young

professionals to combine technical expertise, creativity, and teamwork to address real-world water resource challenges. With a focus on enhancing technical skills, leadership, and problem-solving abilities, the event successfully promoted innovation, knowledge sharing, and collaboration, empowering the next generation of leaders in water resources and coastal engineering.

Event Budge: € 1000.

- **Name:** IAHR SI YPN Plenary Talk at SCORE 2024
- **Date:** December 24, 2024.
- **Venue:** IIT Madras, India.
- **Objectives/Theme:** “The Importance of Students and Scholars Engagement in International Societies for Enhancing Academic and Professional Growth"
- **Description:**

The *Research Scholars In-house Symposium 2024,* hosted by the Scholars’ Communion of Ocean Research and Engineering (SCORE) at IIT Madras on December 26, 2024, highlighted the importance of collaboration and professional development among students, scholars, and international societies. The event featured a plenary talk by the president, IAHR Southern-

India Young Professionals Network (SI YPN), who is also founder and former chair of SCORE. The talk "The Importance of Students and Scholars Engagement in International Societies for Enhancing Academic and Professional Growth" emphasized how active participation in societies like IAHR SI YPN, Marine Technology Society (MTS), and IEEE can elevate academic and professional trajectories. It also showcased global opportunities, including prestigious scholarships such as the IAHR Research Awards, and the MTS Charles H. Bussmann Graduate Scholarship, alongside major upcoming events like the 41st IAHR World Congress, and MTS AI for Oceans 2025. Faculty advisors and mentors, including Dr. K. Narendran, Prof. S. Nallayarasu, Prof. S. A. Sannasiraj, and Dr. M. A. Atmanand, provided invaluable guidance, reinforcing the event's goal of inspiring young professionals to make meaningful contributions to ocean engineering and hydro-environmental sciences

- **Event Budge:** Nil.

Partnerships and collaboration

The IAHR Southern-India Young Professionals Network (IAHR SI YPN) collaborated and partnered with the following organisations for various impactful events:

- Indian Institute of Technology Madras (IIT Madras), India.
- IAHR IIT Madras Institute Chapter.
- IAHR India YPN.
- The Global Water and Climate Adaptation Centre - ABCD Centre, IIT Madras.
- National Institute of Ocean Technology (NIOT), India.
- National Centre for Coastal Research (NCCR), India.
- Anna University, Chennai, India.
- The Central Water and Power Research Station (CWPRS), Pune, India.
- The Indian Society for Hydraulics (ISH), India.
- Indian Institute of Technology, Roorkee (IIT Roorkee), India.
- Indian Institute of Technology, Kharagpur (IIT Kharagpur), India.
- Indian Institute of Technology, Bombay (IIT Bombay), India.
- Maulana Azad National Institute of Technology (MANIT), India.
- National Institute of Technology Tiruchirappalli (NITT), India.
- Marine Technology Society (MTS) IIT Madras Student Section.
- Marine Technology Society (MTS) India Section.
- IEEE Oceanic Engineering Society (OES) Madras Chapter.
- IEEE Oceanic Engineering Society (OES) IIT Madras Student Branch Chapter.
- IEEE IIT Madras Student Branch.
- Scholars Communion of Ocean Research (SCORE), IIT Madras, India.

Communication channels

Linked In | **IAHR Southern-India Young Professionals Network (IAHR SI YPN)**

Website | https://www.iahr.org/index/committe/146

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