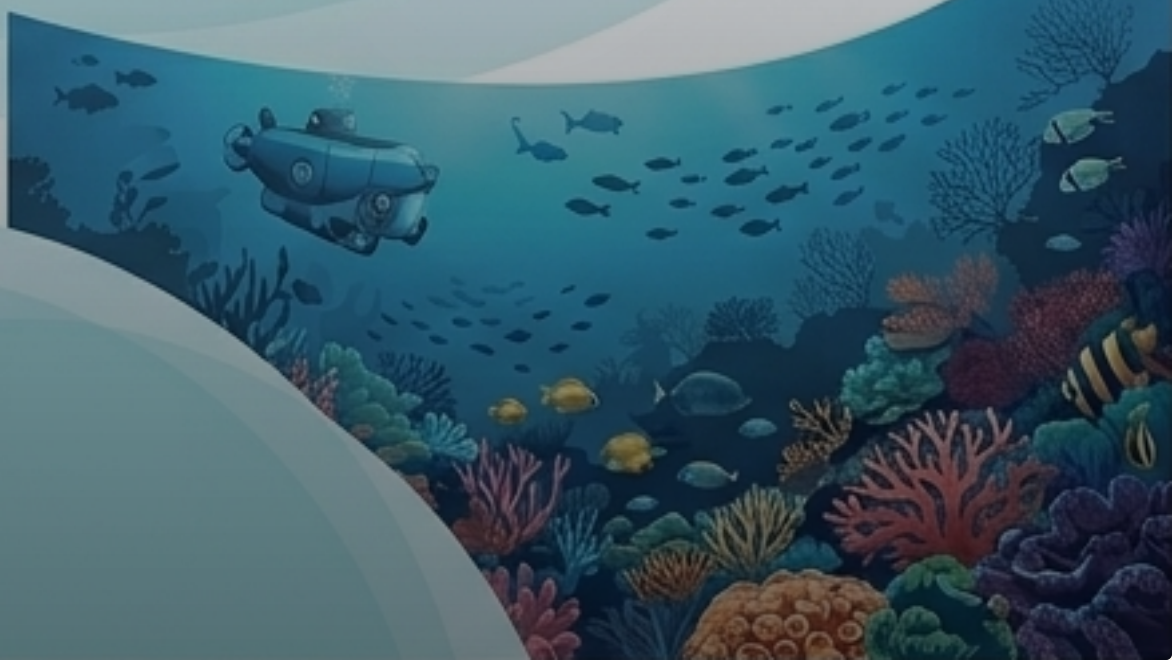




OCEANQUEST

JULY 2026



Message from the Chairman



Dr. Mitrasen BHIKAJEE

CHAIRMAN, MAURITIUS OCEANOGRAPHY INSTITUTE

We are pleased to present this latest edition of OceanQuest, the Mauritius Oceanography Institute (MOI) Biannual Newsletter, marking the revival of a publication that was last issued in 2020. After a period of interruption, we are delighted to reconnect with our valued stakeholders, research partners, collaborators and the wider public through this important platform for sharing knowledge, achievements and developments in ocean science.

The ocean has always been at the heart of Mauritius' identity, prosperity and future. As a Large Ocean State, our relationship with the marine environment is both profound and indispensable. The sustainable management of our ocean resources, the protection of marine biodiversity and the advancement of scientific knowledge have never been more critical in the face of climate change, emerging environmental challenges and the growing importance of the blue economy.

The MOI remains steadfast in its mandate to generate scientific knowledge, provide evidence-based advice to policymakers, support sustainable ocean governance and foster innovation in ocean research. Through strategic partnerships with national, regional and international institutions, the Institute continues to contribute to the understanding and conservation of our marine ecosystems while promoting the sustainable use of ocean resources for the benefit of present and future generations.

This newsletter reflects the breadth of the Institute's activities over recent months. It showcases ongoing research projects, scientific discoveries, collaborative initiatives, capacity-building efforts, technological advancements and community outreach programmes. It also highlights the dedication and professionalism of our researchers, technical and administrative staff as well as partners whose commitment continues to strengthen the Institute's contribution to national development.

Science does not exist in isolation. Its greatest value lies in its ability to inform decisions, inspire innovation and engage society. We therefore hope that this publication will not only inform our scientific community and institutional partners but also encourage greater public appreciation of the vital role our oceans play in sustaining life, livelihoods and economic resilience.

As Chairman of the Board, I take this opportunity to express my sincere appreciation to the management, staff, researchers and all our collaborators for their unwavering dedication and resilience. My special thanks go to the Public Relations Officer for putting this publication together. I also extend my gratitude to our stakeholders and partners whose continued confidence and support enable the Institute to fulfil its mission.

May this renewed edition of our newsletter serve as a bridge between science and society, fostering dialogue, collaboration and a shared commitment to safeguarding the rich marine heritage of Mauritius.

I wish you an informative and enjoyable reading.

Preface

Dr. Pierre Edgard Daniel MARIE

DIRECTOR, MAURITIUS OCEANOGRAPHY INSTITUTE

It is my distinct pleasure to welcome you to this renewed edition of the Mauritius Oceanography Institute (MOI) Newsletter. More than a publication, this newsletter reflects our unwavering commitment to keeping the Public at large, policymakers, development partners, and the global scientific community informed of our ongoing efforts to better understand, protect, and sustainably manage our ocean.

Marking our first edition since 2020, this issue arrives at a critical juncture when ocean health has become increasingly central to global discussions on climate resilience, food security, and biodiversity conservation. For Mauritius—a proud Large Ocean State managing an Exclusive Economic Zone of approximately 2.2 million square kilometres—these challenges are not abstract concerns; they are pressing national priorities that directly influence our future prosperity. The Blue Economy is no longer viewed solely as an economic opportunity, but as a strategic national imperative. Realising its full potential depends on our ability to manage marine resources responsibly while safeguarding the fragile ecosystems upon which they depend, with reliable scientific data and long-term environmental monitoring providing the essential foundation for sound policies and informed investment decisions.

As the national institution mandated to undertake oceanographic research, guided by our Strategic Plan 2025–2029, the MOI continues to strengthen its vital role at the science-policy interface. We are actively expanding research in marine biodiversity, ocean acidification, marine biotechnology, ecosystem restoration, operational oceanography, and resource assessments, while simultaneously embracing advanced technologies that enhance our monitoring capabilities across a changing marine environment.

This edition highlights how our scientific knowledge translates directly into practical action across several key fronts. Following the Wakashio incident, our teams have advanced oil spill modelling to bolster national emergency preparedness, while simultaneously investigating the local influences of global climate phenomena like El Niño and conducting pioneering comparative research on ocean acidification spanning from the tropical Indian Ocean to Antarctica. Alongside these initiatives, we remain dedicated to protecting coral reefs and coastal habitats through continuous monitoring and active restoration projects.

Beyond our scientific endeavours, the MOI remains deeply committed to building an ocean-literate society. Our educational outreach, Open Day events, and active participation in National Science Week, World Oceans Day, and Earth Day celebrations reflect our firm belief that protecting our marine heritage is a shared responsibility extending to every citizen. Furthermore, our strong collaborations with government institutions, universities, and international research bodies demonstrate that addressing complex oceanic challenges requires collective action, knowledge exchange, and regional synergy.

Looking ahead, accelerating climate change, marine pollution, and pressure on natural resources demand bold, evidence-based solutions. Yet, these challenges also present remarkable opportunities to develop a sustainable Blue Economy that creates employment, drives innovation, and safeguards the natural capital upon which Mauritius depends.

I extend my deepest gratitude to our dedicated researchers, technical and administrative staff, and collaborators whose professionalism advances the Institute's mission. I invite you to engage with the achievements presented in these pages as we work together to enable Mauritius to realise its vision as a resilient, prosperous, and internationally recognised Large Ocean State.



Navigating the Blue Economy: Exploring the Vital Role of Oceanography and the MOI's Strategic Role Towards its Sustainable Development

The EEZ of the Republic of Mauritius is approximately 2.2 million square kilometres, an area more than one thousand times larger than its land territory. This vast maritime domain presents tremendous opportunities for economic growth, scientific discovery and innovation. At the same time, it places a significant responsibility on the nation to manage its ocean resources sustainably. It is within this context that the Blue Economy has emerged as a national development priority.

What is the Blue Economy?

The Blue Economy is more than the sustainable use of marine resources. It is a new model of development that seeks to generate economic prosperity, employment and social well-being while maintaining the health, resilience and productivity of marine and coastal ecosystems. It encompasses traditional sectors such as fisheries, aquaculture, shipping and coastal tourism, while also embracing emerging opportunities in marine biotechnology, offshore renewable energy, seabed resources, marine ecosystem restoration and ocean data services. However, the Blue Economy cannot succeed without science. Every investment, policy and management decision affecting our ocean must be underpinned by sound scientific knowledge. This is where oceanography assumes a pivotal role.

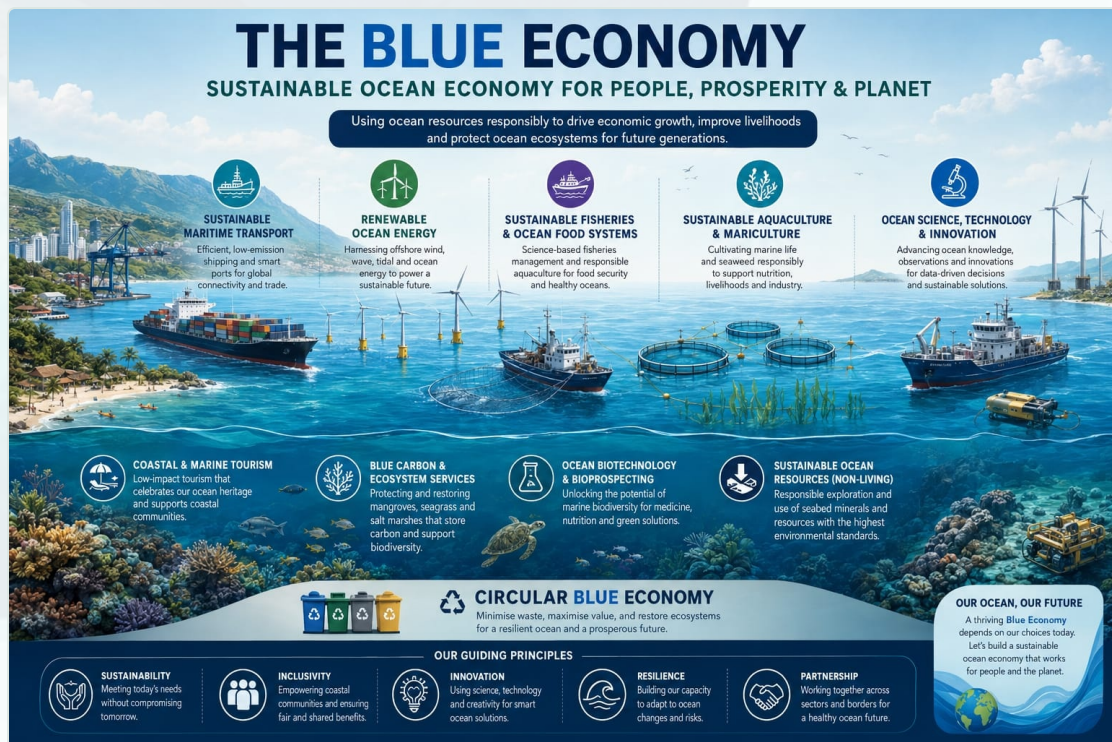
The Role of Oceanography

Oceanography contributes to the Blue Economy by providing the evidence needed for informed decision-making. It enables us to monitor ocean currents, tides, sea-level rise, ocean acidification, marine biodiversity, water quality and ecosystem health. These observations help governments make informed decisions on fisheries management, coastal development, marine spatial planning, climate adaptation and disaster risk reduction. They also support the identification of new economic opportunities while ensuring that marine resources are utilised responsibly and sustainably.

As climate change intensifies, the importance of oceanographic research continues to grow. Rising sea temperatures, coral bleaching, coastal erosion, marine pollution and extreme weather events are increasingly affecting island nations. Continuous ocean observation and long-term environmental monitoring therefore become indispensable for protecting marine ecosystems and strengthening national resilience. Advances in remote sensing, autonomous observing systems, artificial intelligence and ocean data analytics are further transforming the way scientific information is generated and translated into practical solutions for sustainable development.

MOI's Strategic Role in the Blue Economy

MOI has positioned itself as a key scientific institution supporting the Blue Economy agenda. According to its Strategic Plan 2025–2029, the Institute's vision is "to be a regional centre of excellence in oceanographic research, innovation and sustainable development, driving the growth of the Republic of Mauritius as a resilient and prosperous Large Ocean State." Its mission equally reflects this ambition by advancing marine science, fostering sustainable use of marine resources, supporting policy and innovation for the Blue Economy, and promoting public engagement and partnerships.



Four Strategic Objectives

The Strategic Plan identifies four strategic objectives that directly contribute to the Blue Economy. First, MOI seeks to advance ocean research and innovation through deep-sea exploration, marine biodiversity assessment, marine biotechnology, and oceanographic data acquisition. Second, it aims to strengthen marine ecosystem conservation by protecting and restoring coral reefs, assessing climate change impacts and developing innovative approaches to environmental monitoring. Third, MOI is expanding its role in ocean literacy through strategic communication. Finally, the Institute is strengthening partnerships with government agencies, academia, regional organisations and the private sector while enhancing its institutional capacity to become a recognised regional centre of excellence.

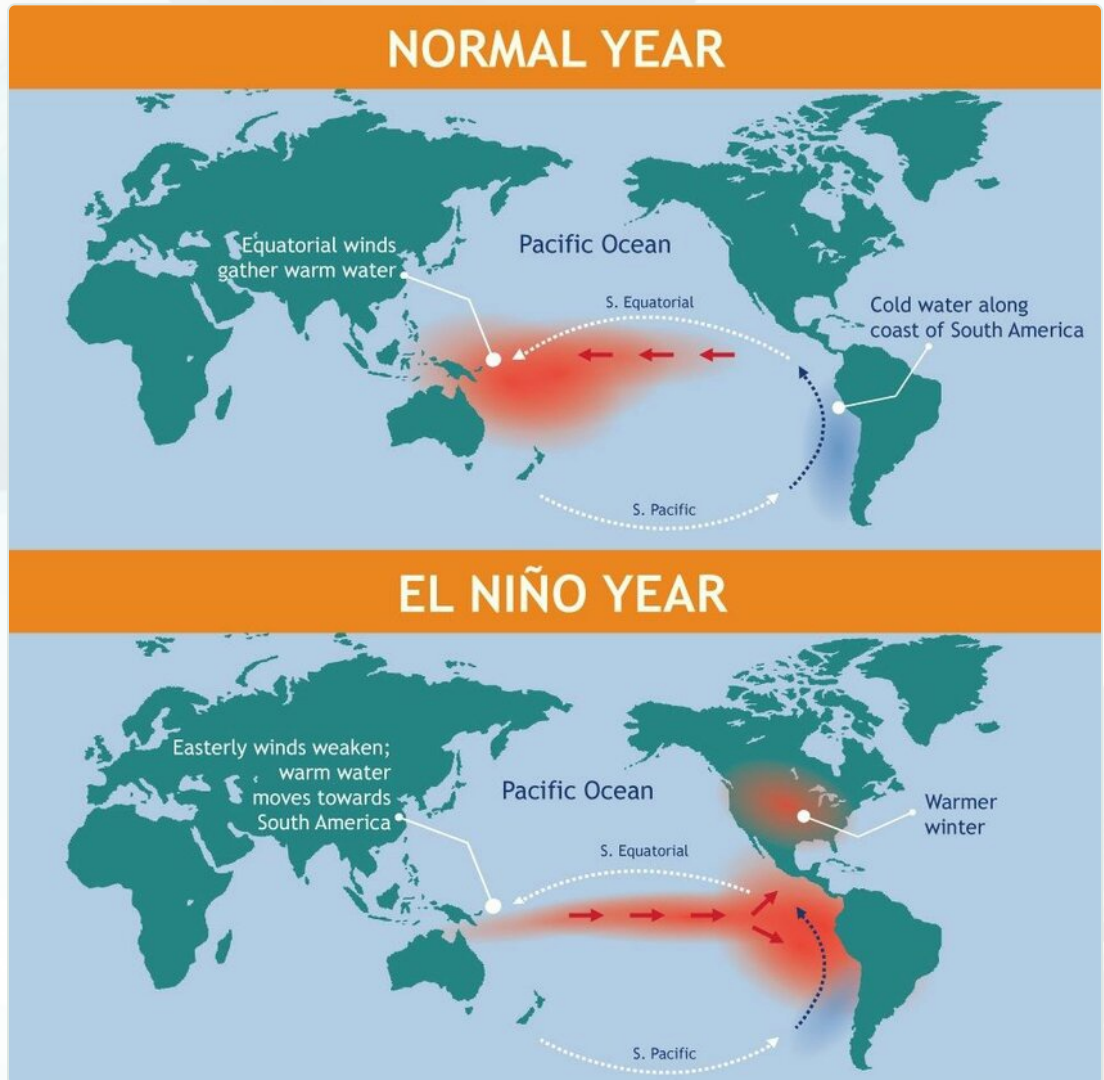
These strategic priorities are already reflected in the Institute's programmes, including long-term ecological monitoring, coral reef restoration, marine biotechnology, marine living resource assessments, marine plastic pollution studies, ocean acidification monitoring, and exploratory oceanographic expeditions. Together, these initiatives generate the scientific knowledge needed to support sustainable ocean governance and unlock Blue Economy opportunities.

Science at the Policy Interface

The success of the Blue Economy depends on science informing policy and investment. As the national oceanographic research institution, the MOI plays a strategic role at the science-policy interface by providing the evidence needed for informed decision-making and the sustainable management of ocean resources.

The Pacific Pulse with a Local Beat: How El Niño Echoes Across the Indian Ocean

To understand how a climate event thousands of kilometers away impacts Mauritian waters, we have to look at how the ocean and the atmosphere work together like a massive planetary engine.



Comparison of atmospheric and ocean surface temperature anomalies during a Normal Year vs. an El Niño Year. Source NOAA

The Engine in "Normal" Times

In a typical year, strong trade winds blow from east to west across the equatorial Pacific Ocean, from South America toward Asia. As these winds skim the surface, they push the sun-warmed top layer of water westward, piling it up around Indonesia.

To replace this displaced water, cold, nutrient-rich water rises from the deep ocean along the coast of South America. This creates a natural balance: **warm water and heavy rain in the west, cool water and dry air in the east.**

What Happens During El Niño?

Every few years, this engine stalls. The trade winds weaken significantly, and sometimes even reverse. That massive pile of warm water trapped near Asia begins to slide backwards, sloshing eastward across the Pacific. The cold upwelling stops, and the entire equatorial Pacific turns into a giant hot spot.

Think of it like moving a giant campfire from one side of a campsite to the exact center — the heat, smoke, and air currents shift for everyone at the site.

The Indian Ocean Echo and Why Baseline Data Matters

For us in the Indian Ocean basin, this global atmospheric shift acts like an invisible thermal blanket. The altered air currents weaken our local winds and cause widespread warming of our own sea surface.

For marine ecosystems already facing rising baselines, these temporary temperature spikes are critical turning points. This is exactly why **collecting baseline data at predicted impact zones** is so vital before the peak of the event arrives — this data allows us to measure the exact stress levels, bleaching impacts, and biological responses of the reef ecosystem rather than just guessing.

However, predicting the exact local impact is rarely a simple copy-paste of the past. Our ocean has its own internal climate engine capable of fighting back, modifying, or entirely shifting the weather narrative.

Next Edition Teaser: The True Regional Wild Card

El Niño has a famous, lesser-known sibling that resides right here in our backyard. It directly influences our sea surface temperatures and local climate, and it can either amplify or completely cancel out El Niño's reach.

Do you know what the Indian Ocean Dipole (IOD) is?

Keep an eye out for our next edition, where we dive deep into this local phenomenon and explore how it acts as the true wild card of our regional climate.

From Crisis to Foresight: Elevating MOI's Oil Spill Modelling in the Wake of Wakashio

When the bulk carrier MV Wakashio ran aground on the coral reefs of Pointe d'Esny on 25 July 2020, Mauritius faced an unprecedented ecological emergency. Following days of relentless battering by heavy ocean swells, the vessel's hull fractured on 6 August, releasing approximately 1,000 metric tonnes of low-sulphur fuel oil directly into our pristine lagoons. The spill immediately threatened some of our island's most biodiverse and sensitive marine sanctuaries, including the Blue Bay Marine Park, the Pointe d'Esny Ramsar wetlands, and the Nature Reserve of Île aux Aigrettes. During this national crisis, rapid data-driven foresight became our primary line of defence.

MOI's Contribution During the Crisis

In the critical hours following the breach, tracking where the toxic slick would drift was paramount to protecting our coastlines. Local response teams and international experts worked urgently to deploy protective containment booms. To optimise these barriers, scientific monitoring was crucial.

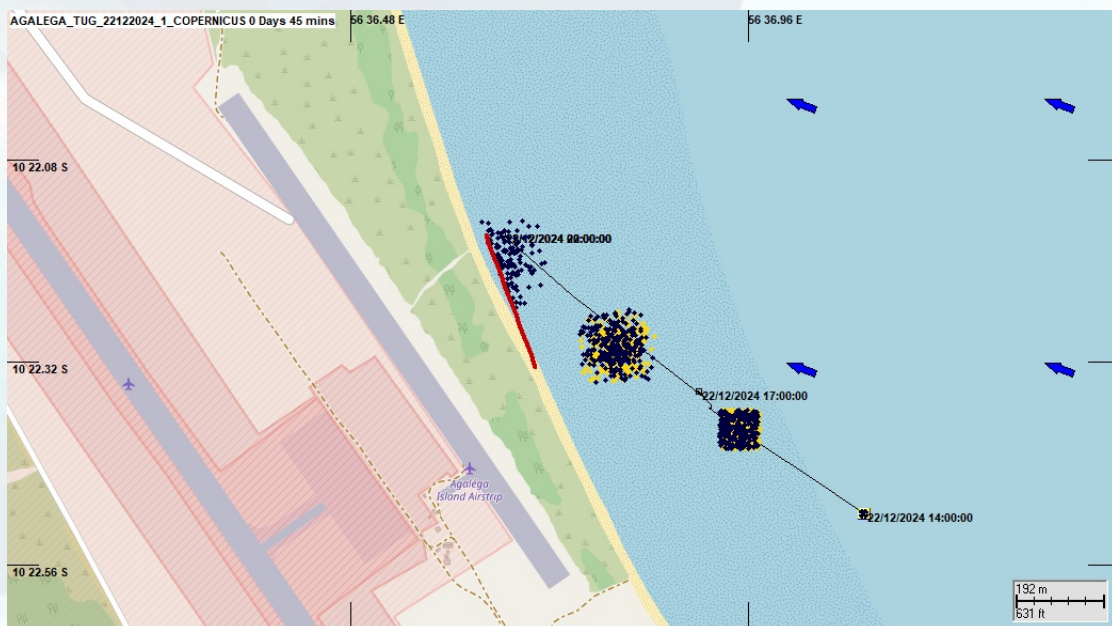
The movement of an oil spill is dictated by a complex, fluid puzzle of wind patterns, wave-induced Stokes drift, tidal movements, and changing lagoon currents. MOI contributed to the national response by providing crucial real-time data to support predictive trajectory models, helping to map the footprint of the impacted zones. Advanced satellite monitoring — such as Sentinel-1 Synthetic Aperture Radar (SAR) imagery — allowed scientists to observe that the spilled oil primarily drifted northwestward over an area of roughly 24 square kilometres. By matching these radar observations with meteorological variables, researchers confirmed that local winds and tides were the driving forces accelerating the spill toward the shoreline.

The Turning Point: Revolutionizing Our Oil Spill Modelling

While immediate clean-up efforts mitigated the worst long-term environmental consequences, the complex coastlines, shallow lagoons, and coral reefs of Mauritius highlighted a glaring need: our standard models needed to be faster, higher-resolution, and perfectly adapted to the distinct hydrodynamic mechanics of our local waters.

In the years following the disaster, MOI fundamentally transformed its operational oceanography toolkit. Today, our forecasting infrastructure has shifted to advanced, dedicated industrial software like the OILMAP system. Instead of relying solely on broad, open-ocean predictions that miss the nuances of our shallow lagoons, the upgraded modelling suite simulates both the physical transport (drift) and the complex 'weathering' of oil — how it evaporates, emulsifies, or sinks over time.

By coupling this advanced software with local data, MOI is now better equipped to predict how an accidental spill will interact with a complex coral barrier reef within minutes of an incident.



Copernicus-derived trajectory model of a simulated oil spill near Agalega Island — particle dispersion tracked from 22 December 2024, 14:00 to 20:00, with the red line marking the estimated coastal impact zone. Output from MOI's upgraded drift-forecasting system.

From Crisis to Capability

This upgraded framework does not just predict the path of a slick; it gives our national emergency teams the precise timeline and spatial resolution needed to intercept environmental threats. From the lessons of the Wakashio, MOI has emerged not just as a monitoring body, but as a proactive guardian of the Western Indian Ocean.

From the Tropics to Antarctica: A Scientific Milestone for MOI



From the tropical shores of Mauritius to the icy expanses of Antarctica, the Mauritian flag stands tall, symbolising unity, resilience and the spirit of exploration.

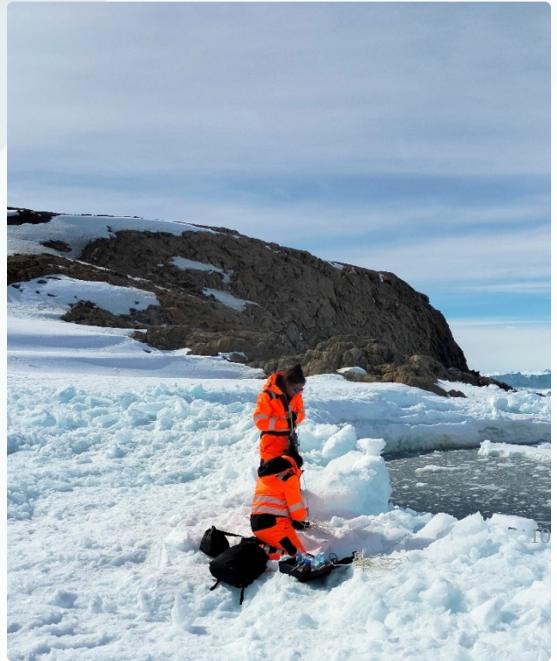
The participation of the Mauritius Oceanography Institute (MOI) in the 43rd Indian Scientific Expedition to Antarctica marked a historic milestone for both the Institute and Mauritius. This achievement was made possible through the collaboration established between the National Centre for Polar and Ocean Research (NCPOR), India and MOI under the framework of the Colombo Security Conclave (CSC). The CSC has strengthened regional cooperation in maritime safety, oceanographic research and scientific capacity building, providing Mauritian scientists with the unique opportunity to contribute to one of the world's most prestigious polar research programmes.

From the tropical waters of Mauritius to the icy landscapes of Antarctica, the expedition presented a rare opportunity to work in one of the planet's most challenging environments. Operating under extreme weather conditions and complex logistical arrangements required meticulous planning, strict safety protocols and close collaboration with the multinational expedition team. Fieldwork was conducted around the Larsemann Hills, including Thala Fjord and Quilty Bay, while laboratory analyses were undertaken at Bharati Research Station. Beyond the scientific work, the expedition fostered valuable exchanges of knowledge and expertise, further strengthening the partnership between MOI and NCPOR and paving the way for future collaborative research in polar and ocean sciences.

The scientific focus of the expedition centred on understanding how carbonate chemistry differs between tropical and polar marine environments through the research project, *From Tropics to Polar Regions: A Comparative Study of Carbonate Chemistry in Mauritius and Antarctica*. Water samples collected during the expedition were analysed for key oceanographic parameters including pH, total alkalinity, dissolved oxygen, salinity, temperature and nutrients. Together, these parameters provide valuable insights into the ocean's ability to absorb and buffer atmospheric carbon dioxide.

Preliminary observations indicate that Antarctic waters exhibit lower pH and reduced total alkalinity than tropical waters, reflecting their naturally lower buffering capacity and greater susceptibility to ocean acidification. These findings contribute to a better understanding of the impacts of climate change on marine ecosystems and establish an important baseline for future comparative studies between the Southern Ocean and the tropical waters surrounding Mauritius. The findings will contribute to a better understanding of ocean acidification across contrasting marine environments while supporting future climate and marine research in Mauritius.

Beyond its scientific achievements, the expedition demonstrated the importance of international collaboration in addressing global environmental challenges. It also marked a significant milestone for Mauritian science with two women scientists forming part of the country's first official scientific expedition to Antarctica. Their participation reflects MOI's commitment to scientific excellence, inclusivity and international engagement while inspiring future generations of Mauritian scientists to pursue careers in ocean and climate research. Through partnerships such as those fostered under the CSC, MOI continues to expand its scientific horizons and strengthen Mauritius' contribution to global ocean science.



Water sampling and in situ measurements at the island.

EVENTS

The MOI and the Rotary Club of Albion Rally for Earth Day 2025, Albion

There is no planet B for us to go to. If we destroy our home, the human race will disappear.

This sobering reminder set the tone for a powerful day of environmental reckoning and resolve. Marking the 55th global Earth Day under the United Nations' banner "Our Power, Our Planet," the MOI joined hands with the Rotary Club of Albion to host the vibrant third edition of "NOU Earth Day".

Held on Saturday 10 May 2025 at the MOI, the event united policymakers, scientists, local communities and the general public under a localised, urgent rallying cry: "Protecting Our Ocean, Securing Our Future."

A Wave of Collective Action

The celebrations were far from just symbolic. The day featured a bustling Open Day and exhibition that transformed the MOI into a hub of eco-innovation. From interactive displays by stakeholder institutions and environmental groups to local entrepreneurs and NGOs like Reef Conservation, the venue buzzed with solutions aimed at fostering deep environmental awareness and ocean conservation.

The ceremony was attended by several high-level government officials, including the Honourable Dr. Arvin Boolell, GOSK, Minister of Agro-Industry, Food Security, Blue Economy and Fisheries; the Honourable Mr. Fabrice David, Junior Minister for the same portfolio; and the Honourable Mr. Ranjiv Wochit, Minister of Local Government. They were joined by Dr. Mitrassen Bhikajee, Chairman of the MOI Board and Mr. Dominique Woomed, President of the Rotary Club of Albion, alongside an array of international and local guests.

Science Meets Strategy: The Island's Ultimatum

- In an inspiring address, Minister Boolell underscored the critical need to bridge the gap between high-level scientific research and grassroots action. He called for unity across all sectors — urging youth, professionals, the public and scientists to stand together against the looming threats of coastal erosion and ocean acidification, while reaffirming Mauritius's fierce commitment to advocating for Small Island Developing States (SIDS) globally.
- Junior Minister Fabrice David spoke on the shared responsibility to protect marine resources, warning of the immediate threats posed by rising sea levels, decreasing fish stocks, coral bleaching, extreme weather events and biodiversity loss.
- Dr. Mitrassen Bhikajee reminded attendees of humanity's absolute dependence on marine ecosystems, noting that the ocean covers two-thirds of the planet and directly regulates global weather, climate, and human survival.
- Mr. Dominique Woomed emphasised that the platform succeeded in "uniting communities around the common goal of protecting the Earth," shifting the public mindset to view our planet as a fragile, shared resource.
- Dr. Daniel Marie, Director of the MOI, showcased the institute's cutting-edge marine conservation projects.

Beyond the Rhetoric: The Albion Ocean Pledge

What truly set "NOU Earth Day 2025" apart was its tangible legacy. The event served as the launchpad for a collaborative ocean pledge, a call-to-action that will see the MOI and the Rotary Club of Albion establish a Marine Conservation Area (MCA) right in Albion, in the near future.

Global Eyes on Local Waters

The ripples of "NOU Earth Day" have been felt far beyond the shores of Albion. The event has resulted in heightened visibility for the MOI and renewed stakeholder engagement. Moving forward, the institute is leveraging the momentum from Earth Day 2025 to advance open dialogues and collaborative programmes with several collaborating partners, including educational and awareness partnerships with the French Embassy aimed at students, scientists and researchers, alongside developmental dialogues with the High Commission of Australia, the High Commission of India, the World Bank and the Commonwealth Climate Finance Access Hub.

As Mauritius looks out at the vast ocean covering two-thirds of our planet — the very engine of our weather, climate and life — the message from Earth Day 2025 is crystal clear: we have the power, and protecting our planet is no longer optional. It is our survival!

Open Day at MOI

Beneath the azure surface of our waters lies the untapped engine of Mauritius' economic future: the Blue Economy. On Friday 8 May 2026, the MOI opened its doors in Albion, transforming its research labs into a high-stakes arena of scientific and ecological innovation. Far from a routine open house, the MOI Open Day, a cornerstone event of the Mauritius Ocean Week, served as a crucial sounding board for how the nation plans to transition from a small island nation into a robust, globally recognised Large Ocean State.

The atmosphere in Albion was charged with possibility as cutting-edge marine research met international policy and private capital.

High-Stakes Diplomacy on the Albion Coast

The true gravity of the event was cemented by a high-level delegation led by the Honourable Gilles Fabrice David, Junior Minister of Agro-Industry, Food Security, Blue Economy and Fisheries. His presence offered a powerful state endorsement of the MOI's strategic role.

Walking the corridors alongside state officials were key representatives from the United Nations Economic Commission for Africa (UNECA) and a group of prominent private sector investors. This unique convergence underscored a critical reality: defending and developing our oceans requires a blend of scientific truth, international backing and commercial enterprise.

Translating Science into Financial Lifelines

During the visit, Junior Minister David and the delegation engaged directly with the MOI's scientific teams, reviewing breakthrough research outputs and interactive exhibits. The message echoing from these discussions was clear: despite immediate operational challenges, the MOI is actively functioning as a pivotal hub capable of attracting the international funding and public-private partnerships (PPPs) necessary to drive the country forward.

By putting actionable scientific data directly into the hands of policymakers and investors, the MOI proved that marine conservation and financial sustainability are not mutually exclusive — they are dependent on one another.

The Road Ahead: Driving the Blue Economy

The MOI Open Day has redefined the public perception of marine research in Mauritius. It is no longer just about tracking tides or cataloguing species; it is about building the foundation for sustainable national wealth.

As Mauritius positions itself on the global stage, the collaboration witnessed in Albion offers a visionary roadmap. By aligning international organisations like UNECA with private investors and local scientific brilliant minds, Mauritius is charting a bold course toward a sustainable, climate-resilient future. The tide is turning and the blue frontier awaits.

Have Your Say:

Can public-private partnerships successfully protect our marine ecosystems while fuelling economic growth, or should the ocean remain strictly under public conservation?

Are you optimistic about Mauritius's future as a Large Ocean State?

What areas of ocean research — such as sustainable fisheries, eco-tourism, or renewable marine energy — should private investors prioritise?

Share your thoughts and join the conversation!

World Oceans Day 2026: Fostering a New Relationship with Our Ocean in Mauritius

The ocean is not merely a backdrop to Mauritian life; it is the very heartbeat of our survival. This profound truth anchored the celebrations for UN World Oceans Day on **Monday 8 June 2026**, where science, culture and community converged at the Institut Français de Maurice (IFM). Co-organised by the Mauritius Oceanography Institute (MOI) and the IFM, the event embraced this year's global theme — "Reimagine: Beyond the world we know, a new relationship with our ocean"—transforming traditional advocacy into an inspiring, forward-looking blueprint for the sustainable stewardship of our vast maritime heritage.

With a remarkable turnout of around 200 passionate participants, the gathering signalled a powerful collective awakening. It proved that safeguarding our blue economy is no longer just the domain of scientists in laboratories — it is a shared national destiny.

A United Front: Policy, Youth and Science

The opening ceremony delivered a series of high-level calls to action, emphasising that the future of Mauritius relies on a unified front.

- Dr. Arvin Boolell, GOSK, Minister of Agro-Industry, Food Security, Blue Economy and Fisheries, delivered a resounding keynote address underlining the Government's commitment to the Blue Economy. He stressed that robust scientific research must drive policy formulation to secure long-term food security and climate resilience through sustainable fisheries and marine conservation.
- "Safeguarding Mauritius' maritime heritage requires fostering a national culture of ocean literacy and empowering the next generation to champion environmental stewardship." Junior Minister Mr. Fabrice David championed the mobilisation of youth. He noted that safeguarding our maritime heritage requires fostering a deep-rooted national culture of ocean literacy, empowering young people to become the ultimate environmental stewards.
- MOI Director Dr. Daniel Marie showcased the technical triumphs of the institute, detailing how ongoing research directly translates into actionable data to protect Mauritian waters.
- Mr. Quentin Biehler, Director of the IFM, celebrated the fusion of cultural and scientific diplomacy, reaffirming the IFM's role as a platform bridging complex scientific knowledge with public consciousness.

Beyond the Lab: Bringing the Deep Sea to the Public

The event successfully dismantled the traditional barriers between academia and civil society. Through interactive displays, MOI research staff brought critical environmental frontiers to life — including marine soundscapes, microplastics monitoring and coral restoration initiatives — alongside dedicated NGOs like the "Savetheblu" Foundation and Coral Garden Conservation.

The atmosphere energised with forward-thinking dialogue during expert-led roundtables. Panels tackled critical regional issues, ranging from defending our Exclusive Economic Zone (EEZ) and securing international development support, to managing connected ecosystems and creating equitable fishing quotas across the Indian Ocean. The screening of the documentary "Cachalots, une histoire de famille" by oceanographer François Sarrano further deepened the audience's emotional connection to Mauritian waters, followed by a live virtual session with producer René Heuzey.

The Vision: A Permanent Platform for the Future

What makes the World Oceans Day 2026 celebrations truly historic is not just what happened on 8 June, but what comes next. Moving far beyond a seasonal commemoration, the MOI and IFM will be officially transitioning their partnership into a permanent, long-term alliance.

By inspiring secondary students, university researchers, the various stakeholders and the youth to seek active roles and internships within marine science, Mauritius is cultivating its next generation of ocean defenders. The message from 2026 is clear: by uniting scientific expertise with public passion, we are not just studying the ocean — we are securing our survival!

Public Outreach, Awareness and Education

Educational Visits

In view of inspiring future scientists, the MOI hosted several educational visits. Designed to bridge classroom learning with practical scientific application, the immersive guided tours and educational visits offered students direct access to our laboratory facilities and interactive sessions with research scientists. Participants explored key concepts in marine science, ocean conservation, and ongoing research initiatives, reinforcing core topics within their academic curriculum while fostering an interest in marine-related careers.

16 Jul 2026 — 60 Grades 11 and 12 Biology students from College Notre Dame

25 Jun 2026 — 15 Grades 3 and 4 science students from College Pierre Poivre de l'Ecole du Centre

29 May 2026 — 50 levels 1–3 science students (Biology, Chemistry, Marine and Environmental Science and Biotechnology) from the University of Mauritius

7 Apr 2026 — Miss Rya Keerodhur, 12-year-old International Baccalaureate student from Le Bocage International

31 Mar 2026 — 10 HSC students from Bel Air SSS

8 Dec 2025 — Lycée des Mascareignes: 25th-anniversary educational activity with ~15 secondary students, including an intertidal activity at the Albion public beach comparing rocky and sandy coastal environments

5 Dec 2025 — 25 course participants from 12 African countries with three Curtin University staff (Australia Awards Africa Program)

28 Nov 2025 — 40 lower-secondary students (aged 13–15), "Biology Exploration Camp" with the Rajiv Gandhi Science Centre

17 Jul 2025 — ~50 students from Bambous SSS Boys

11 Jul 2025 — 50 students from the Foundation Programme of the Adventist College

MOI Participation in National Science Week

CÔTE D'OR — In a vibrant showcase of discovery and innovation, the MOI participated in the National Science Week 2026, anchoring its position as a beacon of the region's oceanographic research, reinforcing its position as a pillar of the Blue Economy. Held from **1 June to 5 June 2026** at the Côte d'Or National Sports Complex, the annual event — organised by the Rajiv Gandhi Science Centre (RGSC) — served as a powerful catalyst to popularise science and technology across the nation.

For five dynamic days, the MOI transformed complex marine research into an inspiring, accessible journey for hundreds of students, educators and members of the public. With Mauritius uniquely positioned to lead sustainable ocean initiatives, the Institute's participation underscored a vital truth: safeguarding our ocean begins with understanding it.

Igniting a Passion for the Blue Frontier

Stepping into the MOI's interactive exhibition booth, the Institute deployed a rich tapestry of engaging displays, marine specimens and captivating short film screenings that brought the island's fragile coastal ecosystems to life.

More than just a display of data, the event was a masterclass in human connection. MOI's dedicated team of scientists and researchers stood at the frontline, actively engaging with the public, answering eager queries and demystifying the sophisticated science behind oceanography. By bridging the gap between high-level research and community awareness, the MOI successfully implemented environmental stewardship in the hearts of the younger generation, inspiring tomorrow's leaders to look to the ocean for their future careers.

A Call to Action: Engaging Our Stakeholders

While inspiring youth remains a core triumph, the MOI's vision extends deeply into collaborative action. The National Science Week provided a fertile ground for networking, sparking fruitful exchanges with fellow scientific institutions and key stakeholders. The challenges facing our marine environments — from climate resilience to sustainable resource management — require a collective, unified response.

Charting the Course Ahead

The overwhelming success of this year's participation perfectly aligns with the MOI's statutory mandate for public engagement and capacity building. As the tides of the Blue Economy rise, the MOI remains committed to charting a sustainable course — inviting every citizen, student and stakeholder to be a part of the journey.

Science, Trust and the Digital Age: The Evolution of Public Sector PR and Communications — The MOI Experience

Public sector communication has changed dramatically over the last two decades. What was once mainly focused on issuing press releases, holding media briefings and publishing annual reports has evolved into a strategic function centred on public engagement, transparency and trust-building.

In today's digital environment, where information travels instantly and misinformation can spread rapidly, public institutions are expected to do much more than simply share news. They must communicate clearly, engage with citizens and maintain confidence in the work they do. This shift has been particularly important for scientific institutions. Science is no longer confined to laboratories and academic journals. Researchers and scientific organisations are increasingly expected to explain complex topics in ways that are easy for the public to understand and relate to.

The growth of social media, digital platforms and citizen journalism has transformed how scientific information is shared, discussed and sometimes challenged. Around the world, scientific institutions are strengthening their online presence and modernising their communication strategies to build public trust, combat misinformation and promote scientific literacy. Global organisations such as UNESCO have championed ocean literacy and science communication initiatives that seek to make scientific knowledge more accessible and actionable for communities and decision-makers alike.

Today, public relations and communications professionals play a much broader role than before. They are no longer simply messengers. Instead, they serve as facilitators of dialogue, helping to connect institutions with communities through transparent, evidence-based communication, visual storytelling and real-time engagement.

Social media has become a powerful tool for raising awareness about important issues such as climate change, biodiversity conservation and ocean sustainability. It also allows scientific institutions to highlight research achievements and demonstrate the impact of their work on society.

The MOI reflects this global transformation!

Established in 2000, the MOI has long been responsible for coordinating and promoting oceanographic research in Mauritius. Beyond its scientific mandate, the Institute has always recognised the importance of sharing knowledge and increasing public understanding of marine science and ocean conservation.

Over the years, the Institute's PR and Communication approach has evolved from a traditional institutional model to a more dynamic and digitally focused strategy. As Mauritius advances its Blue Economy ambitions, the MOI increasingly serves as a vital link between scientific research, policy development and public awareness.

Its growing visibility through media engagement, research publications, public outreach activities and digital communication platforms demonstrates a commitment to ensuring that science reaches a wider audience. The Institute recognises that research delivers its greatest value when it is understood, appreciated and supported by the public.

One of the most significant examples of this commitment is the MOI Ocean Database platform. By providing easier access to oceanographic data, the platform encourages information sharing and supports collaboration among researchers, policymakers, stakeholders and the wider public. The initiative reflects international best practices in transparency, open science and knowledge exchange.

The MOI has also undergone significant transformation in recent years through a renewed research agenda, organisational restructuring and strengthened scientific capacity. Alongside these developments, the Institute has invested in enhancing its public profile and communicating the importance of marine science to national priorities such as climate resilience, biodiversity protection, marine conservation and sustainable ocean resource management.

Looking ahead, the future of public sector PR and Communication will increasingly depend on authenticity, transparency and meaningful engagement. Citizens today seek timely, accurate information from trusted sources. Institutions that can effectively communicate evidence-based science and engage audiences across multiple digital channels will be better equipped to counter misinformation and foster informed communities.

For the MOI, this evolution goes beyond communication itself. It represents a strategic commitment to ensuring that marine science contributes to public understanding, supports national decision-making and inspires greater stewardship of Mauritius' vast ocean territory. In an age where trust has become one of the most valuable public assets, effective PR and Communication are no longer an addition to science. It is an essential part of its impact!

Memorandum of Understandings (MoUs)

MOI Partners with the Mauritius Meteorological Services (MMS) for Seismic and Ocean Research

The MOI, operating under the aegis of the Ministry of Blue Economy, Marine Resources, Fisheries and Shipping, signed a Memorandum of Understanding with the Mauritius Meteorological Services (MMS), under the Ministry of Local Government and Disaster Risk Management, to establish a formal framework for research collaboration.

Signed on 2 September 2024, by the MOI Director Dr. Pierre Edgard Daniel Marie and MMS Acting Director Dr. Prithiviraj Booneeady, the agreement sets out to foster joint research and development in seismology, physical oceanography and ocean-atmosphere interactions.

The primary objective of the MoU is to accelerate Research & Development (R&D) in ocean-atmosphere interaction, promote data-sharing across mutually agreed joint projects as well as facilitate practical application of findings in support of sustainable development. The scope of collaboration includes joint R&D projects, exchange of scientific personnel, technical information sharing, joint seminars/workshops and shared research facilities.

India and Mauritius Seal 5-Year Agreement for Advanced Marine Science & Technology

In a major boost to regional oceanographic research, the Council of Scientific and Industrial Research – National Institute of Oceanography (CSIR-NIO), Goa, India, signed a landmark Memorandum of Understanding with the Mauritius Oceanography Institute (MOI) to advance education, capacity building and research across the Indian Ocean Region.

Executed on 5 September 2025, in Port Louis by Ambassador Janmajaising Bissoondoyal, Secretary for Foreign Affairs of Mauritius and High Commissioner of India Mr. Anurag Srivastava, the agreement establishes a framework valid for five years with automatic five-year renewals.

The strategic scope of the MoU covers joint exploration of hydrocarbon and seabed minerals in the Exclusive Economic Zone (EEZ) of Mauritius under the coordination of the Department of Continental Shelf, Maritime Zones Administration and Exploration. R&D also covers marine biotech, pharmaceuticals, marine food, numerical modelling and climate-data time-series stations.

Capacity building and vessel training will include long-term doctoral degrees for Mauritian scholars at Indian universities (via CSIR-TWAS fellowships) and post-doctoral research attachments. Mauritian researchers will also receive hands-on training aboard CSIR-NIO oceanographic research vessels. Regarding its implementation, a Joint Working Committee (JWC) and designated coordinators will meet virtually to monitor three-year work programmes.

The MOI and the Shipping Division of the Ministry of Agro-Industry, Food Security, Blue Economy and Fisheries Agree on a Rs. 8.5 Million Marine Fouling Community Assessment

The Ministry of Agro-Industry, Food Security, Blue Economy and Fisheries (Shipping Division) signed a project-specific Memorandum of Understanding with the MOI to evaluate marine fouling communities and detect non-indigenous marine species within the port waters of Mauritius.

Signed on 18 June 2026, by the Permanent Secretary, Mr. Veersingh Boodhna on behalf of the Ministry and the MOI Director Dr. Pierre Edgard Daniel Marie, the agreement mobilises Rs. 8.5 million in Ministry funding toward a four-year scientific initiative.

This project is mandated to deploy specialised settlement plates inside port waters to assess native and introduced marine fouling species, strengthening environmental biosecurity in Mauritian shipping hubs. The Ministry will provide Rs. 8.5 million allocated to a dedicated, audited bank account managed by the MOI. The MOI is tasked with producing comprehensive Technical Reports and audited Financial Reports, whereby bilateral progress meetings will be held at least once every two months.

Meet the Team: The People Shaping MOI

Mrs. Nazli Tegally

CONFIDENTIAL SECRETARY TO THE DIRECTOR

Serving for over a quarter of a century as Confidential Secretary, Mrs. Nazli Tegally is a cornerstone of executive operations at the MOI. Sitting at the strategic intersection of leadership and action, she plays an indispensable role in empowering the Director's Office. As the primary liaison between management and internal and external stakeholders, she ensures seamless communication, rigorous correspondence management as well as high-level operational efficiency.

As a veteran pillar of the Institute's administrative framework, Mrs. Tegally's unwavering dedication and professional excellence directly support the MOI's mission to pioneer marine science, foster knowledge sharing and drive the sustainable management of Mauritius' ocean resources.



A Legacy of Dedication and Vision

Mrs. Tegally's distinguished career in research administration began at the prestigious Mauritius Research and Innovation Council (MRIC) — formerly the Mauritius Research Council (MRC) — before she seized the opportunity to join the MOI as Confidential Secretary. Driven by a deep love for the sea and an innate, insatiable curiosity, she was captivated by the fascinating world of oceanographic research, eager from the very start to explore the boundless opportunities marine science could offer for the institute's growth and national development.

Versatility in Action

Renowned for her exceptional adaptability, Mrs. Tegally has seamlessly collaborated with a diverse succession of Chairpersons, Officers-in-Charge, and Directors (local and international). Navigating various leadership styles and complex, high-stakes environments with grace and poise, she has consistently proven to be an invaluable asset. Though her background is non-scientific, her wealth of experience, sharp insights and continuously expanding knowledge have enabled her to offer wise, trusted guidance to executive leadership throughout her tenure.

“Si pena recherche, pena MOI!”

(Without research, there is no MOI!)

— MRS. TEGALLY, REFLECTING ON THE EVOLUTION OF THE INSTITUTE OVER THE LAST QUARTER-CENTURY

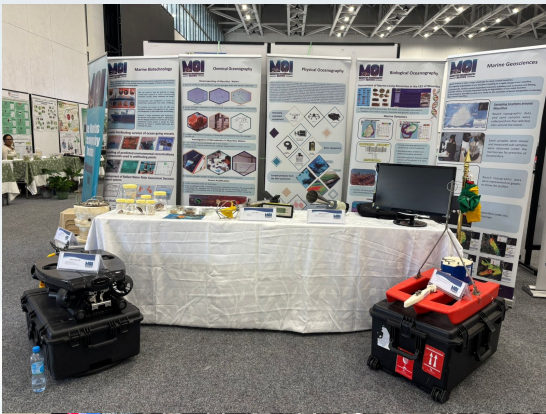
Core Values and Vision for the Future

Reflecting on the institute's extraordinary journey over the past 25 years, Mrs. Tegally strongly believes that MOI's greatest strength lies in its exceptional human capital — a talented team where every member brings unique expertise to the table. Looking ahead, she champions proactive innovation, encouraging researchers to explore bold new ventures and secure external funding to complement state resources.

For Mrs. Tegally, the cornerstone of true organisational progress rests on four timeless pillars: unwavering effort; collaborative team spirit; mutual respect; and organisational integrity.

An Anchor of Institutional Memory

Having joined the MOI in 2000, Mrs. Tegally stands as one of its longest-serving and most revered officers. She embodies the very institutional memory and loyalty that drive national marine research forward. Consistently exceeding the expectations of her role, she also serves as an inspiring exemplar of female empowerment — masterfully balancing a flourishing professional career with a rich, fulfilling family life.



MOI participation of the National Science Week 2026.



Joint celebrations of World Oceans Day 2026 by MOI and IFM.



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