**December 2022** 

## Mélange The eMagazine of IME(I) Members









EVOLVING MARITIME WORLD FOR GREENER & SUSTAINABLE FUTURE



KOSHIYARI

SONOWAL

Director General, Shipping Secretary, Ministry of Ports Shipping and Waterways

DR. MALINI SHANKAR IAS (Retd.) Vice Chancelor Indian Maritime Universit

DOMINGUEZ Marine Environment Div



Dear Readers,

At the onset, I would like to extend a warm welcome to all our esteemed Members and would like to express my gratitude for your overwhelming response to the first edition of iMélange.

Victor Hugo, the French poet, and novelist had prophesied "Nothing is more powerful than an idea whose time has come." iMélange is one such idea and we are thrilled to note that it has hit off well with the readers.

### Editor's Note

Sunil Kumar

Honorary Editor, iMélange

The inaugural issue of iMélange was formally released on the 18th of November 2022 by none other than **Shri. Sarbananda Sonowal**, the Union Cabinet Minister of Ports, Shipping and Waterways and the Cabinet Minister of AYUSH in the Government of India. The dignitaries on the dais included **Dr. Sanjeev Ranjan** – IAS, Secretary – Ministry of Ports, Shipping and Waterways & **Shri. Amitabh Kumar** – IRS, Director General of Shipping. INMARCO 2022 formed the perfect backdrop for the launch of iMélange



.INMARCO 2022 - the flagship quadrennial international maritime conference and exhibition was hosted by The Institute of Marine Engineers (India) Mumbai Branch along with its Navi Mumbai & Gujarat Chapter. It was the eleventh in the series of INMARCOs organised by the IME(I).

His Excellency **Shri Bhagat Singh Koshyari**, Honourable Governor of Maharashtra was the Chief Guest at the inaugural ceremony of INMARCO 2022 which was held from 17th to 19th November 2022 at Hotel Sahara Star, Mumbai. The efforts of the Maritime Sector to reduce the Greenhouse Gas emissions through cooperation with all stakeholders was applicated.

Director General of Shipping in association with IME(I) organized a thematic conference titled 'Green Shipping Conclave' alongside INMARCO 2022. *Mr. Ottar Ostnes*, Director General, Department of Maritime Policy, Norway. *Mr. Arsenio Dominguez*, Director, Marine Environment Division of International Maritime Organisation also graced the mega event which was well participated by all quarters of the maritime industry internationally. Lloyd's Register has been engaged to issue a report on 'Green Shipping Conclave' and we shall keep our readers posted about it.

INMARCO 2022 also had a Students Session which was inaugurated by Shri. Amitabh Kumar which constituted a remarkably interesting Technical Paper Presentations and a unique Model Making Competition. *Dr. Malini Shankar, IAS* (Retd.) & Vice Chancellor - Indian Maritime University was the Chief Guest of Students Session - Panel Discussion on "Just Transition in Maritime Sector".

For the benefit of our readers, we have captured glimpses and defining moments of INMARCO 2022 in this INMARCO special edition of iMélange.

From this edition onwards, we are bringing to you a new experience of reading wherein iMélange can now also be explored as a feature rich *Flip-Mag*. You can *read* articles, *view* albums, *see* videos, *listen* to audios, *share*, comment and *interact* on multiple platforms like *LinkedIn*, *WhatsApp*, *Facebook*, *Twitter*, *Pinterest*, *Instagram & more!* 

It has been rightly said, "A reader lives a thousand lives before he dies". So folks, happy reading and hoping you shimmy shake your way into 2023!

Also, let me remind that members and their loved ones can share their interesting anecdotes, travelogues, celebration of festivities, passion, enriching articles, jokes & trivia, personal achievements, coverage of noteworthy events & conferences, photography, artwork, cartoons, poetries, etc. So, do dash off you inputs to <a href="mailto:editornewsletter@imare.in">editornewsletter@imare.in</a> by 7th Jan'23, for them to be included in our Jan'23 issue.

Happy reading

Skurry reading:



iMélange

eMAGAZINE OF THE INSTITUTE OF MARINE ENGINEERS (INDIA)

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The Mumbai Branch of the Institute of Marine Engineers (India) along with its Navi Mumbai & Gujarat Chapter held its flagship prestigious quadrennial threeday event INMARCO 2022 from 17th to 19th November 2022 at Hotel Sahara Star, Mumbai.



# DGS - INMARCO Green Shipping Conclave

The Theme of the Conference was "Evolving Maritime World for Greener and Sustainable Future" and it also provided for deliberation on all issues presently being faced by the maritime industry. "D.G. Shipping – INMARCO Green Shipping Conclave" was inaugurated by Governor of Maharashtra, His Excellency, Shri. Bhagat Singh Koshyari. He expressed his pleasure that awareness about the environment is gaining momentum in the maritime sector. He was hopeful that the Green Shipping Conclave will act as a catalyst to bring a major shift in the shipping industry towards reduction of Greenhouse Gas emissions. Highlighting climate issues affecting the planet, he called for a balance between development and environment and was confident that the technocrats and the entire maritime sector would do their best to reduce greenhouse gases and protect humanity.

venue **Earlier** at the conference he inaugurated the maritime exhibition where over 40 exhibitors representing Class Ship Societies, Institutes, Training Management Companies, Shipyards, Paint makers, Unions, Logistics & Service Providers, and several other companies displayed their marine related products and services to the industry.

Shri. Vijendra Kumar Jain, President, IME(I) and Shri. Arun Kumar Gupta, Chairman, IME(I) Mumbai Branch extended a warm welcome to all the delegates and the participants.

Introducing the conference Shri. Amitabh Director General of Kumar, Shipping emphasized the importance of environment protection and role the shipping industry can play to help the planet. Theme chosen for the conclave is relevant and topical in the current situation. He assured that the Directorate General of Shipping is making efforts to become paperless, adopting to digitization and are working towards creating ease of doing business for seafarers and other stakeholders.

He also felicitated Mr. Ottar Ostnes, Director General Department of Maritime Policies, Norway and Mr. Arsenio Dominguez, Director, Marine Environment Division, International Maritime Organization (IMO), for gracing the occasion.

Setting the tone for the conference, Shri. Ajith Sukumaran, Chief Surveyor to the Government of India briefly outlined issues currently being discussed at the Marine Environment Protection Committee of IMO and how the Indian maritime sector is preparing to face the challenges.

Four very important sessions were conducted under the Conclave on the opening day, covering:

- 1. Green Fuels for Maritime India and India as a Bunker destination for alternative fuels Chaired by Shri. Vijay Arora, Managing Director, Indian Register of Shipping.
- 2. Construction of Green Ships and Green technological Solutions for existing ships including Carbon Capture Chaired by Shri. Madhu Nair, Chairman & Managing Director, Cochin Shipyard Ltd.



- 3. **Green Ports, Availability of Shore Power and the Green Corridors** Chaired by Shri. Rajeeev Jalota, IAS, Chairman of
  Mumbai Port Authority and Chairman of Indian Ports Association.
- 4. International Co-operation for Green Technology & Green Finance Chaired by Shri. Kumar Sanjay Bariar, Additional Director General of Shipping.

All four sessions were widely discussed, deliberated and debated by the panelists with active participation of the audience. A summary was made by the chair.

**Mr. Arsenio Dominguez,** Director, Marine Environment Division, International Maritime Organization (IMO) speaking on the occasion praised the Indian government's efforts towards green shipping and IME(I) for organizing the Conclave.

Sonowal addressed the participants highlighting progress made in various sectors including in Shipping under the visionary leadership of Prime Minister Shri. Narendra Modi. India's Maritime Sector has a glorious history and has played a very important role in India's economic growth. In the last 8 years, we have focused on port-led development which includes expanding port capacities and infrastructure making port operations more efficient. Transportation by Waterways is being facilitated to ensure Indian products get access to new markets. Our maritime sector has scaled new heights and contributed to the enhancement of global trade. Praising Green Initiatives, he reiterated focus on making shipping industry Carbon Neutral by 2050. He commended Cochin Shipyard for INS Vikrant, as a glorious example for ATMA NIRBHAR BHARAT.

After two days of deliberations, the closing ceremony of INMARCO 2022 saw two sessions of deliberations at the CEO forum and Policy-Maker's forum chaired by Shri. Amitabh Kumar, IRS, DG Shipping and Dr. Sanjeev Ranjan, IAS, Secretary to Government of India, Ministry of Ports, Shipping and Waterways respectively. At these forums it was acknowledged that success to Green Shipping and Green Policy finally rests with the initiative and commitments from those who would translate them at ground level successfully and to a sustainable level. CEOs and Heads of companies agreed that Availability of competitive technologies and affordable financing would be crucial to attain goals of Green Shipping and hoped for governmental support and guidance.

Summing up the entire conclave, Dr. Ranjan said, "There was great learning for all of us and the challenge of Green Shipping holds a hidden opportunity." He emphasized that sustainable development is a way of life in India. He declared proudly that the ground is set, and we are fully prepared and urged all to work together and achieve the goals.





Write-up by : **S. M. Rai** 

#### **INMARCO - 2022**

#### **INAUGURATION & HIGHLIGHTS**





Lamp Lighting ceremony by Shri. Bhagat Singh Koshiyari, Hon. Governor of Maharashtra, Shri. Amitabh Kumar, IRS, D.G. Shipping, Mr. Arun Gupta, Chairman IME(I) Mumbai Br., Mr. Vijendra Jain, President IME(I) & Mr. Rajeev Nayyar, Chairman, INMARCO 2022





Mr. Sunil Kumar, Head Student Committee welcomes Dignitaries & Delegates to INMARCO - 2022



Student Lead welcomes
Dr. Malini Shankar, IAS (Retd.),
Vice-Chancellor of Indian Maritime University



Mr. Ottar OSTNES, Director General, Department of Maritime Policy, Norway is presented with a Memento by Shri. Amitabh Kumar









**INMARCO - 2022** 



### **DEFINING MOMENTS**



Signing of the MoA between The Energy and Resource Institute (TERI) and V. O. Chidambaranar Port Authority (formerly Tuticorin Port Trust), Paradip Port Authority, Deendayal Port Authority and Cochin Shipyard Limited under the leadership of Shri. Sarbananda Sonowal, Dr. Sanjeev Ranjan & Shri. Amitabh Kumar co-supported by Shri. Rajesh Kumar Sinha, Additional Secretary (MoPSW), Dr. T. K Ramachandran - Chairman, V.O. Chidambaranar (VOC) Port Authority, Shri. Sanjay K. Mehta - Chairman, Deendayal Port Authority, Kandla, Shri. P. L Haranadh - Chairman, Paradip Port Authority, Shri. Madhu S Nair - Chairman & Managing Director, Cochin Shipyard Ltd., Dr. Vibha Dhawan - Director General, TERI.





# PANEL DISCUSSION: GREEN FUEL FOR MARITIME INDIA





# PANEL DISCUSSION: GREEN SHIPS & GREEN TECHNOLOGY SOLUTIONS IN INDIA











# PANEL DISCUSSION: GREEN PORTS, SHORE POWER, JIT-GREEN CORRIDOR





# PANEL DISCUSSION: INTERNATIONAL CO-OPERATIONS FOR GREEN TECHNOLOGY & GREEN FINANCE



### D.G. SHIPPING - INMARCO



### **GREEN SHIPPING CONCLAVE**















### **TECHNICAL PAPER COMPETITION**















### **PANEL DISCUSSION**





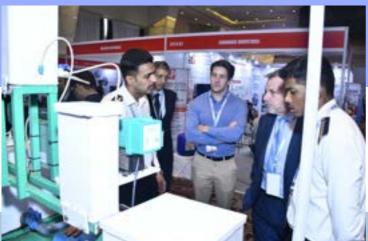






### MODEL MAKING COMPETITION











### **HIGHLIGHTS**



DR. L. K. PANDA **Technical Session** MR. SUNIL KUMAR Title Chairperson Coordinator

Green Initiatives for Ports and Inland/Coastal waterways

Paper Title

Natural Gas as a Sustainable Option for Inland Waterways -Challenges and Opportunities in Mr. Asim Prasad C.G.M. - (GAIL)

Director - CIISL Dr. Niti Nandini Mr. Ranjit Deka

C.M.(Mrktg. Gas) (GAIL)

Chatnani Professor (IIFT)

Dr. Anita Kumar

Renewable Energy Options for Future Greener Seaports

**Dr. S. Thangalakshmi** Faculty – Electrical, School of Marine Engineering and Technology (IMU-Chennai)

Dr. Rajoo Balaji Director (IMU-Chennai)

Green Initiatives in Inland and **Coastal Transportation** 

Mr. Shane Balani Development Manager, South Asia - Lloyd's Register Asia Ms. Shilpa W. Bali Faculty - GEIMS

Green Energy Initiatives at JNPA

Mr. Niteen M Borwankar

Technical Session	MR. C P K KASHYAP	MR. MOHAN PAL SINGH
Title	Chairperson	Coordinator
Alternative Fue	ors	
Paper Title	Authors	
Alternative Fuels and Technologies	<b>Mr. Sudarshan Daga</b> Surveyor I (IRS)	<b>Mr. Karan Doshi</b> Senior Surveyor (IRS)
A Preliminary Analysis	Mr. Somesh Gupta Surveyor I (IRS)	Mr. Dipak Sonawane Senior Surveyor (IRS)
Potential Challenges of Hydrogen as a Fuel for International Maritime Transport	Dr. S. Thangalakshmi Faculty – Electrical, School of Marine Engineering and Technology (IMU-Chennai)	<b>Dr. Rajoo Balaji</b> Director (IMU-CHennai)
The Applicability of Bio Fuel as a Marine Fuel	<b>Mr. Partha Das</b> Regional Operations Manager (Asia) – FOBAS Llovd's Register Asia	





Mr. Shane Balani

MR. ARSENIO **Panel Discussion** MR. P. K. MISHRA **DOMINGUEZ** Coordinator Chairperson

#### INTERNATIONAL DEVELOPMENTS IN MARITIME SECTOR WRT **GHG AND DECARBONISATION**

#### **Panelists**

Mr. Tristan Smith UMAS, UCL

**Ms Astrid Dispert** Project Technical Manager, IMO, (PARTNERSHIPS & PROJECTS)

Mr. Ennarasu Karunesan Advisor to Indian Ports, JNPA, MUMBAI.

Mr. Sachin Kulkarni Head - Marine Power Sales (South Asia) WARTSILA INDIA PVT. LTD.



Identifying and Implementing Green

Corridors in Shipping







### HIGHLIGHTS



MR. RICHARD DE Technical Session VRIES
AREA MANAGER SAMEA, LRS

Chairperson

MR. KARTHIK SEETHARAMAN (IRS)

#### Technological advancements, Digitalization and **Autonomous Ships**

Paper Title Digitalization, Using IoT, real-time

condition monitoring, Big Data and

Mr. Prashant Hinduja Head - Delivery

Mr. Joy Basu

Al for improving vessel efficiency and performance forecasting Smart Ship Hub Digital Pte Ltd.

Mr. Sumithran Renewable Energy Options for Sampath General Manage ClassNK Future Greener Seaports

Mr. Junji Tokunaga Technical staff of Research Institute -ClassNK

How can Technology close the gap between Ship at sea to shore

Mr. Maninder Singh Manager - Digitalization Vedam Design & Manager of Research Institute ClassNK Technical Consultancy Pvt Ltd

**Autonomous and Remotely Operated** Vessels

Mr. R. Srinivas

Authors

Title	Chairperson	Coordinator
Technical Session	CAPT. ASHOK MAHAPATRA UA CONSULTING	MR. SHISHIR KUMAF

#### **Marine Environment and Maritime Safety**

Paper Title Authors Mr. Karan Doshi Fires in cargo areas onboard containerships - An analysis of Senior Surveyor accidents IRS Importance of the concept of Dr. Brijendra K. Saxena Seaworthiness (Ex. Principal Tolani Maritime Institute) Marine Environment- The

challenges of Marine Plastic Litter

**Demystifying Human Factors &** Integrating in Management Systems Ass. Commandant Aman Jugran Indian Coast Guard

Dr (Capt) Suresh Bhardwaj Resident Director & Principal MASSA Maritime Academy Chennai





**Panel Discussion** 

MR. ARUN KUMAR **GUPTA** 

**MEHRA** 

Hall 1 Time: 14:00 - 15.30

Chairperson

Coordinator

MR. SANJEEV

MARITIME POLICIES, DEVELOPMENT OF MARINE INFRASTRUCTURE FOR **INLAND WATERWAYS AND COASTAL SHIPPING** 

Mr. H V Ramesh

Mr. Mahesh Korade Deputy Marine Engineer cum Chief Surveyor, MMB Maharashtra Maritime Board

Capt. Anil Kishor Singh CEO, Adani Hazira Port

Mr. Subhakar Dandapat

Former Chief Engineer(Project & Marine) IWAI, Ahmedabad







### **HIGHLIGHTS**



	MR. N. GIRISH	MR. MAHESH SUBRAMANIAN IMU, CHENNAI
Title	Chairperson	Coordinator

#### Ship building, Product Lifecycle Management and Ship Recycling

raper ritte	Authors
Radiated Noise Control in Indigenous Ship Building- Design Requirements for Strategic Advantage	<b>Cdr. A Sanjayan</b> Commander (Marine Engg) at IHQ MoD(N)/ DME, Indian Navy

Product Lifecycle Management (PLM) in Shipyards -An essential step in Digital Transformation towards Shipyard 4.0

Commander S Gopi Krishna IN (Retd.), Centre of Excellence in Maritime and Shipbuilding CEMS

Sustainable growth of Ship Recycling capacity in India

Mr. Vikram Purohit
Senior Shin Recycling Specialist
Mr. Shobhit Kapoor
M&O Operation Manager South &O Operation Manager S Asia West Lloyd's Register Asia

Compliant & Sustainable Ship Recycling

Mr. Rohit Agarwal

MR. J. DASGUPTA MR. VIVEK DIWAKAR PRASAD Chairperson Coordinator

Decarbonisation efforts - Energy efficiency, Net Zero emissions
and Carbon Capture

Paper Title	Auth	
Sea Trial Analysis with The Aid of Numerical	<b>Mr. Sharad Dhavalikar</b> Principal Surveyor I (IRS)	

Surveyor I (IRS) Assessment for Existing Mr. K. Shanmukha Srinivas Asst. Surveyor I (IRS) Senior Surveyor (IRS)

EEXI and CII compliance with Becker's energy saving devices Mewis Duct® and Twisted Fins

Title

Mr. Castagna Alessandro Becker Marine Systems GmbH, Hamburg, Germany

Dr. Joseph Prabhu

Mr. Ramkumar Joga

Technological Advances in Shipboard Carbon Capture - An Overview'

Linking the Zero-Emission Value Chain - Mr. Sobhith Komalavally Hariharan

#### Mr. P. Koutsourakis

Liquid Hydrogen Mr. H. Daiyan Carrier ustainability Manager rican Bureau of Shipping

Mr. I. Soultanias Managing Principal American Bureau of Shipping







### **HIGHLIGHTS**



Technical Session	CAPT. M. P. BHASIN MSC	MS. ARCHANA SANGAL	
Title	Chairperson	Coordinator	
Seafarers' welfare, Human Element and Training			
Paper Title	Authors		
Gender Diversity and Retention of Seafarers	Ms. Parnita Rasal Psychologist Anglo Eastern Maritime Academy		
Human Factor in Shipping	Mr. NMC Nair (Fellow Member -Institute of Marine Engineers (India)) ClassNK		
Seafarers' welfare, Human element & Training	Mr. Mani Ganapathi Ramachandran Head of Quality system & Management Representative Hindustan Institute of Maritime Training		
Training for Autonomous Vessels: A Paradigm Shift	Mr. Sanjeev Vakil Founder and CEO Hindustan Institute of Maritime Training		

<b>Technical Session</b>	REAR ADMIRAL CS BABURAJ UA CONSULTING	MR. AMIT BHATNAGAR	
Title	Chairperson	Coordinator	
Maintenance of Ship & Machinery			
Paper Title Authors			
Condition Monitoring System - Advanced Insights into the health of Diesel engines	Mr. Uday Purohit Founder Neptunus Power Plant Services Pvt. Ltd	Mr. Narendra Kumar Sr. Manager – Engineering Neptunus Power Plant Services Pvt. Ltd	
Prediction of Wave Bending Moment for a Ship at Site and Route	Mr. Anant Ajithkumar Assistant Surveyor, IRS	Mr. Amresh Negi Principal Tolani Maritime Institute	

Ballast Water Filters: Factors affecting the efficacy of filtration -Sediments

Dr. Sungar Surveyor, Ins.

Mr. M. Subramanian Collection of Properts Angle - State Skip Management Collection - Sediments

Dr. Sungar Surveyor, Ins.

Dr. Sun

Ultrasonic Anti Fouling System

Lt. Cdr. Mohit Dey
Deputy Hof (Projects)





INMARCO 2022, as in the past, provided a platform for students from MTIs across the country to display their knowledge and skills, in the form of Technical Paper presentation competition and making competition. The Students Sub Committee constituted of:

### Students Session

- Mr. Sunil Kumar (CTO and Head Training & Assessment, Great Eastern Shipping) - Head
- Mr. Mahesh Subramanian (General Manager (ESG & Projects), Anglo Eastern Shipping - Co-Head
- Mr. Rajesh Doshi, Promoter Director of Dwarka Kutchh Ferries & Tourism -Member
- Cdr. Gaurav Agarwal (Retd), Ex General Manager MDL - Member
- Suri Jasjeet (HOD Engineering, Chitkara University) Member
- (Training • Mr. Vivek **Prasad** Assessment Manager, Great Eastern Shipping) - Member



The Students Session was inaugurated by Shri. Amitabh Kumar, IRS, DG Shipping. In his Inaugural Address, the DG Shipping said that the students had joined the maritime industry when it was at a crossroads. He amplified that with present measures in place, the stiff GHG reduction targets for 2030 and 2050 set by IMO would not be met, as Alternate Fuels were to be deployed at the rate of 5% per year already, but clarity on the Alternate Fuels was still missing. Participation in the Green Conclave and the other sessions of the INMARCO would the students, open opportunities and show case to the world the amount of talent India has today and could produce in the future. He ended his address by exhorting the students to never stop their quest for knowledge.

Thereafter Mr. Mahesh Subramanian flawlessly conducted the Students Technical Paper session. The six best papers, of the 44 papers received, were presented. Each team was grilled by the Judges on all aspects of their paper.

Three eminent maritime industry veterans constituted the panel of Judges for the paper presentation and model making. They were :

- Mr. Vikram Gokhale (Deputy Director Training, IMEI).
- Mr. Lalatendu Acharya, Director Vedam
- Design).

   Dr. K Sivasami, Associate Professor & HOD

  Indian Maritime Maritime Engineering), Indian (Marine Jniversity Chennai Campus.



The post lunch session saw a panel of distinguished personalities discussing Just Transition - Maritime (Alternative Fuels). The Panel Discussion was ably chaired by Dr Malini V Shankar, IAS (Retd), Vice Chancellor, Indian Maritime University. The panelists included the following:

- Dr K Pandurang Raut, DDG Shipping.

- Dr K Pandurang Raut, DDG Shipping.
   Capt. KN Deboo, Principal & Director, Anglo Eastern Maritime Academy.
   Mr. Amit Khare, General Manager (Marine Sales & Service), Alfa Laval.
   Mr. Rajiv Biswas, Founder Blue Ridge Marine.
   Capt. Ashwini, DPA & CSO MR/MA, Shipping Corporation of India.



The Panel Discussion was followed by a Q&A session, in which the students asked a number of penetrating questions. The panelists (and the Chair) replied to all questions patiently, encouraging informatively and with an approach. The main concern of the cadets regarding loss of jobs due to technological advancements was also addressed adequately. All in all, it was an extremely professional discussion, skillfully kept relevant and on course by the Chair.

#### **Technical Paper Competition Winners:**

			•	
		Winner	1st Runner Up	2nd Runner Up
	Institute	IMU Kolkata Campus	IMU Kolkata Campus	IMU Kolkata Campus
	Topic	Harnessing Tidal Energy	Comprehensive Insight into Smart Ships and Digital Twins	Future Fuels and Renewable Sources of Energy
Cadets		Raghav Dhaka	Sourin Karmakar	Arkya Baishya
	Cadoto	Rustam Raj	Ritbik Kumar	Parthib Dutta
	Anna D.M.	Wamiq Asrar	Pradyot K Maiti	
	Yash Mukherjee		B Ajay Sreeram	

#### **Model Making Competition**

Winner		1st Runner Up	2nd Runner Up
Institute	Anglo Eastern Maritime Academy, Karjat	Maritime Academy, Karjat	IMU Kolkata Campus
Model	Dual Axis Solar Tracker	Hybrid BWMS	Water Waste Collector
	Ragib Akhter	Vaibhav	Parth Mehta
Cadets	Sharvaree Chitre		Arka Parbat
Caders	Varun Darbari		Asmit Raj
	Yash Mohite		Saurabh Kumar

One of the main takeaways was the requirement for continuous learning, upskilling / reskilling at every level. Micro credit courses by IMU for meeting such industry technological needs had already commenced.

Global transition of shipping towards reducing GHG emissions will involve the introduction of measures and policies which impact the maritime workforce. Seafarers will, for example incur additional training to handle new low- to zero-carbon fuels, as well as adjust to working on zeroor low-emission vessels and meeting the additional requirements this may encompass. These are a part of the broader spectrum of considerations to achieve a truly just transition.

In the ensuing panel discussion, technology options were covered in detail including LPG, LNG, Ammonia, Methanol, Hydrogen and relative costs, safety, storage, infrastructure etc. The need to enhance capability across the entire fuel supply chain, especially so in the case of shore staff, was underscored. Faculty training was a major concern. The need to involve locally available expertise within the Indian shipping industry was also brought out. All stakeholders agreed that each had a role to play and teamwork was required to meet the numerous challenges head on. development Research and commenced to ensure that India kept ahead of the technology curve with respect to Alternative Fuels.

The prizes were given away by the Chief Guest Dr. Malini V Shankar. In her address Dr Shankar said that it was extremely encouraging to see a Students Session in the INMARCO, and in the coming years it should become as major an event as the main Technical Session. She exhorted the students to keep learning, learning and learning. The INMARCO was an excellent example of Academia - Industry partnership, and the days of academia and industry working in silos was over. Good results could well be expected from this guiding / mentoring by industry, and the whole maritime ecosystem working together.

The cadets felt that the INMARCO introduced them to the ecosystem of shipping and the probable technological advancements in the near future. They returned with invaluable knowledge and a delightful experience from the exposure to the shipping industry provided at INMARCO 2022.

-(With inputs from Cdt. Rustam Raj, IMU Kolkata Campus)





Write-up by:

Cdr. Gaurav Agarwal (Retd.)

### **DEFINING MOMENTS**









### **DEFINING MOMENTS**







#### **DEFINING MOMENTS**











## WHITEPAPER ON INDIAN COASTAL GREEN SHIPPING – DNV OUTCOME REPORT OF THE GREEN CONCLAVE - LR





### **CEO FORUM**

Chaired by Shri. Amitabh Kumar IRS - Director General of Shipping





### **POLICY MAKERS FORUM**

Chaired by Dr. Sanjeev Ranjan

IAS Secretary - Ministry of Ports, Shipping and Waterways







Members of Governing Council of IME(I) at INMARCO 2022











### **Exhibitors' Pavilion**











### **Exhibitors' Pavilion**

















### The Institute of Marine Engineers (India)

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Tel: +91 – 9967875995/ 9773363542 / 9594204403/ 022-27711663 Email: training@imare.in. Website: www.imare.in

#### REGISTRATION OPEN FOR Following DGS APPROVED COURSES (Online)

- Basic Training for Ships using Fuels covered within IGF code Course Id 5311 (OFFLINE)
   (5 Days) Commencing soon
- Assessment, Examination and Certification of Seafarers Course Id 1062 (OFFLINE)
   (11 Days) Commencing soon
- Advanced Training for Ships using Fuels covered within IGF code
   Course Id 5312 (OFFLINE) (6 Days) Commencing on December 2022
- MEO Cl. I (FG): 2- months course (OFFLINE) 2nd January 2023 / 1st March 2023 / 2nd May 2023 (followed by Simulator course) Discount on combined bookings of Class I Course with Simulator
- MEO CLASS III (NCV\_CEO) Upto 3000kW STCW 2010: 2 month course (OFFLINE)
   1st March 2023 / 1st July 2023
- MEO CI. III (NCV\_SEO) Part-A STCW 2010: 2-month course (OFFLINE) – 2nd January 2023
- MEO CI. III (NCV\_SEO) Part-B STCW 2010: 4-month course (OFFLINE) 1st March 2023
- MEO Cl. IV (NCV) STCW 2010 -4 months course (OFFLINE) 2nd January 2023
- MEO CL. II (FG): 4-month Course (OFFLINE) 2nd Jan. 2023 / 1st Feb.2023 / 1st March 2023 / 1st April 2023 / 2nd May 2023 (Discount on combined bookings of Class II Courses with Simulator)
- REFRESHER & UPDATING TRAINING (RUT 3 DAYS) COURSE FOR REVALIDATION OF COC FOR ALL ENGINEERS AND ETOS (OFFLINE) Course Id – 1118 – 21st Dec. 2022/ 2nd January 2023/16th January 2023/ 30th January 2023
- Basic Training for Ships using Fuels covered within IGF code Course Id 5311 (OFFLINE)
   (5 Davs) Commencing soon
- I ENGINE ROOM SIMULATOR MANAGEMENT LEVEL (3 DAYS) COURSE FOR MEO CLASS I
- ENGINE ROOM SIMULATOR OPERATIONAL LEVEL (3 DAYS) COURSE (OFFLINE) 15th Dec. 2022
- MEO Cl. IV(FG) non mandatory course (2months duration) On request
- 2 weeks Induction course for Naval candidates 2nd January 2023
- Familiarisation Training Course For Liquefied Natural Gas (LNG) Tanker Operations (Online) -

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For enquiries contact on training@imare.in

For Registration of Competency Courses: https://forms.gle/DBvLuEarFpbk3aqX9

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#### **Industry Updates**

# We are overjoyed & proud of Shri. Ajithkumar Sukumaran,

a Fellow of the IME(I), as he has been elevated to the post of Chief Surveyor - cum - Additional Director General of Shipping (Engineering) with the Govt. of India.

Shri. Sukumaran is Mechanical Engineer from TKM College of Engineering, Kollam and did his post-graduation in Maritime operation and management from IIT, Kharagpur. He is serving Directorate General of shipping for the last over and decades leads two Indian delegations to Marine Environment Protection (MEPC) Committee and Maritime Safety Committee (MSC) at IMO London. He is Member of Academic Council of Indian Maritime University also.

# Congratulations!



# Shri. Ajithkumar Sukumaran promoted as Chief Surveyor - cum -Additional Director General of Shipping (Engineering)

Wishing him immense success in all his endeavours!



#### **Industry Updates**

# SHRI. SUDHANSHU PANT DESIGNATED SECRETARY SHIPPING



Shri. Sudhanshu Pant, IAS, 1991 batch from Rajasthan Cadre has been designated to take over as Ministry Secretary, of Shipping and Waterways from 1st 2023 with the January Superannuation Current of Secretary Dr. Sanjeev Ranjan, IAS. holds Shri. Pant B.Tech а (Hons), degree from IIT Kharagpur.

In the early years of his service, he has served as Collector & District Magistrate in districts of Rajasthan and also as Chairman & Managing Director of the State Power Corporation, Transmission Power Distribution companies and the State Renewable energy Corporation. He has been Secretary in the Mines and Petroleum Dept. in the Government of Rajasthan besides having worked Commissioner of Jaipur as Development Authority. He has vast experience of working in the cooperative sector, heading several cooperative Federations. We welcome him in his new assignment.

# CAPT. B. K. TYAGI TAKES OVER AS CMD OF THE SHIPPING CORPORATION OF INDIA



Capt. Binesh Kumar Tyagi has taken over as Chairman and Managing Director of The Shipping Corporation of India Ltd. with effect from 03.09.2022. He takes the honour to be the first, who started his career as a cadet with SCI and rose to occupy the highest office.

well-rounded He is а shipping professional with qualification in Navigation, Ship operation, Chartering, General Shipping Management, Port Development & Management and Law. In his distinguished shipping spanning over 32 years in SCI, he has held many responsible positions, both while afloat and later ashore before taking over as the CMD.

Capt. Tyagi is IIMA alumni and also member of various professional bodies like ICS (London), CILT, NMIS, Nautical Institute London, CMMI, Institute of Directors etc. Capt. Tyagi is also appointed as Member and Chairperson of ABS India National Committee and Member of the South Asia Committee of DNV GL.

Wishing them immense success in all their endeavours!

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Humbleness



Uprightness **Our Employees** 





Our Name

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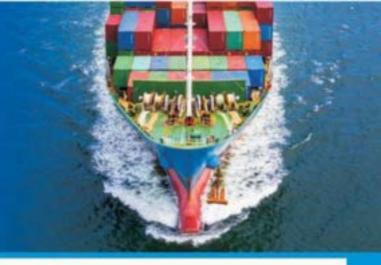
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## D. G. Shipping Approved

# IGF COURSES



## Basic IGF

Basic training for ships using fuels covered within the IGF code

DURATION 4 DAYS

#### ELIGIBILITY

- · Any seafarer who has completed the four Basic Safety Courses, under STCW Regulation VI/1 and Section A-VI/1.
- · Seafarers holding Basic or Advanced Level Gas Tanker Cargo endorsement / COP are not required to undertake this training.

# **Advanced IGF**

Advanced training for ships using fuels covered within the IGF code

DURATION DAYS

**EVERY MONTH** 

BENEFITS

Flexibility to work on an hourly basis at your

Family accommodation (at Pre-sea campus).

Sail for a few months and teach for the remaining

Teach any course to your liking from Pre-Sea to Post-

Medical Insurance for self and family.

convenient time.

Sea Courses.

Personal accident policy.

#### ELIGIBILITY

- . Seafarer who has completed the four Basic safety courses, under STCW Regulation VI/1 and section A-VI/1 and holds as a minimum a certificate of Proficiency as Watch keeping rating or a Certificate of Competency as an Officer on Watch
- · Hold certificate of proficiency for Basic Training for ships using Fuels covered within the IGF Code.

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- Prior Teaching Experience.

Industry Updatesrience in Simulator Training.
Industry Insights Engineers competent to teach electrical topics.

- Willingness to take both Competency & Revalidation courses.
- Age below 55 years would be preferred.
- Masters/Chief Engineers with no teaching experience and above 55 years can also apply.

SALARY

Salary and Incentives as per Industry Standards

Interested applicants can send a mail to careers@himtmarine.com

#### **Industry News**



Coveted 9th International Samudra Manthan **Awards** the recognising Gems Maritime Sector, organised by leading publishers of the maritime industry, the Bhandarkar Publications, was held on 11th November at the Domestic Cruise Terminal in Mumbai. Award ceremony held every year honour excellence in maritime the sector and acknowledge the contribution made to the Industry.



Shri. Rahul Narvekar, Speaker of the Maharashtra Legislative Assembly graced the occasion as the Chief Guest along with world-renowned Indian music director & flautist Padma Vibhushan, Shri. Hari Prasad Chaurasiya as special guest. Shri. Rajiv Jalota, IAS, Chairman of Mumbai Port Authority (MbPA) was the Guest of Honour. Maharashtra's Upa-Lokayukta Shri. Sanjay Bhatia, IAS (Retd.) was the Chairman of the Award Jury.

Ceremony started with a dance drama highlighting Chhatrapati Shivaji Maharaj's vision of 'Samudra se Samruddhi ', the lovely act performed by the kids of Shindewadi Mumbai Public school (Dadar) adopted by Akanksha Foundation.

Shri. Narwekar acknowledged that the well-conceptualised awards are to recognise the contribution and efforts made by the awardees, for the evolution, development and progress of Maritime industry in India and around world. Shri. Rajiv lalota. in his address Chairman of MbPA complimented the winners and appreciated the efforts of the lead organisers



At the 'Awards Nite Extravaganza' best in the industry were honoured with the Samudra Manthan Awards.

Awards were bestowed on following in the Shipping Sector:

The Shipping Company of the Year- The Shipping Corporation of India

Shipping Company of the Year- (International): Mediterranean Shipping Company (MSC).

**Genter Diversity Award:** Maersk Line Fleet Management & Technology Ltd. was specially awarded for their role in Gender Diversity.

The Major Port of the Year (Containers): Jawaharlal Nehru Port Authority (JNPA)

Major Port of the Year (East Coast): Paradip Port Authority (PPA).

The Major Port of the Year (West Coast): Deendayal Port Authority (DPA) while the Mumbai

Port Authority (MbPA) was specially felicitated for initiating many projects to develop infrastructure for water based transport services.

The Non- Major Port of the Year: Adani Port & Special Economic Zone Ltd.

**Emerging Non- Major Port of the Year:** JSW Jaigarh Port Ltd.

**The Terminal of the Year:** Adani Ports and Special Economic Zone Ltd. #Technology Provider: Navalt Solar & Electric Boats

Training institute of the Year (Pre-sea): Training Ship Rahaman

**Training Institute of the year (Post-Sea):** Hindustan Institute of Maritime Training (HIMT)

Ship Owner Manning company: MSC crewing Services Private Limited

**Manning Company of the Year:** Elegant Marine Services Pvt. Ltd. and Anglo-Eastern Ship Management, India

SHE company of the Year: Seaspan Crew Management Pvt Ltd

#### SPECIAL CATEGORY AWARDS

Prestigious awards to individuals for their contribution to the sector were awarded to the following\_

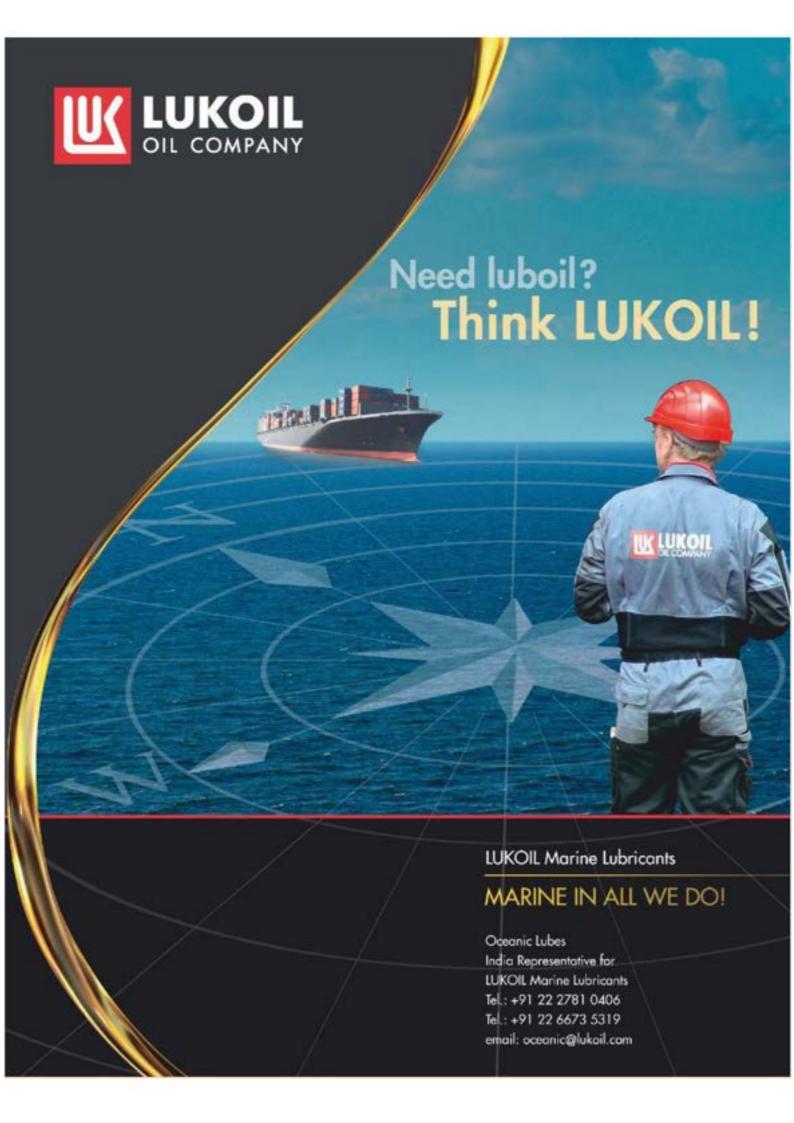
**Empowered Women in Shipping:** Mrs. Nafeesa Moloobhoy, Managing Director of Moloobhoy Group of Companies in India and in the UAE.

**Mentor of Industry:** a) Mr. S.M Rai, General Manager (Retd) The Shipping corporation of India and Ex Director (Technical) INSA b) Mr. Dinesh Lal, Director, AMI Logistics India Pvt. Ltd.

**Best Ship and Logistic Professional:** Capt. B.V.J.K Sharma, Chief Executive officer of the Navi Mumbai International Airport

**Late Prof. K.R. Bhandarkar Award for outstanding Services:** Mr. Madhu Nair, Chairman and Managing Director of Cochin Shipyard Ltd. for contributing to the maritime industry and trade.

**Lifetime Achievement Award:** Mr. Natwarlal Popat, Chairman and Managing Director of Velji Dosabhai and Sons Pvt. Ltd.

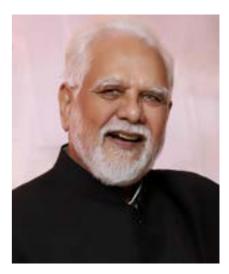


# Obituary

The Indian Shipping Industry has suffered an irreparable loss with the sad passing away of Shri. Vijay Kumar, former Managing Director, Bharati Defence and Infrastructure Ltd., Mumbai.

In him Industry has lost a highly knowledgeable and innovative technocrat-cum-entrepreneur, whose contribution to Indian Ship Building Industry is unparalleled. He was IIT Kharagpur Graduate and a qualified Naval Architect par excellence.

In 1968 to promote ship building in India, he founded and established Bharati Shipyard Ltd, with expertise in design and ship construction. Due his efforts he could get large export orders too and managed timely deliveries, making a name for the country. He was a strong supporter and pioneer in building friendly and close professional association with the Institute of Marine Engineers (India) and even Chaired the INMARCO INAvation 2010 organised jointly by the Institute of Marine Engineers (India) and the Institution of Naval Architects.



(11 April 1945 to 29 Nov. 2022)

#### Shri. Vijay Kumar

Our heartfelt condolences to the family. May the departed soul rest in peace



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- **B1** Maritime Regulations
- B2 Management Techniques & Applications
- **B3** Naval Architecture
- **B4** Vibration Engineering
- B5 Advanced Marine Engineering Knowledge
- **B6** Human Element

Choose any five subjects in each semester.

Course completion: Within 5 years

#### MEO Class 2

**Preparatory Course** 

1st of every month

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#### D DCCDD

Refresher Proficiency in Survival Craft Rescue Boats

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### MARITIME AUTONOMOUS SURFACE SHIPS (MASS)

The **MSC** made further progress on the development of a goal-based instrument regulating the operation of maritime autonomous surface ships (MASS). The aim is to adopt a nonmandatory goal-based MASS Code to take effect in 2025, which will form the basis for mandatory goal-based MASS Code, expected to enter into force on 1 January 2028.

THE MSC REVIEWED A
NUMBER OF
PROPOSALS FOR NEW
OUTPUTS AT THE
SESSION AND AMONG
MANY AGREED TO
CONSIDER ON
PRIORITY:

# 01

Revision of SOLAS regulation V/23 and associated instruments to improve the safety of pilot transfer arrangements, with a target completion year of 2024

# 02

Revision of resolution
A.1050(27) to ensure the safety of personnel entering enclosed spaces on board ships with a target completion year of 2024.

# 03

Strengthen to work on humanitarian efforts to evacuate all stranded ships and seafarers at sea or in ports including in war zones

# 04

Revision of the ECDIS Guidance for good practice

#### SUSTAINABLE GOALS































Contribu MR. S. M.

#### **IMO NEWS**



The 128th session of the Council was held in person at the IMO headquarters supported by hybrid facilities for remote participation from Monday, 28 November to Friday, 2 December 2022, and was chaired by Mr. Victor Jiménez of Spain. After the routine administrative functions, like planning of events for the coming year and budgets, following were discussed:

 On the situation of international shipping and seafarers in the Black Sea and Sea of Azov, taking into account the ongoing military conflict between Ukraine and the Russian Federation, requested the Secretary-General to continue to work on humanitarian efforts to to evacuate all stranded ships and seafarers in the conflict area, including efforts to ease transportation and expand the Black Sea Grain Initiative to other types of ships and additional ports.

The Council noted the proposal for the Establishment of a Voluntary Multi-Donor Trust Fund to Facilitate the Participation of Developing Countries, especially Small Island Developing States (SIDS) and Least Developed Countries (LDCs) in IMO Meetings. Council agreed to review the terms of reference.

- Invited the Maritime Safety Committee, at its 107th session, to consider possible measures to be taken to address the issue of unlawful launching of Ballistic Missiles without information and propose what action be taken.
- Council appreciated the efforts of the Secretary General for the important Black Sea Grain initiative, as a landmark agreement to help the vulnerable people in every corner of the world at the time of current ongoing conflict in Ukraine.

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- · Actively participating in the debates, delegation, Head of Indian Dr. Sanjeev Ranjan, Secretary Ministry of Ports, Shipping and Waterways (MoPSW) said, 'India supports UAE's proposal to include the element of digitisation in the next Strategic Plan as well as the adoption of a maritime single window system as a part of the digitisation initiative, since it will help in resolving the regulatory bottlenecks faced in the maritime industry. Time bound action plans for digitisation should be part of the IMO strategic directions'
- Dr. Ranjan, further emphasised on India's statement at COP 27 that the journey towards a planet safe for humanity is a collective journey to be undertaken with equity with climate justice as our guiding principles. He also put across India's stand that decarbonisation and funding for the same may be included as a separate

- strategic direction with the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC) as its cornerstone for the way forward.
  - India also appreciated the proposal of UAE on 'Capacity-Building Decade 2021-2030' strategy including the concept of 'no one should be left behind'. "India noted that this element does not appear to be comprehensively absorbed within the ambition of the 8 strategic directions under the existing Strategic Plan. India, therefore, consider this aspect as crucial for the effective financial usage of technical resources available with IMO through Technical Cooperation Committee's work to assist developing states.
  - Council confirmed that the World Maritime Theme for 2023 should be "MARPOL at 50-Our Commitments goes on" and to meet for 129th session in July 2023.

contributed by : Mr. S. M. Rai.

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December 2022: 05-09

For bookings: +91 22 67205611 / 12 / 18



Wartsila 4-stroke DF Engine December 2022 : 07-09 Wartsila RT Flex Engine

December 2022 : 12-14

Conducted by Wartsila Switzerland (OEM Approved Course)

#### D. G. Approved Courses December 2022 Advanced Training for Ships using fuels covered within the IGF Code 12-16 05-09 Basic Training for Ships using fuels covered within the IGF Code 19-21, 27-29 Engine Room Simulator (Operational Level) 05-09 Engine Room Simulator (Management Level)



#### Value Added Courses December 2022

1.	Advanced Marine Electrical course Module 1 - Practical Marine Electrical (Basic)	12-16, 19-23
2	Advanced Marine Electrical course Module 2 - Practical Marine Electrical (Advanced)	05-07,19-21
3.	Advanced Marine Electrical course Module 4 - Electronics for Marine Engineers	08-09
4.	Advanced Marine Electrical Course Module 5 & 6, Instrumentation, Process Control &	
	Programmable Logic Controllers	12-16
5.	Bridge Manouervering & Engine Control - Operational Level	08-09
6.	Bridge Manouervering & Engine Control - Management Level	12-14
7.	Engine Room Emergency Management	22-23
8.	Hydraulics for Engineers - Basic	05-07
9.	Machinery Breakdown Safety Campaign - 2	16
10.	Maritime Crew Resource Management (MCRM)	05-08, 19-22
11.	Maritime Safety Management - Module 1 (Occupational and Behaviour Based Safety)	12-14, 27-29
12.	Maritime Safety Management - Module 2 (Risk Assessment)	05, 09
13.	Maritime Safety Management - Module 3 (Shipboard Safety Officers)	06,20
14.	Maritime Safety Management - Module 4 (Accident Investigation-2)	07-21























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MOMENTS

