

**INSPIRE
INNOVATE
SUSTAIN**

UN Endorses Oceans 2022



2021 United Nations Decade
of Ocean Science
for Sustainable Development
2030

IEEE
Oceanic
Engineering Society



marine technology
SOCIETY
Opportunity runs deep™



OCEANS
CONFERENCE & EXPOSITION

February 21-24, 2022 | IIT Madras Research Park, Chennai

SPECIAL SESSION - JOIN US

GLOBAL TO LOCAL: **CLIMATE CHANGE SOLUTIONS & THE OCEAN DECADE**

Jointly organised by NOAA (National Oceanic & Atmospheric Administration)

- Keynote Session
- Panel Discussion
- Round Table Q&A

February 22, 2022

05:30 PM - 07:00 PM (IST) | 12.00pm to 13.30pm (GMT)

IN PERSON & VIRTUAL





OCEANS is a bi-annual event for global marine researchers, technologists, engineers, students, and policymakers. The researchers and industrial leaders gather for four days to highlight, discuss and exchange relevant topics and current trends in marine technologies. This will help in creating awareness on advanced research areas, practices, and policies for the marine field. The Marine Technology Society and the IEEE Oceanic Engineering Society have partnered to present the prestigious OCEANS Conference & Exposition (2022), which will draw an audience of more than 1,000 attendees.

The 2022 edition of OCEANS Conference & Exposition will be held as a HYBRID conference, with an option available to attend the conferences physically and virtually, as per your comfort. This decision was taken keeping in view the health and safety of the attendees, amidst the pandemic.

The innovative OCEANS 2022 Chennai program will include technical sessions, invited sessions on specialized topics, plenary sessions, a student poster competition, outreach and media sessions, discussion panels, live feeds, tutorials, student hackathons and exhibits with the following highlights;

- Over 600 professionally reviewed technical papers, including sessions focused on local themes.
- Plenary sessions with leaders from industry, academia, defence forces and the government.
- Exhibitors showcasing the latest innovations in products and services from across the globe.
- A student poster session featuring outstanding projects from around the world and other student activities, including hackathons for student.
- Tutorials, workshops, product demonstrations, government listening sessions, social and networking opportunities, professional field trips etc.

You are cordially invited to the beautiful city of Chennai for lively sessions and discussions on ocean-related issues and to experience the magic of the oceans spanning centuries of maritime history.

SESSION FOCUS

The focus on adaptation signifies a level of urgency that makes concrete actions necessary to protect vulnerable communities. The next ten years of the Ocean Decade will be essential for focusing on developing and scaling up climate solutions, especially in coastal communities.

RECENT DEVELOPMENTS

The Intergovernmental Panel on Climate Change (IPCC) released the first portion of its Sixth Assessment Report on how climate change is altering the planet's natural systems and worsening extreme weather events around the world. Climate Change Adaptation requires the cooperation between engineering, humanities, social and natural sciences to develop adaptive infrastructures, solutions and strategies to mitigate future climate risks and impacts. With this interdisciplinary approach in mind, we can tackle scientific challenges in dialogue with local and international stakeholders.

MOTIVATION

The United Nations Decade of Ocean Science for Sustainable Development 2021-2030 (Ocean Decade) is a unique, ten-year, global cooperative program to expand scientific and industry partnerships to support effective science, ocean management, and sustainable development. The emphasis of this Decade is not science for science's sake, but a dedicated effort around the world to ensure the sustainable development and management of our coastal and ocean regions. One of the fundamental challenges of the Ocean Decade is to “Enhance understanding of the ocean-climate nexus and generate knowledge and solutions to mitigate, adapt, and build resilience to the effects of climate change across all geographies and at all scales”.

Global Climate Change is a well-known fact with a multitude of observable impacts on our environment, our activities and our future. Mitigation and adaptation are the most promising instruments. Making use of state-of-the-art strategies and technologies, we need to focus on adapting to a changing climate by building upon the research competencies of the institutions involved. It explicitly does not ignore the relevance of climate change mitigation and the necessary impacts to the global economy.



COAST

It is unequivocal that human influence has warmed the atmosphere, ocean and land. There is a current focus on these issues through international attention on areas such as: the Blue Economy; changes in the ocean and ice sheets; global sea level rise; livelihoods and infrastructure of coastal communities; sustainable water resources, water supply and water treatment; climate resilient cities and innovative building technologies; societal acceptance and communication of adaptation technologies and strategies; and climate adaptation as a challenge for health. Many of these focus areas are addressed by initiatives that are underway and will continue to develop under the umbrella of the Ocean Decade.

SPECIAL SESSION

In view of the above, a panel discussion is planned during Oceans 2022 with experts in the above specializations. The Coast and Oceans related component can be highlighted and tied to the location of the conference in the coastal city of Chennai. The panel will be useful to write recommendations from Oceans 2022.

THEMES

1. Technological solutions - coastal protection measures.
2. Coastal disaster protection of society and infrastructure- Observation earth system approach modelling prediction sea level rise.
3. Ground level expectations from science and technology from coastal communities; **Think Global- Act Local.**



SESSION OVERVIEW

ORGANISING TEAM

R. Venkatesan (India) | S.A. Sannasiraj (India)
Meredith Kurz (NOAA) | Theresa Keith (NOAA)

TOTAL DURATION: 90 MINUTES

1. Welcome by Dr R Venkatesan
2. Special address by Dr. Vladimir Ryabinin (*Executive Secretary of the Intergovernmental Oceanographic Commission (IOC) of UNESCO & Assistant Director General of UNESCO*)
3. **Motivation:**
Relevance of UN Decade & Climate Change role of technical Societies
Introductory Remarks Mr. Craig McLean, Dr Akhilesh Gupta
4. **Sessions:**
Session A Title: "Climate Change Adaptation; Think Global- Act Local"
Keynote speakers #3 x (4min each)
Session B Title: "Climate Change Adaptation; Technological Solution- Role of Citizen"
Keynote speakers #3 x (4min each)
5. **Round Table**
Introductory remarks(2 min) | Panelists # 4(3 min each)
Round Table Q&A session with Participants
7. Concluding remarks by Speakers - Wrap up
8. Vote of Thanks Dr S.A. Sannasiraj

OCEANS Conference & Exposition 2022 Secretariat
Department of Ocean Engineering
IIT Madras, Chennai - 600036.
info@chennai22.oceansconference.org

Technical Partners



Patrons

