

# 2<sup>nd</sup> MALAYSIA MARITIME INDUSTRY INTERNATIONAL CONFERENCE 2024

## SUSTAINABILITY IN MARITIME ENGINEERING

Sustainability in maritime engineering refers to the application of practices and principles that aim to minimize the environmental impact of maritime activities while promoting long-term economic viability and social responsibility. This field addresses the unique challenges faced by the maritime industry in balancing economic growth with environmental conservation.

## KEYNOTE SPEAKERS



**Prof. Matsushita  
Masafumi**

Center for Naval Architecture and  
Ocean Engineering, Ehime  
University, Japan



**Prof. I Ketut Aria  
Pria Utama**

Institut Teknologi Sepuluh  
Nopember (ITS),  
Indonesia



**Prof. Ts. Dr  
Mohamad Rosni  
Othman**

Director General  
Maritime Institute of Malaysia  
(MIMA)



**Prof. Guangming Xie**

Director of Intelligent  
Biomimetic Design Lab  
(IBDL), Peking University,  
China



**26 NOVEMBER 2024, TUESDAY**  
**8.30AM - 6.00PM**



**WISMA IEM, PETALING JAYA  
SELANGOR**

**BEM CPD  
POINT:**

**7**



**Scan to Register  
Now!!**



**APPROVED DURATION:**  
**4/10/2024 - 3/10/2025**  
**HRD CORP SERIAL NO:**  
**10001471223**

Co-organisers



MALAYSIA  
JOINT  
BRANCH  
RINA - IMarEST



Contact for more information



**03-7890 0133**



**ezzaty@iem.org.my**



**www.myiem.org.my**



**www.mmiic2024.com**

## ITINERARY

### TIME ACTIVITY

8.00 am	<b>Registration</b>
9.00 am	<b>Opening Ceremony</b> Welcome Speech by Organising Chairman, Ir. Dr Ching Yern Chee Opening Speech by President of The Institution of Engineers, Malaysia (IEM), Ir. Prof. Dr. Jeffrey Chiang Choong Luin
9.30 am	<b>Collaboration Certificate Exchange Session</b>
9.45 am	<b>Keynote 1: Ehime as a Maritime Hub in Shipbuilding by Prof. Masafumi Matsushita (Ehime University, Japan)</b>
10.10 am	<b>Keynote 2: Biofouling Management and its Correlation with Ship Energy Efficiency and Reduction of GHG Emissions by Prof. I Ketut Aria Pria Utama (ITS Indonesia)</b>
10.35 am	Networking / Coffee Break <b>Technical Paper Presentation</b>
11.00 am	<b>Technical Paper 1: Environmental Risk Assessment of LPG Ship in Marine Transportation Operation by Ir. Dr. Ab Saman Ab Kader</b> <b>Technical Paper 2: Preventive Action to Minimize Accident on Bunkering Operation at Port by Gopala Krishnan</b> <b>Technical Paper 3: Indoor Air Quality (IAQ) Mitigation Strategies for Marine Transportation: A Call for Ship IAQ Guidelines Development by Lt Cdr Ir. Amirul Faiz bin Kamaruddin RMN</b>
12.00 pm	<b>Technical Paper 4: Exploring Untapped Demand in Malaysia's Shipbuilding and Ship repair Industry by Sri Widias Tuti Asnam Rajo Intan</b> <b>Technical Paper 5: Green Port Performance Indicators for Dry Bulk Terminal A Case Study of Port Klang by Hikmah Affirin Shahrul Alfian</b> <b>Technical Paper 6: Structural Analysis of Aluminum Boat Using The Fiber Bragg Grating (FBG) Strain Gauge by Ts. Dr. Zulzamri Salleh</b> <b>Technical Paper 7: Thermal Storage Bag Using Phase Change Materials (PCMs) by Alsaigh Nabeel Kamil</b>
1.00 pm	Lunch Break / Prayer
2.00 pm	<b>Keynote 3: Developing Policy for the Blue Economy through Coastal Innovations by Prof. Ts. Dr Mohamad Rosni Othman (Maritime Institute of Malaysia, MIMA)</b>
2.25 pm	<b>Keynote 4: Underwater Robot Design Inspired By Biology by Prof. Guangming Xie (Peking University, China)</b> <b>Technical Paper Presentation</b>
2.50 pm	<b>Technical Paper 8: IVS the Innovative Solution in Managing Upstream Vessels by Ir. Wan Rizaluddin Abdullah bin Wan Ali &amp; Syed Jaffar Sadik Yahya bin Syed Mustafa Yahaya</b> <b>Technical Paper 9: The Efficiency of Selected Ports in Asia using Data Envelopment Analysis (DEA) by Gopala Krishnan</b>
3.30 pm	Afternoon Coffee Break <b>Technical Paper Presentation</b>
3.40 pm	<b>Technical Paper 10: Performance Analysis of Mini and Light Intervention Class ROVs in Varying Underwater Conditions by Assoc. Prof. Dr. Ahmad Faisal Mohamad Ayob</b> <b>Technical Paper 11: Bamboo Wave Screen for Mangrove Protection in Tanjung Kepah by Teh Hee Min</b> <b>Technical Paper 12: Shipping Energy Transition and Green Shipping Corridors Development by Ilias Soultarias</b>
4.40 pm	<b>Forum: Navigating the Future: TVET and R&amp;D - Which is the True Lifeline for Malaysia's Marine Industry?</b> <b>Panelist 1: Assoc. Prof. Ts. Dr. Md Rezuan Zoolfakar</b> <b>Panelist 2: Prof. Ts. Dr Mohamad Rosni Othman</b> <b>Panelist 3: Ir. Esham Salam</b> <b>Moderator: Prof. Ts. Dr. Mohd Fadzil bin Mohd Akhir</b>
5.30 pm	Closing Ceremony of MMIIC 2024

## REGISTRATION FEES

(Including 2 coffee breaks & lunch)

### PARTICIPANTS

<b>IEM Member</b>	<b>RM450</b>
<b>Non IEM Member</b>	<b>RM650</b>
<b>Government Staff</b>	<b>RM500</b>
<b>International Delegation</b>	<b>USD130</b>

\*Prices are not inclusive of 8% SST

### PHYSICAL GROUP REGISTRATION DISCOUNT

(non-HRD Corp Claimable)

**2-5 participants: 5% discount**

**6-10 participants: 7% discount**

**11 and above participants: 10% discount**

(strictly register via email to secretariat in charge)



**APPROVED DURATION:**  
**4/10/2024 - 3/10/2025**  
**HRD CORP SERIAL NO:**  
**10001471223**

## CONTACT US

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Selangor  
**Tel. No: 03-7890 0133**

### SECRETARIAT

**MARINE ENGINEERING & NAVAL  
ARCHITECTURE TECHNICAL DIVISION  
(MNATD)**

The Institution of Engineers, Malaysia (IEM)  
**Email: ezzaty@iem.org.my**  
**act@iem.org.my**

**Sponsors:**



# KEYNOTE SPEAKERS



## Prof. Matsushita Masafumi

*Center for Naval Architecture and Ocean Engineering,  
Ehime University, Japan*

Dr. Masafumi Matsushita is Deputy Director of the Center for Naval Architecture and Ocean Engineering and Professor in the Department of Mechanical Engineering at Ehime University, Japan. His research focuses on functional materials such as alloys and composites. Ehime University is a comprehensive university located near Imabari City, Japan's largest maritime industry base. Since 2024, Ehime University has established the Technical Committee of the Ehime Maritime Industry Consortium, which aims to implement education, research, and urban development centered on shipbuilding through cooperation among companies in Imabari City, the local government, and the university. He also serves as chairman of the committee.

## Prof. I Ketut Aria Pria Utama

*Institut Teknologi Sepuluh Nopember (ITS), Indonesia*

Prof. I Ketut Aria Pria Utama is a distinguished academic in the field of naval architecture, specializing in ship hydrodynamics. He is a professor at the Institut Teknologi Sepuluh Nopember (ITS) in Surabaya, Indonesia, where he has served since 2007. Prof. Utama earned his bachelor's degree from ITS in 1991 and later pursued his master's and PhD at the University of Southampton, UK, in 1996 and 1999, respectively.

His research focuses on ship resistance and propulsion, computational and experimental fluid dynamics, marine renewable energy, and maritime education. Prof. Utama has also worked on reducing greenhouse gas emissions in marine applications, particularly through improving energy efficiency in ships. He has been recognized with several awards, including the prestigious Distinction Medal from the Royal Institution of Naval Architects (RINA).

He is an active member of several professional organizations, including the Royal Institution of Naval Architects, and has held leadership roles such as Secretary of RINA's Indonesian branch and investigator for the National Transportation Safety Committee (KNKT) in the maritime sector. Additionally, Prof. Utama is a fellow of the Indonesian Academy of Sciences (AIPI) since 2015.

His work has significantly contributed to maritime engineering and education in Indonesia and globally.



## Prof. Ts. Dr Mohamad Rosni Othman

*Director General, Maritime Institute of Malaysia (MIMA)*

Professor Ts. Dr. Mohamad Rosni Othman is a Director General of the Maritime Institute of Malaysia (MIMA), appointed by the Prime Minister of Malaysia on 1 Mac 2024. He is a Professor at National Defence University of Malaysia (UPNM) and previous Dean of the Faculty of Maritime Studies at Universiti Malaysia Terengganu (UMT), and the 1st Director and founder of the Malaysian Maritime Logistics and Transport Centre (MALTRAC). He has extensive experience and qualifications in maritime management, policy, safety, security, logistics and transport, and has received various research grants, awards, and professional recognition. He has also published several books, articles, and conference papers, and has been involved in consultancy work and collaboration with maritime and logistics industries and universities.



## Prof. Guangming Xie

*Director of Intelligent Biomimetic Design Lab (IBDL),  
Peking University, China*

Guangming Xie received his B.S. degrees in both Applied Mathematics and Electronic and Computer Technology, his M. E. degree in Control Theory and Control Engineering, and his Ph.D. degree in Control Theory and Control Engineering from Tsinghua University, China in 1996, 1998, and 2001, respectively. Then he worked as a postdoctoral research fellow in the Center for Systems and Control, Peking University, China from July 2001 to June 2003. Now he is a full Professor of the College of Engineering, Peking University and the founder and director of the Intelligent Biomimetic Design Lab (IBDL). His research interests include bio-inspired underwater robot and multi-robot cooperation. He has published over 200 papers and three books. He is one of the Most Cited Chinese Researchers from Elsevier (Control and system engineering), from 2014 to 2023.



**Sponsors:**



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MARITIME (M) SDN. BHD.



# FORUM PANELIST

## Assoc. Prof. Ts. Dr. Md Rezuan Zoolfakar

*Director Centre for Industrial Linkages (CIL) Universiti Kuala Lumpur*



Assoc. Prof. Ts. Dr. Md Redzuan Zoolfakar is an expert in marine engineering at Universiti Kuala Lumpur (UniKL) MIMET. His research focuses on marine engineering systems, steam propulsion, and liquefied natural gas carriers (LNGC). He has been recognized for his contributions to Malaysia's maritime industry, notably receiving the "Day of the Seafarer Icon" Award in 2022. His expertise appears to be in marine science, technology, and engineering.

His academic background includes:

- Doctorate in Marine Science & Technology (Newcastle University, UK)
- Master of Science in Thermal Power and Fluid Engineering (University of Manchester Institute of Science and Technology, UK)

## Prof. Ts. Dr Mohamad Rosni Othman

*Director General, Maritime Institute of Malaysia (MIMA)*

Professor Ts. Dr. Mohamad Rosni Othman is a Director General of the Maritime Institute of Malaysia (MIMA), appointed by the Prime Minister of Malaysia on 1 Mac 2024. He is a Professor at National Defence University of Malaysia (UPNM) and previous Dean of the Faculty of Maritime Studies at Universiti Malaysia Terengganu (UMT), and the 1st Director and founder of the Malaysian Maritime Logistics and Transport Centre (MALTRAC). He has extensive experience and qualifications in maritime management, policy, safety, security, logistics and transport, and has received various research grants, awards, and professional recognition. He has also published several books, articles, and conference papers, and has been involved in consultancy work and collaboration with maritime and logistics industries and universities.



## Ir. Esham Salam

*Chief Engineer and President of Protankgrüp.*



Ir. Esham Salam is the Chief Engineer and President of ProtankGrüp, a grouping of boutique engineering firms that specializes in Mission-Critical Fluid Systems and Offshore Containerization catering for the demanding oil and gas, maritime, defense and aviation industries.

Esham's background in engineering has been pivotal in developing ProtankGrüp's innovative solutions. The company prides itself on its agility, customization capabilities, and rapid prototyping, which allow it to quickly respond to market needs. With an established Safety and Quality Management System and ESG compliance in the works, Compliance to international standards is a ProtankGrüp's key strategic capability.

Additionally, Esham is driving innovations and "Designed in Malaysia" products. The ProtankGrüp's Helicopter-in-Hover Refuelling System has been accepted by many navies of the world and the latest in the market, the DOCKLEV, a vessel handling system for shipyards, demonstrate ProtankGrüp's ability to deliver complex, tailor-made engineered solutions.

The company is already exporting its "Designed, Developed and Manufactured in Malaysia" products to Korea, China, Singapore, Japan, Brazil, Taiwan, Indonesia, India, Guyana to name a few, for installation in many continents.

Ir. Esham has been vocal in advocating better pay for engineers, the importance of the correct policies for driving innovations and in-country design capability and capacity and the need for equitable and sustainable ecosystems.



Chairman,  
Marine Engineering & Naval Architecture Technical Division,  
The Institution of Engineers Malaysia,  
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## **REGISTRATION FORM PARTICIPANT AND PRESENTER**

**2nd MALAYSIA MARITIME INDUSTRY INTERNATIONAL (MMIIC 2024)**

**26 NOVEMBER 2023 (TUESDAY)**

**Closing Date: 20 November 2024**

No	Name(s)	Email Address	IEM Membership No.	Grade	Fee (RM)
SUB TOTAL					
+SST 8%					
Total Payable					

**FULL PAYMENT must be settled before commencement of the course**, otherwise participants will not be allowed to enter the hall. If a place is reserved and the intended participant fails to attend the course, the fee is to be settled in full. If the participant failed to attend the course, the fee paid is non refundable.

Contact Person: \_\_\_\_\_ Designation: \_\_\_\_\_

Name of Organisation: \_\_\_\_\_

Address : \_\_\_\_\_

\_\_\_\_\_

Telephone No. : \_\_\_\_\_ (O) \_\_\_\_\_ (Fax No.)

\_\_\_\_\_ (H) \_\_\_\_\_ (HP)

Email : \_\_\_\_\_

\_\_\_\_\_  
Signature & Stamp

\_\_\_\_\_  
Date

**Photocopies are acceptable**