

UDA

UNDERWATER DOMAIN AWARENESS

E-NEWSLETTER - 2025



1ST QUARTER AT A GLANCE

5

Media Features and Mentions

360+

Social Media postings (across platforms)

3

UDA Webinars conducted

15+

UDA Workshops and Interactions

1 Lac+

Social Media Impressions

THOUGHTS FROM THE EDITOR

*“I am pleased to share the **Newsletter for the first Quarter of 2025**. This quarter proved to be incredible for our team in various ways as we did our best to make the concept of UDA more and more mainstream. This quarter, we made significant progress, including participating at the **Asia Economic Dialogue 2025** and launching our **Annual Report**. Our media presence and mentions have surged, reflecting the growing impact of our work. We also welcomed talented **fellows from IIT Bombay**, and we look forward to their research insights in the coming months. Our **UDA Digest e-magazine** also featured thought-provoking articles from domain experts on maritime security and the blue economy. We hope these highlights provide a clear view of our work and the UDA concept we champion.”*

NISHTHA VISHWAKARMA

HEAD OF COMMUNICATION AND
OUTREACH, MARITIME
RESEARCH CENTER

TABLE OF CONTENTS

(Click on the Content to Read)



01 UPDATES & INTERACTIONS



02 UDA WORKSHOPS



03 WEBINARS



04 UDA DIGEST ARTICLES



05 KNOWLEDGE CENTER ARCHIVES



06 PRESS INTERACTIONS



07 MRC VIDEOS



08 INTERNSHIPS & FELLOWSHIPS



09 GET IN TOUCH WITH US



On January 10, 2025, the **Maritime Research Center (MRC)** and the **Military Institute of Technology (MILIT)** signed a **Memorandum of Understanding (MoU)** to enhance the capacity building of Armed Forces officers. This strategic partnership will focus on advanced training and research, equipping officers with the necessary skills to navigate the evolving maritime and defense sectors.

[READ MORE](#)

On February 22, 2025, we participated in the **Asia Economic Dialogue 2025**, hosted by the Pune International Centre, in collaboration with MEA, GoI. During the panel discussion on Blue Economy, Dr. (Cdr.) Arnab Das highlighted the role of UDA, AI, and digital transformation in advancing the Blue Economy.



[READ MORE](#)

[FULL VIDEO](#)



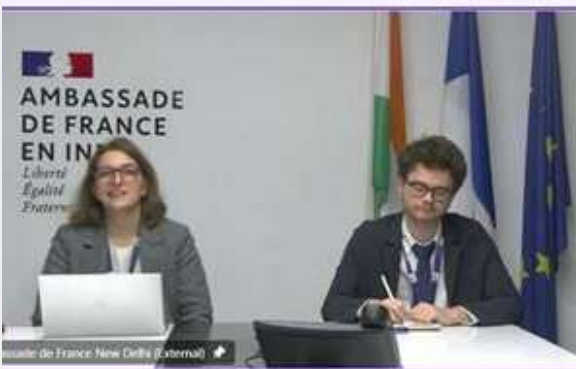
In January 2025, Dr. (Cdr) Arnab Das' research paper was featured in **Indian Council of World Affairs (ICWA)** publication. It highlights the Underwater Domain Awareness (UDA) framework for the Indo-Pacific. In the paper, Dr Das has outlined MRC's three-step strategy—Outreach, Engage, and Sustain—to enhance regional security for the sustainable maritime governance.

[READ MORE](#)

In January 2025, we unveiled our **Annual Report 2024**, highlighting our progress in research, innovation, and sustainability. "As we reflect on 2024, we take great pride in presenting MRC's Annual Report. This transformative year has driven advancements in skilling, research, and strategy for a safe, secure, and sustainable Indo-Pacific," writes Dr. (Cdr) Arnab Das in the Letter that is featured in the Annual Report.



Annual Report 2024

[READ MORE](#)

On January 20, 2025, our team, led by Dr. (Cdr) Arnab Das and our Research & Publication Head Ms. J Cathrine, held a key **meeting with officials from the French Embassy in India**. The discussion focused on the critical importance of submarine cable safety and its intersection with Maritime Domain Awareness (MDA), Underwater Domain Awareness (UDA), and strategic imperatives.

[READ MORE](#)

On January 21, 2025, **MRC hosted Guardinger Advanced Technologies** at the UDA Center, Pune. Dr. (Cdr) Arnab Das presented key research on collision avoidance, underwater noise, sediment management, and the blue economy, while the team demonstrated the SRN model and the APY Tool.

[READ MORE](#)

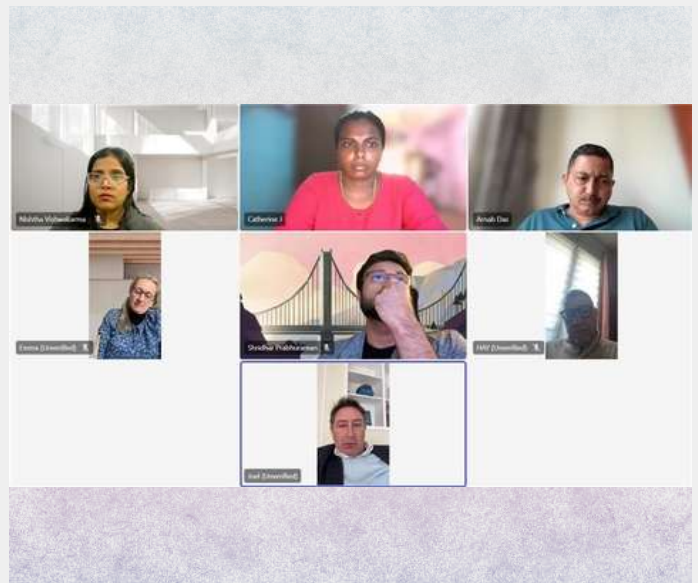


On February 14, 2025, Dr. (Cdr) Arnab Das met **Ms. Nutan Kapoor Mahawar, Additional Secretary at ICWA, New Delhi**, during his Delhi visit. Ms. Nutan presented ICWA's special publication on Maritime Domain Awareness (MDA) in the Indo-Pacific, featuring Dr. Das's research on Underwater Domain Awareness (UDA).

[READ MORE](#)

On February 22, 2025, MRC team, led by Dr. (Cdr) Arnab Das, **hosted Mr. Joel Ruet and team from The Bridge Tank (France)** to discuss the UDA Framework, Blue Economy, Maritime Security, and Climate Change. Our team also highlighted our ongoing skilling programs and MRC's contributions to FICCI's Blue Economy report. This interaction paves the way for Indo-French maritime collaboration and innovative solutions.

[READ MORE](#)

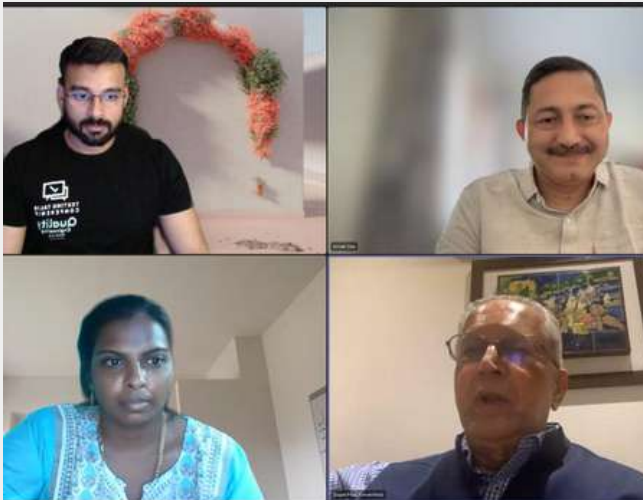


On March 7, 2025, Dr. (Cdr) Arnab Das met **Capt. Kosuga Hiroyuki, Naval Attache at the Embassy of Japan in India**, to discuss UDA. The meeting focused on Underwater Radiated Noise (URN) and Sediment Management for a sustainable maritime environment, strengthening India-Japan maritime cooperation in the Indo-Pacific.

[READ MORE](#)

On March 7, 2025, Dr. (Cdr) Arnab Das met **Col. Emmanuel Peltriaux, Defence Attaché at the French Embassy in India, New Delhi**, to discuss UDA and maritime security, reinforcing India-France cooperation in safeguarding international waters.

[READ MORE](#)

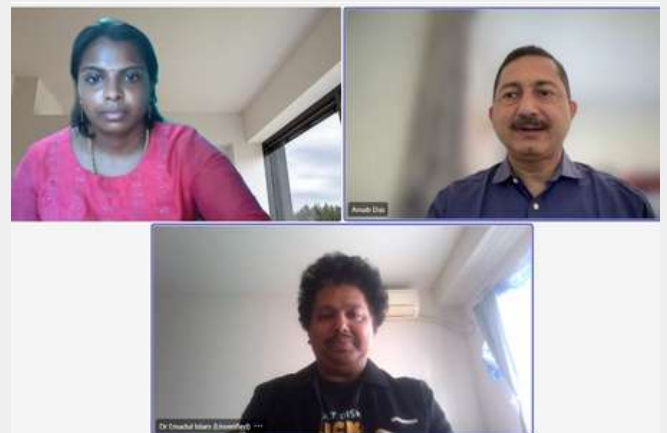


In March 2025, Dr. (Cdr) Arnab Das, along with Mr. Shridhar Prabhuraman and Ms. J Cathrine, met **Mr. Gopal Krishna Pillai, Former Home Secretary, GOI**, to discuss the nuances associated with UDA and maritime security. The meeting explored insights on the UDA Framework and potential collaboration with the Ministry of Home Affairs.

[READ MORE](#)

On March 27, 2025, Dr. (Cdr) Arnab Das and Cathrine J from the MRC team met **Dr. Emadul Islam (Nayan) from the Sasakawa Peace Foundation, Japan**. The discussion centered around UDA-driven collaboration between India and Japan. Key topics discussed were strategic trade routes, SIDS engagement, Northeast India's maritime cooperation, and the 100 Coastal/River Warriors Initiative.

[READ MORE](#)



On January 9, 2025, we were honored to collaborate with the **Military Institute of Technology (MILIT)** for a UDA workshop for the **CAPSTAR officers of the Indian Armed Forces**. The workshop was held at the MILIT premises in Pune, Maharashtra. During his presentation, Dr Das discussed the 'UDA Framework for Safe, Secure, Sustainable Growth for All in the New Global Order'.

[READ MORE](#)

On January 9–10, 2025, at the MILIT premises in Pune, our team **showcased advanced tools addressing Underwater Domain challenges**. CAPSTAR officers of the Indian Armed Forces explored our demo area, which featured posters on Digital Transformation, Sediment Management, Climate Change Risk Management and URN Management.

[READ MORE](#)

On January 10, 2025, **Lt Gen AK Ramesh, Commandant of CME**, visited our demo area during the MILIT event in Pune. During his visit, Dr Das delivered an insightful presentation on critical topics, including UDA, maritime security, the blue economy, marine environment protection, and disaster management.

[READ MORE](#)

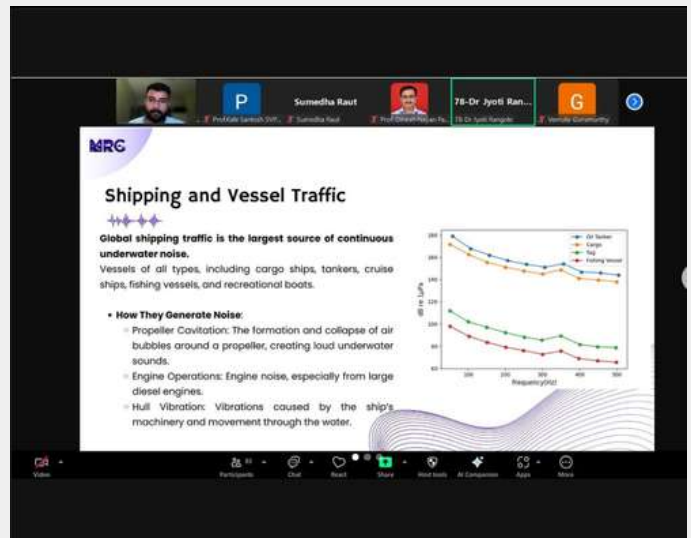


On January 9, 2025, our Deputy Director, **Mr. Shridhar Prabhuraman**, showcased **MRC's Passive Sonar Simulator and SRN models**, which our in-house engineering team has developed. During the demonstrations of the SRN Tool and the Passive Sonar Simulator model, Shridhar emphasised on the nuances and functionality of the tools and how it would benefit the maritime community at large.

[READ MORE](#)

In January 2025, Mr. Shridhar Prabhuraman, delivered an insightful presentation on **"Basics of Underwater Acoustics and Management of Underwater Radiated Noise"** during the 'Next Generation Communication' program organised by the **Electronic and Telecommunication Engineering Department of S.V.P.M's College of Engineering, Pune**.

[READ MORE](#)



On January 29-30, 2025, Dr. (Cdr) Arnab Das participated in the **'National Seminar on Andaman and Nicobar Islands: Multidimensional Perspectives'**, which was organised by the **UGC Centre for Maritime Studies, Pondicherry University**, in collaboration with the **Indian Council of World Affairs and Indian Council for Social Science Research**.

[READ MORE](#)



In February 2025, Dr. (Cdr) Arnab Das led a **UDA Workshop at O.P. Jindal Global University, Sonipat, Haryana**, where he highlighted UDA's four pillars –strategic security, blue economy, climate change risk management, and digital transformation. He also showcased MRC's ongoing research in Marine Spatial Planning, Digital Transformation, and URN Management.

[READ MORE](#)

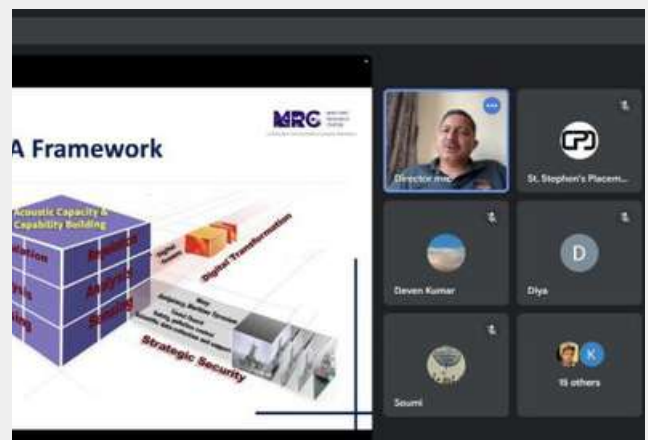


On March 15, 2025, Dr. (Cdr) Arnab Das led a **UDA workshop at South Asian University, New Delhi**, where he highlighted the role of UDA in security, environment, and sustainability. He stressed the need for technology and collaboration to safeguard underwater spaces, sparking insightful discussions.

[READ MORE](#)

On February 19, 2025, MRC conducted an online **UDA workshop for St. Stephen's College, Delhi University**, which was led by Dr. (Cdr) Arnab Das and Ms. J Cathrin. During the workshop, the MRC team covered topics such as geopolitics, submarine navigation, and marine ecosystem impacts.

[READ MORE](#)





On March 3, 2025, Dr. (Cdr.) Arnab Das participated in a webinar on 'UDA in Coastal India', which was conducted by the Centre for Public Policy Research (CPPR). During the webinar, Dr. Das highlighted the importance of local communities, challenges in digital transformation, and the need for technology-driven solutions to enhance maritime security.

READ MORE

FUN FACT ABOUT OCEANS



INDIA-PHILIPPINES MARITIME DIALOGUE

February 22, 2025



MRC MARITIME RESEARCH CENTER
FOUNDATION FOR UNDERWATER DOMAIN AWARENESS



INDIA-PHILIPPINES
75th ANNIVERSARY
1947-2022



NIR TECHNOLOGIES
DHWANI

India-Philippines Maritime Dialogue

A New Perspective Based on the Underwater Domain Awareness (UDA) Framework

📅 26 Feb 2025 at 1530 hrs IST

HOSTS



Dr. (Cdr.) Arnab Das
Founder & Director, MRC



Mr. Praful Talera
MRC's Adviser on Blue Economy



Mrs. J Cathrine
Head of Publications at MRC



Mr. Shridhar Prabhuraman
Deputy Director, MRC

Speakers



Vice Admiral M P Muralidharan (Retd.)
AVSM & Bar, NM
Former DG
Indian Coast Guard



Dr. Shishir Shrotriya
Research and Information System for Developing Countries (RIS)



Prof. Mimi Fabe
National Police College, Philippines



Prof. Sey Santos
Chief (Faculty Section), National Police College, Philippines



Ms. Joan Andrea Toledo
National Police College, Philippines



Dr. Shabana Barua
NKCSEAS, Jindal School of International Affairs






REGISTER NOW



VIEW REPORT

FULL VIDEO



INDIA-PHILIPPINES MARITIME DIALOGUE

Speakers' Presentations | February 22, 2025



Mrs. J Cathrine
Head of Publications at MRC

FULL VIDEO



Dr (Cdr) Arnab Das
Founder and Director of MRC

FULL VIDEO



Mr. Shridhar Prabhuraman
Deputy Director, MRC

FULL VIDEO



Vice Admiral M P Muralidharan
AVSM (Retd) & Bar, Former DG
Indian Coast Guard

FULL VIDEO



Dr. Shishir Shrotriya
Research and Information System for
Developing Countries (RIS)

FULL VIDEO



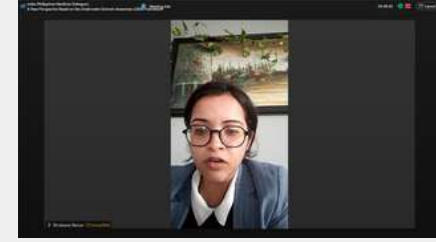
Prof. Mimi Fabe
National Police College, Philippines

FULL VIDEO



Ms. Joan Andrea Toledo
National Police College, Philippines

FULL VIDEO



Dr. Shabana Barua
NKCEAS, Jindal School of International Affairs

FULL VIDEO

DEMONSTRATION OF THE SHIPPING RADIATED NOISE (SRN) TOOL

March 4, 2025



MRC MARITIME RESEARCH CENTER
FOUNDATION FOR UNDERWATER DOMAIN AWARENESS



NIR TECHNOLOGIES
DHVANI

Marine Spatial Planning (MSP) through Indigenous Innovation- A Live Demonstration of the Shipping Radiated Noise (SRN) Tool

📅 04 Mar 2025 at 1600 hrs IST

HOSTS



Dr. (Cdr.) Arnab Das
Managing Director, NDT



Mr. Shridhar Prabhuraman
Head, Innovation, NDT



Mr. Jay Pinjarkar
Project Lead, NDT



Mr. Praful Talera
Blue Economy Advisor,
MRC, Pune



Mrs. J Cathrine
Head, Research &
Publication, MRC, Pune

Speakers



Dr. Purvaja Ramachandran
Director, National Centre for
Sustainable Coastal
Management (NCSM), Chennai



Amb. Anup Kumar Mudgal
Former Indian Diplomat and Blue
Economy Expert



Dr. Tine Usha, Sc G
National Centre for Sustainable
Coastal Management (NCSM),
Chennai



Cmde. Anil J Singh
Vice President, Atlas Electronics



Dr. Shishir Shrottriya
Head, Center for Maritime
Economy & Connectivity



Mr. Ajit Sukumaran
Chief Surveyor, Government of
India









LEARN MORE


via webex



Marine Spatial Planning Digital Tool - Sneak Peek



Marine Spatial Planning



FULL VIDEO

DEMONSTRATION OF THE SHIPPING RADIATED NOISE (SRN) TOOL

Speakers' Presentations | March 4, 2025



FULL VIDEO



FULL VIDEO



FULL VIDEO



FULL VIDEO

INDIA - US STRATEGIC MARITIME PARTNERSHIP

March 19, 2025

MRC MARITIME RESEARCH CENTER
FOUNDATION FOR UNDERWATER DOMAIN AWARENESS

NEAR EAST SOUTH ASIA
Center for Strategic Studies

NIR TECHNOLOGIES
DHWANI

India - US Strategic Maritime Partnership

Approaches both Partners Bring to the Maritime Domain

📅 0800 hrs Washington DC time and 1730 hrs IST on Mar 19, 2025

HOSTS

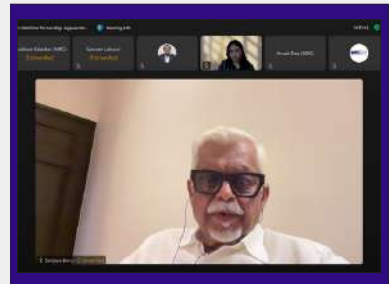
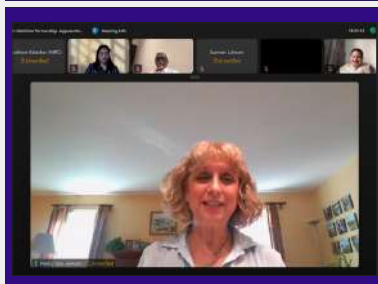
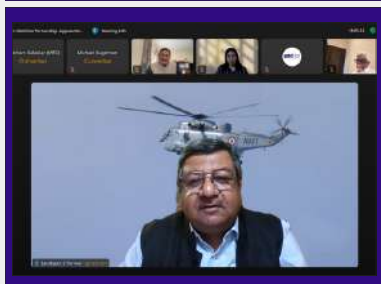
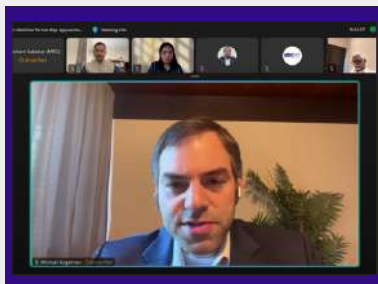
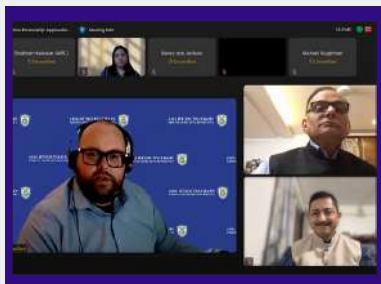
- Dr. (Cdr.) Arnab Das**
Founder & Director, MRC, India
- Mr. Jeffrey Payne**
Assistant Professor (Maritime), NESEA, USA
- Mr. Praful Talera**
MRC's Adviser on Blue Economy

Speakers

- Amb Anup Mudgal**
Former Indian Diplomat and Member of FICCI's Blue Economy Task Force, India
- Ms. Nancy Izzo Jackson**
Senior Advisor, NESEA, USA; Deputy Assistant Secretary (former), Bureau of SCA, Department of State, USA
- Dr. Sanjaya Baru**
Political Commentator and Analyst; Former Secretary General to FICCI, India
- Dr. Sameer P Lalwani**
South Asia Expert at the U.S. Institute of Peace, USA
- Prof. V N Attri**
Chair in Indian Ocean Studies (CIOS), Indian Ocean Rim Association, University of Mauritius
- Mr. Michael Kugelman**
Director of South Asia Institute, Wilson Center, USA
- Capt Sarabjeet Parmar**
Distinguished Fellow, Council for Strategic and Defence Research, India

Webex | **REGISTER NOW** | **YouTube**

LEARN MORE



Read our latest UDA Digest Expert Article
'Japan's Deep Dive: Embracing the Underwater Frontier with Partners and Allies'



By: Geoffrey F. Gresh
Professor of International Relations,
National Defense University, USA



"Securing the underwater domain remains a vast and overwhelming challenge. Japan has set an important example for others to follow, especially as it continues to carry forward its strategic vision for a Free and Open Indo-Pacific."




SWIPE RIGHT

Japan's Deep Dive: Embracing the Underwater Frontier with Partners and Allies

READ MORE

SWIPE RIGHT



DID YOU KNOW?

Sonar systems, initially developed during World War 1 for submarine detection, now play a pivotal role in ocean studies.




Unravelling acoustic challenges in the Indian Ocean Region

READ MORE




Did You Know?
BIOFOULING

is one of the major issues for ships in tropical waters as they cause maintenance problems by rapidly deteriorating the wooden hull below the waterline.





Biofouling in the Indo-Pacific: A Menace to Shipping

READ MORE




Read the latest UDA Digest article on
Shrimp, Pearls and All That Lies: Managing the Blue Economy



Author by  **Scharada Dubey**
Author and Communication Consultant


Shrimp, Pearls and All that Lies: Managing the Blue Economy

READ MORE




Basics of Climate Risks

[READ MORE](#)



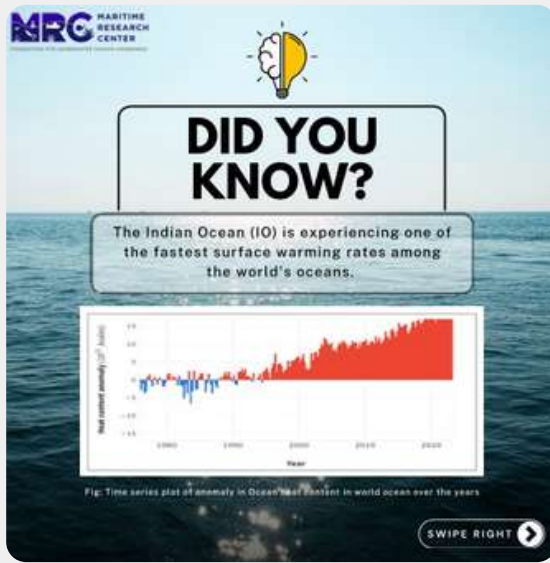
URN Management in Freshwater Systems- Emphasis on Ganga River Dolphins

[READ MORE](#)



Collision avoidance and navigation system using AIS

[READ MORE](#)



Statistical Interface of Climate Change Impact in the Indian Ocean Region

[READ MORE](#)



Dr. (Cdr) Arnab Das on News9: Rising Threats to Undersea Cables & Global Connectivity in February 2025

[TUNE-IN NOW](#)



Dr. (Cdr) Arnab Das on News9: China's Deep Sea Cables on 24th March 2025

[TUNE-IN NOW](#)

Pondicherry University Hosts National Seminar on 'Andaman & Nicobar Islands: Multidimensional Perspectives'



Pondicherry University Hosts National Seminar on 'Andaman & Nicobar Islands: Multidimensional Perspectives'

[READ NOW](#)

Asia Economic Dialogue 2025 Concludes in Pune, Focuses on Economic Resilience Amid Global Fragmentation



Asia Economic Dialogue 2025 Concludes in Pune, Emphasizing Economic Resilience Amid Global Fragmentation

[READ NOW](#)

AED 2025: Sustainable Ocean Management Key to Blue Economy Growth, Say Experts
Dr. Manoj Singh stressed that oceans must be viewed as development spaces rather than just extractive resources.



MEA-PIC Asia Economic Dialogue 2025: Exploring Blue Economy in India's Extended Neighborhood

[READ NOW](#)



Explaining the UDA Framework

WATCH THE VIDEO



Annual Report 2024

WATCH THE VIDEO



Area, Production and Yield (APY) Tool

WATCH THE VIDEO



2024: Year-end Video

WATCH THE VIDEO

**AKASH PRASAD**

IIT Bombay

Climate Change Risk
Assessment

**PRADNYA KUMBHARE**

IIT Bombay

Acoustic Fingerprinting

**MIHIR DARWAN**

MRC Intern

Green Shipping

Contact Information

Address: Maritime Research Center, Koregaon Bhima, Pune, Maharashtra – 412216
Email: director@maritimeresearchcenter.com

Social Connect



Join Us

Internship, Fellowship and Research, Individual Membership, Corporate Membership, Academia Membership.

Map



Maritime Research Center – UDA

Support MRC Initiatives



Support MRC

Checkout our Digital Brochure



Digital Brochure

JOIN US



Individual & Corporate Membership