

# eMARINA

The quarterly newsletter of  
The Hong Kong Joint Branch of The Royal Institution of Naval Architects  
and The Institute of Marine Engineering, Science and Technology,  
and The Hong Kong Institute of Marine Technology  
皇家造船師學會暨輪機工程及海事科技學會香港聯合分會  
及香港海事科技學會季刊

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## HKJB & HKIMT Activities

### Visit to Wuhan University of Technology (WUT) for 14th National Marine Vehicle Design & Construction Competition from 8 to 12 August 2025



*HKIMT delegation with Hong Kong students at Wuhan University of Technology*

HKIMT organised a technology and innovation exchange visit (the Visit) from 8 to 12 August 2025, inviting 30 Hong Kong primary and secondary school students (winners of the 2024–2025 HKIMT STEM x Marine Vehicle Design and Construction Competition) to attend the 14th National Marine Vehicle Design & Construction Competition (第十四屆全國海洋航行器設計與製作大賽) held at WUT (武漢理工大學).

The Visit aimed to promote cross-border academic exchanges, broaden students’ understanding of the development of national maritime technology, and deepen their understanding of marine engineering and innovation. The Visit was sponsored by the Maritime and Aviation Training Fund (MATF) and HKIMT. The Association of IT Leaders in Education (AiTLE) co-organised the Visit and provided valuable guidance.

The 14th National Marine Vehicle Design & Construction Competition (Competition) was organised by the China State Shipbuilding Corporation Limited (中國船舶集團有限公司), the China Shipbuilding Engineering Society (中國造船工程學會), and the Innovation and Cooperation in Naval Architecture & Marine Engineering Association (國際船舶與海洋工程創新與合作組織) and was hosted by WUT.

The Competition featured seven categories:

- i. Innovation, Creativity and Entrepreneurship,
- ii. Design and Production,
- iii. Smart Ships and Marine Engineering Technology,
- iv. Model Simulation of Famous Ships,
- v. Model Boat Racing,
- vi. Model Sailboat Racing, and
- vii. Marine Knowledge Competition.

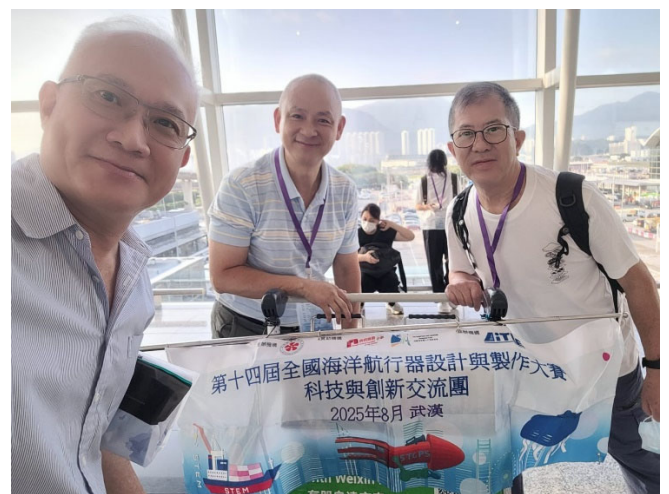
The event showcased a diverse range of innovative marine engineering design, highlighting the ingenuity and technology of 3,345 teams from nearly 400 universities and colleges of China.



*HKIMT Chairman Mr. Ernest Chan presented memento plaque to Shenglong Electric Co. Ltd., AI main switchboard manufacturer*

In addition to visiting four laboratories on WUT campus, covering Combustion & Laser Sensing and shipboard engine control room simulator, as well as the WUT Maritime Museum, each student group was invited to present their 2024–2025 HKIMT STEM x Marine Vehicle Design and Construction design and exchange views with experts from WUT experts to recommend improvements.

Students also visited a local shipbuilding yard, an AI main switchboard manufacturer and Optics Valley Suspended Monorail Line to learn about the latest developments in other technological fields. Cultural activities also included visits to the Hubei Provincial Museum (湖北省博物館), Yellow Crane Tower (黃鶴樓), Wuchang Uprising Memorial Hall of the 1911 Revolution (辛亥革命武昌起義紀念館), East Lake Park(東湖公園).



*HKIMT Chairman Mr. Ernest Chan and members of HKIMT*

The visit not only showcased the broad talent and creativity in the field of marine technology but also promoted continuous progress and innovation from academia to application. Students broadened their horizons and deepened their interest in marine engineering through the Visit.

*(Reported by Mr. Stanley Lui)*

## The 11th Pan Asian Association of Maritime Engineering (PAAMES) Forum and Advanced Maritime Engineering Conference (AMEC) 2025 in Singapore

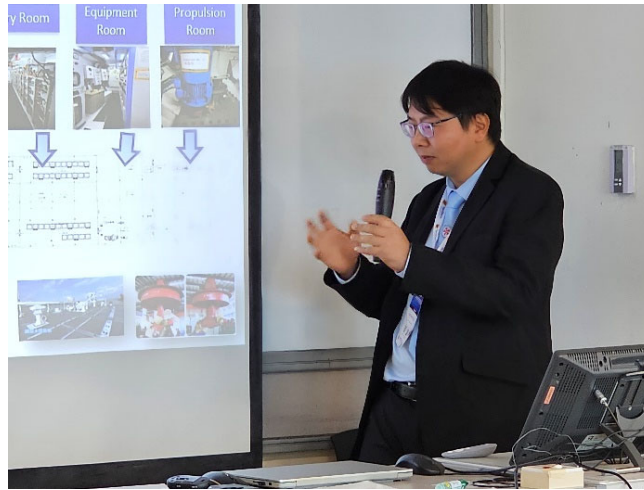
The Hong Kong Institute of Marine Technology (HKIMT) and the Hong Kong Institution of Engineers - Mechanical, Marine, Naval Architecture and Chemical Division (HKIE-MMNC) delegates attended the captioned event in Singapore. The PAAMES Forum and AMEC were hosted by the Singapore Society of Naval Architects and Marine Engineers, Singapore (SNAMES) and the Department of Civil & Environmental Engineering College of Design and Engineering, National University of Singapore (NUS) from 10 to 12 December 2025 at NUS Campus, with welcome reception hosted by SNAMES for all participants in the evening on 7 December 2025 at Grand Copthorne Waterfront Hotel.

On 10 December 2025, PAAMES Forum and Lecture commenced with a keynote speech delivered by Mr. Ng Yi Han, Chief Transformation Office of the Maritime and Port Authority of Singapore, sharing the policy and measure for achieving zero emission and sustainable maritime future in Singapore. Mr. Ng shared their experience of determining to continually innovate and reinvent themselves to remain relevant amid greater uncertainty. Their strategies include (i) Position Singapore to be ready for the future of maritime industry; (ii) Create an enabling ecosystem for innovation and R&D collaboration; and (iii) Prepare maritime talent to capture new opportunities. In the afternoon Lecture Session, HKIMT Honorary Assistant Secretary Dr. K S Fung introduced HKIMT, highlighting the maritime community and challenges in Hong Kong; recent efforts and activities; and the actions plan for moving forward.



*Presentation in PAAMES Lecture Session by Dr. K S Fung*

The AMEC started on 11 December 2025 with a total of 82 conference papers submitted and presented. Mr. M T Yau presented a paper titled "*Hong Kong's Maritime Green Technologies: A Case Study of Electric Ferry and Infrastructure Development in Hong Kong*" for HKIMT and HKIE-MMNC Division. The paper introduced the first electric ferry "Xin Ming Zhu 39" owned and operated by Sun Ferry Services Company Ltd, covering the aspects from conceptual design, ship functional architecture and specifications determination, to shipbuilding, operations, performance analysis, maintenance, as well as future development. The presentations were followed by an interactive Q&A session, with topics including pros and cons of carbon fiber hull, performance in high-speed mode, and the potential development of other electric vessels in Hong Kong.



*Presentation of Conference Paper by Mr. M T Yau for HKIMT and HKIE-MMNC Division*

Upon completion of the presentation of the conference papers in the afternoon of 12 December 2025, the PAAMES member societies representative met, discussed, and voted for the best paper awards. The best awarded papers were as follows:

**Category 1 – Advanced Ship & Offshore Structure**

“HOS-CFD Coupled Numerical Wave Tank for Predicting Wave-Added Resistance and Ship Motions,” Haofeng Tian et al. (Shanghai jiao Tong University, China)

“Analysis on the Coupling Effect of Liquid Sloshing and Tank Motion in the Unloading Process in Waves,” Qingyi Qu et al. (Jiangsu University of Science and Technology, China)

**Category 2 – Clean Fuel, Renewables & Transition Energy**

“Active Ballast Control of a 5MW Semi-submersible Floating Offshore Wind Turbine”, Yu-Chieh Hung et al. (National Taiwan University, Taiwan-China)

**Category 3 – Digital Transformation & Smart Technologies**

“A Method for Ship Modeling in a Virtual Marine Environment for SILS-Based Collision Avoidance,” Ha-Yun Kim et al. (Seoul National University, Korea)

**Category 4 – Sustainable Maritime Practices & Decarbonization**

“Hybrid AI Framework for Predicting Ship Energy Penalties from Hull Fouling Conditions,” Yougrong Kim et al. (Nanyang Technology University, Singapore)

**Category 5 – Underwater Technology**

“Analysis of Propeller Hydrodynamic Characteristics under Various Operating Conditions,” Ping Sen Chou et al. (National Taiwan Ocean University, Taiwan-China)

**Category 6 – Safety & Regulatory Compliance**

“Buckling-induced Ductile Fracture of a Thin-walled Square Column Subjected to Monotonic Compression,” Takahiro Oda et al. (National Maritime Research Institute, Japan)

**Category 7 – Education, Training, Human Resources and Other Topics**

“Semi-Automatic Equipment 3D Model Generation from 2D Drawings using YOLO”, Eun-young Son et al. (University of Ulsan, Korea)

**Category 8 – Maritime Logistics, Management & Business**

“A System Dynamics Model for Container Ship Demand Forecasting,” Yujiro et al. (Hiroshima University, Japan)

The awards were delivered by SNAMES President Dr. Ang Joo Hock during the 11th PAAMES Conference Banquet in conjunction with SNAMES 51st Anniversary Annual Dinner. It was announced that 12th PAAMES AMEC 2027 shall be hosted by the Taiwan Society of Naval Architects and Marine Engineers to in Taipei in 2027.



*The 11th PAAMES Conference Banquet – SNAMES President Dr. Ang Joo Hock (middle) and delegates from Hong Kong-China, Japan, Korea, and Russia*

As the final highlight of PAAMES AMEC 2025, on the morning on 13 December 2025, 14 delegates enjoyed a memorable post-conference river cruise along Singapore’s iconic waterfront onboard the solar powered electric boat “Pyxis R” arranged by SNAMES. Cruising passes the vibrant skylines of Clark Quay, Boat Quay, and Marina Bay, delegates took in a unique perspective of the city while savoring a refined gourmet lunch and concluding their time in Singapore with relaxed, meaningful conversations among peers. A special highlight was Mr. Foo Nan Cho, former SNAMES President (2015-2018), who delighted everything with a soulful harmonica performance through the journey.



*Singapore first solar-powered electric boat “Pyxis R”*

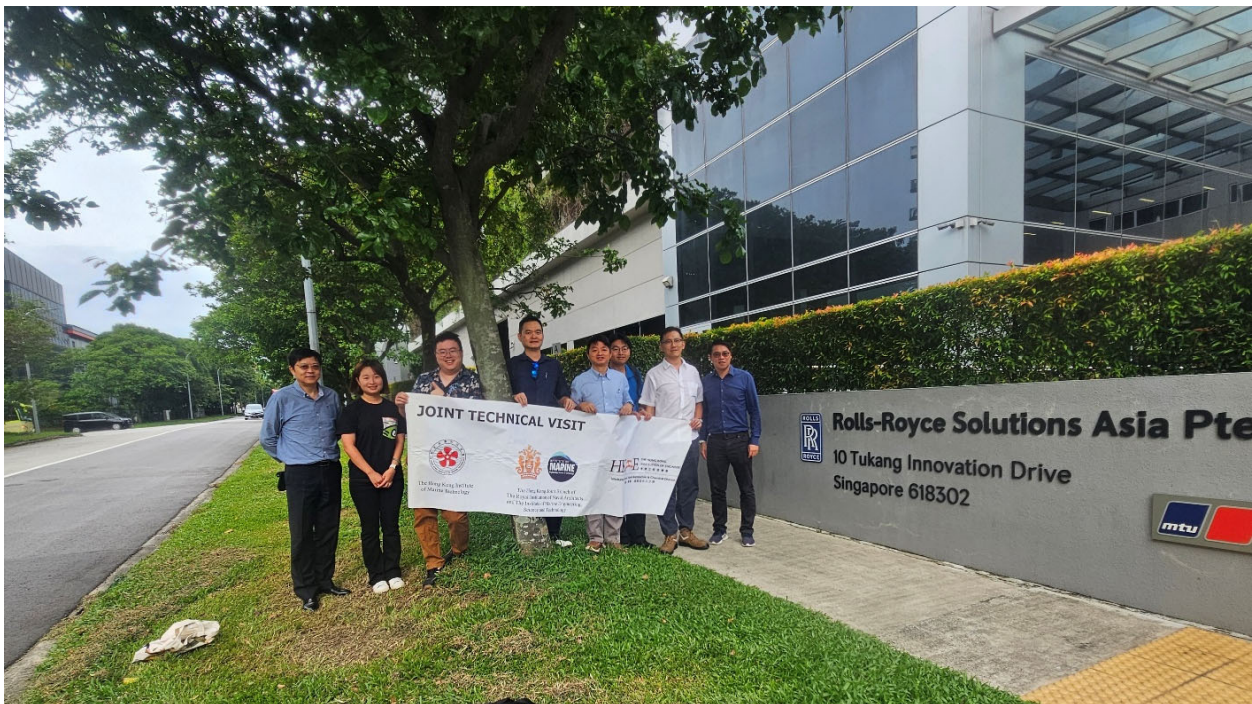
*(Reported by Leslie Lee and Simon Chen)*

## HKIMT/HKJB technical visit to Rolls-Royce Solutions Asia on 8 December 2025

Rolls-Royce is a high street brand equivalent to lavishness and top-class quality. It is seen on super luxury cars on land and turbo-fan engines on civil aircrafts in the air; it is also found on yachts, ferries and naval crafts at sea, appearing itself as MTU. Rolls-Royce acquired MTU and MTU has become part of Rolls-Royce Power System business, serving 1,200 locations in 175 countries by its 420 distributors. Singapore is its Asia Pacific hub and stocks EUR€ 14 million spare parts for governmental, marine, offshore and mining industry. It is also the centre of training the operations and maintenance (“O&M”) of the MTU 2000, 4000, and 8000 series marine engines, as well as the centre of overhauling the MTU marine engines to their original brand-new state.

Users of the Rolls-Royce products often operate in highly demanding conditions, which equipment down-time is kept to absolute minimum. In case of engine faults, the redress is not diagnosis of fault and on-site replacement of the faulty components, which often links to suspension of service for the delivery of spare parts. Instead, the complete engine is replaced with a fully functional one, while the replaced faulty engine takes its time to be repaired off-site. To support this ‘swing engine’ arrangement, which is more common in the government sectors, Rolls-Royce needs to keep multiple complete engines in stock, ready for ‘swing’ at any possible time.

In the commercial sector, time factor is crucial, and so is cost. Rather than overhauling parts, Rolls-Royce offers factory remanufactured (“reman”) components. The reman components came from the used engines taken from other users, and were reconditioned, tested and certified full functionality by Rolls-Royce. Customer is supplied reman components for instant replacement of its old and worn ones, so that its engines can resume operational at the shortest possible down-time. Not only so, but customers can also enjoy the lower procurement cost of the reman components than the brand-new ones, while Rolls-Royce warrants the final engine performance and emissions. The rolled-out pieces are then sent to Rolls-Royce for remanufacturing, turning into useful assets in other customers’ engine reparation or rehabilitation.



*Team photo at Rolls-Royce Solutions Asia in Singapore*

A team of four Rolls-Royce qualified trainers in Singapore deliver 13 to 18 electrical and mechanical O&M courses on the MTU marine engines for civil and military users in Asia Pacific. Fault diagnosis, use of specialised tools, roll-in and roll-out of parts of all modern MTU units are taught in detail in typically in four

weeks, enabling the learners to be fully competent to work on the designated MTU engines onshore or offshore. The spacious modern training facilities also train military personnel on repairing MTU engines on tanks and Mercedes-Benz Diesel engines on trucks.

Rolls-Royce in Singapore has two 4,000 m<sup>2</sup> workshops for overhauling full range of MTU marine engines. All incoming used engines are first thoroughly washed and sand blasted. Components are then dismantled for meticulous condition inspections. For instance, crank-shafts are examined with magnetic particle inspection to expose the slightest crack, and using co-ordinate measuring machine for dimension measurements highly accurately. Malfunctioned components are subject to failure mode analysis (“FMA”) in a dedicated laboratory, which is capable to issue Level 3 FMA reports.

Each overhauled engine is tested on one of the three test cells. Supplied with low-sulphur diesel (10 ppm sulphur content), it is put on a hydro-dynamometer of 2,500 kW, 4,500 kW or 110,000 kW and measured its smoke level and exhaust temperature. Upon the test is passed, the engine is wrapped and vacuumed, with a humidity indicator attached, for return to its owner. Overhaul turn-over varies from 12 to 14 weeks.

MTU marine engines are premium products in the marine and offshore industries. Rolls-Royce also finds its prestige, not only on land and in air, but also at seas. The Rolls-Royce facilities in Singapore gives MTU engine owners in Asia Rolls-Royce-class after-sale services in O&M training, engine overhaul and spare parts supplies, at Rolls-Royce-grade engineering excellence. The standing of Rolls-Royce is self-explanatory, even at sea.

*(Reported by Tsang Wing Hay)*

## **HKIMT/HKJB technical visit to SeaTech on 8 December 2025**

Hong Kong and Singapore are alike in certain areas: common-law, right-hand drive, 50 Hz 200V power ... a notable similarity is extensive use of multi-storey industrial buildings to accommodate offices in non-central districts. For maritime engineering in Singapore, besides the mega shipyards in either Sembawang or Tuas, or marine engine reconditioning workshops in dedicated facilities in industrial parks, an industrial building by MRT North-West Line viaduct between Clementi and Jurong East houses the office of naval architecture, SeaTech.

The Singapore-headquartered consultancy has provided 410 customised front-end naval architectural designs for use on 670 vessels in 25 years. SeaTech utilises advanced industry software packages for designing vessels of various functions, such as “AVEVA” and “ShipConstructor” for designing vessels three dimensionally, Plant Design Management System for designing topside oil and gas production layouts on floating process, storage and off-loading vessels (“FPSO”). The hull design is optimised with running computational fluid dynamic analysis. Schedule management is assisted with either Primavera P6, which is preferred by the oil and gas clients, or Microsoft Projects. The design outputs are 100 % virtual; no physical modelling is needed.

FPSO are often converted from existing tankers, which design drawings may not accurately reflect the as-is condition. Where the drawings are unable to be depended upon in designing in detail the interfaces of the sophisticated oil and gas production hardware with the carrier, laser scanning is available to survey the actual state of the carrier in high precision.

SeaTech also designs for the offshore wind industry. In deep seas, offshore wind turbine generators (“WTG”) are kept afloat by the substructure for buoyancy and stability, while the substructure is chained to anchors on seabed to maintain its position. SeaTech designs all these, as well as feeder vessels of ferrying the WTG components from shore to the WTG locations offshore. In addition, offshore WTG can only be reached by purposely designed crafts with gangway of dynamically adjustable elevations, to enable the operators to embark and disembark on the offshore WTG safely. These are Offshore Wind Support Vessels, which are also in SeaTech naval architectural portfolio.

As a Singaporean naval architect firm, SeaTech contributes the island country’s pursuit of carbon neutrality. In preparation of Singapore no further grant of license to harbour vessels with tailpipe in 2030, SeaTech is designing Singapore’s first hybrid electric bunker and the first pure battery electric tugboat in Asia Pacific. The latter craft features swap batteries, minimising down-time for power replenishment. The batteries are modularised in containers, which also function as fire enclosure for safety.

Unlike few other naval architects that take-up jobs freelance, SeaTech directly employs naval architects and engineers. In India alone, it employs 40 of them, and it has also engineering offices in Malaysia and China. It is considered medium-sized in naval architecture in Asia, if not large-sized. The broad range of its design products reflects that it is a recognised partner in maritime engineering. Its office may appear ordinary; yet its establishment is extraordinary.



*Team photo at SeaTech Office in Singapore*

*(Reported by Tsang Wing Hay)*

## HKIMT/HKJB technical visit to Pinnacle Marine (Singapore) on 9 December 2025

At the chock between South China Sea and India Ocean, Port of Singapore is the second largest container port in the world in terms of volume. West of it sees Jalan Buroh crossing-over Pandan River, and next to Jalan Buroh finds a shipyard, as busy as the adjacent container port, but building harbour-craft vessels. Pinnacle Marine (Singapore) (“Pinnacle Marine”) constructs aluminium alloy-hull boats in 13, 16 or 20 m, repairs and maintain similar vessels in aluminium alloy-, wood- or glass reinforced fabric-made hull. It is also a major customer of its own products, using them to provide agency services in support of Port of Singapore nearby and government agencies.

Beneath the metal shelter by Pandan River are five production lines that can deliver 15 boats annually, while Pinnacle Marine is proud of its record of from kneel to launch within one month and 28 days. American Bureau of Shipping-classified 5083 aluminium alloy sheets in thickness from 3 mm to 12 mm from the Chinese Mainland are used to form all sections of the boats, while welding of aluminium alloys is governed by in-house developed welding procedure specification, backed-up by respective procedure qualification record.



*Visit to Pinnacle Marine (Singapore) shipyard*

Pinnacle Marine-build boats feature recessed ladder and platform above draught line integrated into both port and starboard sides of the aluminium alloy-made hull. Not only does this feature provide convenient embarkation and disembarkation, but it is also found particularly useful when serving as a diver support craft. The boats in the Pinnacle Marine fleet are classified by China Classification Society (“CCS”) as class, enabling them to operate in outer port limit (“OPL”) of 30 nautical miles. Their aluminium alloy-made hull also permits them to be flagged Singapore and hire maximum two foreign seafarers, according to Singaporean law.

Adjacent to the production yard are the workshop and warehouse for repairing propellers, machining propeller shafts and stocking spare parts. It is also where the palm oil-based B100 biodiesel from Malaysia is stored for trialling zero emission on boats in Singapore, an attempt to help the island country to achieve the national target of near carbon neutral and full carbon neutral by 2030 and 2050 respectively.

Fulfilling CCS classification requirements for OPL, the boats are endowed with twin Weichai 331 kW (460 hp) engines and twin 20 kW generators, to deliver speed of 20 knots and meet regular hotel load of 16 kW for carrying 3 crew members and maximum 12 passengers.

As an authorised distributor of Weichai marine engines, Pinnacle Marine keeps stock of spare parts and complete engines. It can also overhaul an engine in five days.

Pinnacle Marine site near Jalan Buroh is on a plot by water leased from the government. Beforehand it manufactured boat components on the eighth floor of a ramp-up rented factory, like the multi-storey industrial buildings in Hong Kong, and assembled them in a third-party shipyard. It overcame all challenges and has evolved to the current state, in which the Pinnacle Marine management takes pride. Moving ahead, eyeing on the buoyant liquidity and dynamic market, it is working towards listed in Hong Kong Stock Exchange. If everything goes as planned, Hong Kong and Singapore will share a piece of maritime engineering in common.



*Team photo at Pinnacle Marine (Singapore) shipyard*

*(Reported by Tsang Wing Hay)*

## HKIMT/HKJB technical visit to C M R (Far East) on 9 December 2025

Power distribution is indispensable to all industries, more crucial to marine applications. Singapore is the hub of navigation and marine engineering, and there is a company in Tuas, the western end of the island country, that provides total solutions of power distribution in maritime applications.

Contrôle Mesure Régulation or C M R, now part of the U.S.-based company Amphenol, offers wiring systems, electronics, sensors and power solutions. In Singapore, C M R specialises in designing, manufacturing and installing shipboard power and vessel controlling facilities. It is capable to convert functional requirements to detail design drawings and tangible products of low voltage (“LV”) distribution panels, which are popular in offshore applications, and controlling systems on energy, propulsion and integration of multiple systems for automating ocean-going vessels.



C M R also provides retrofit solutions that includes rehabilitating the controls of existing engines on vessels. Certain engine original equipment manufacturers (“OEM”) may no longer provide technical support to their older engine models. Despite these engines may still be mechanically sound, their wires, sensors and control hardware may have become obsolete and hamper them to function. C M R can ascertain the condition of the existing engine sensors and replace all obsolete wiring, sensors and control processing devices with new ones, which leverage class type approved, open-sourced micro-processors from reputable brands such as Shindler. Featuring short downtime and no OEM support needed, old engines can resume full functionality economically.

C M R in Singapore assembles LV panels up to 690 V using angle bars and sheet metals in standard lengths and coated from contractor in Johor Barau, Malaysia, and integrates switches and other electrical components from recognised OEM likes Shindler and Siemens into complete distribution panels. Factory acceptance test is

carried out in the same workshop using C M R in-house testbeds, which can generate signals to simulate all possible working conditions, witnessed by classification society representative.

The C M R distribution panels are known to be well received by the maritime industry with its flexibility, especially in Floating, Processing, Storage and Off-loading “FPSO” vessels in offshore engineering. FPSO vessels are converted from tankers and being technically sophisticated, often engineering design keeps changing during conversion. Last minute changes are commonplace, and C M R is agile enough to accommodate them with swiftly alternating panel design and adjusting equipment assembly. Even under such adaptability and customisation, C M R can complete production of a panel in three to four weeks. This explains why Singapore-made distribution panels with C M R batch are frequently found on high value FPSO.

Although Singapore is a high-cost region, C M R is still able to sustain manufacturing in it. Quality and reputation are surly major factors, and ability to swiftly customise is another drive of gaining its recognition. C M R’s success in Singapore is an exhibition of responsiveness to market, in combination of technical excellence, can differentiate one from its lower cost rivals and justify notable presence in a premium place.



*Team photo at Contrôle Mesure Régulation (Far East) in Singapore*

*(Reported by Tsang Wing Hay)*

## HKIMT and HKJB Annual Ball 2025

The HKJB - HKIMT Annual Ball 2025 was held on 28th November at the Kerry Hotel in Hung Hom Bay, marking the first time the event took place at this venue. This year's ball was notable for being the largest in recent memory, with nearly 430 guests and members gathered in the Grand Ballroom. The event carried a somber tone, as it followed the tragic Tai Po fire incident that had occurred just two days prior. As a sign of condolences, government officials did not present at the Ball in their official capacity.

Guests were served cocktails upon arrival in the stylish hotel foyer, where they could enjoy sweeping views of the Hung Hom Bay waterfront. The event saw a remarkable increase in foreign guests, many of whom hailed from traditional maritime nations including the UK, Ireland, Türkiye, Greece, Denmark, Cyprus, Australia, Dubai, South Africa, Italy, France, and the Netherlands. Besides a significant representation of Chinese SNAMEs, guest list included the CEO of IMarEST and the President & Chairman of the ICS UK.



Guests entered the Ball room first and as is a long-standing tradition, Pipers led the Head Table guests in at 7:30 pm. The evening's emcee, Elizabeth Poon, invited all attendees to stand as the pipers performed a solemn rendition of "Amazing Grace" on the bagpipes, serving as a tribute to the victims of the Tai Po fire.

Following the welcome speeches by host Chairmen, Ir Ernest Chan of HKIMT and Ir Leslie Lee of HKJB, Ball Chairman Mr Sharad Gupta, announced that a donation of HKD 200,000 would be made to the Tai Po Fire Relief Fund from the Ball receipts and an anonymous donor. This announcement was met with appreciative applause from the audience.



Subsequently, all sponsors were invited to the stage and honored with mementoes.

The evening's festivities began with a series of lucky draws, where winners received prizes ranging from shopping vouchers to drones and the latest iPhone and iPad models. Each draw was met with enthusiastic cheers and joyful celebrations. As the live band led by Phillip began to play, guests enjoyed a delectable four-course meal, used the immense networking opportunity and captured memories through photographs. Additional rounds of lucky draws kept spirits high and ensured a lively atmosphere throughout the evening.



The HKJB – HKIMT Annual Ball 2025 concluded on a high note, leaving attendees with fond memories of a meaningful and vibrant gathering that brought together the local as well as international maritime communities and underscored the Ball's growing importance as a key event in Hong Kong's maritime calendar.

*(Reported by Sharad Gupta)*

## Technical Visit to Marintec China 2025 in December 2025

In early December 2025, an 18-member delegation from Hong Kong's maritime sector, including HKITM, HKJB, HKIE, embarked on a technical visit to Shanghai and Wuxi (無錫), combining participation in Marintec China 2025, which is the world's premier maritime exhibition, with immersive tours of leading shipyards and related marine equipment manufacturers.



*Group photo at welcome reception of Marintec 2025*

Led by the Chairman of HKITM, Vice Chairman of HKJB, and Deputy Chairman of HKIE-MMNC, the delegation's four-day journey aimed to foster cross-border collaboration, share cutting-edge technologies, and strengthen ties between Hong Kong's maritime community and Chinese Mainland's industrial powerhouses.

### *Day 1: Arrival and a Warm Welcome in Shanghai*

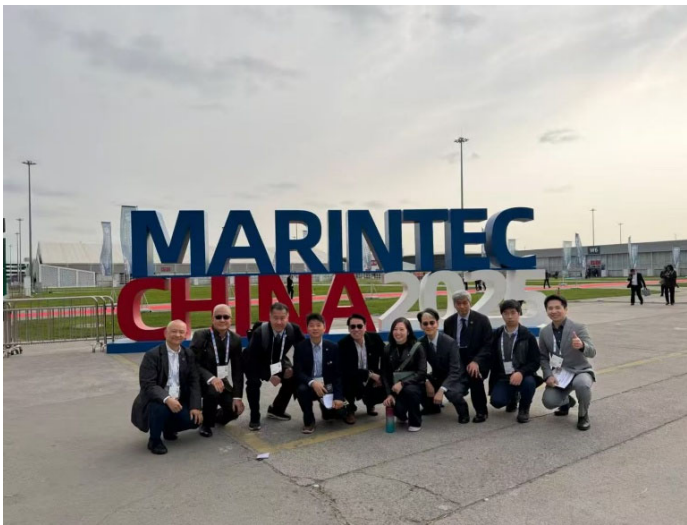
The delegation touched down in Shanghai on the evening of December 1st, 2025 (Monday) and was greeted by the warmth of the Shanghai Society of Naval Architecture and Marine Engineering (SSNAME)'s welcome reception.



*Opening ceremony of MARINTEC CHINA 2025*

*Day 2: Marintec China 2025's Exhibition Tour*

2 December (Tuesday) marked the delegation's full-day participation in Marintec China 2025, an event with over 40 years of legacy as a cornerstone of the global maritime calendar. As a global networking hub, the exhibition brought together thousands of professionals, experts, and enterprises from across the maritime spectrum—from shipbuilding and offshore engineering to marine equipment, digital solutions, and sustainable technologies. The Hong Kong delegation navigated over 10 exhibition halls, engaging with exhibitors from around the world to explore innovations in low-carbon propulsion systems, autonomous navigation, and eco-friendly marine materials. Key takeaways included insights into the accelerating adoption of LNG and hydrogen fuel technologies, as well as the growing role of data analytics in optimizing ship operations. In the evening, a “get together” dinner hosted by SSNAME further deepened connections, with informal conversations sparking ideas for future joint ventures and knowledge-sharing initiatives.



*Group photo at Marintec China exhibition center*



*Group photo in front of RINA booth*



*Group photo at Hong Kong Pavilion*

*Day 3: World-Class Shipbuilding enterprise - Shanghai Wai Gao Qiao (外高橋) Shipyard*

Wai Gao Qiao Shipyard is one of the major shipbuilding and repair facilities in China. It is well-known for the construction of various types of vessels, including bulk carriers, tankers, and specialized ships. The shipyard emphasizes technological advancement and has made significant investment in modern shipbuilding techniques to enhance efficiency and quality. During the visit, the delegation experienced China's second domestically built large cruise ship, the “Adora Flora City” (愛達·花城號), which was under construction at Wai Gao Qiao Shipyard. With a capacity of over 5,200 passengers, the vessel is designed for the Asian market, featuring advanced tech, cultural themes, and larger spaces than its predecessor, the “Adora Magic City” (愛達·魔都號), equipped with VR, aqua parks, and family suites, expected to debut in late 2026 or 2027 with international sailings from Guangzhou. Delegation group was lucky to have the opportunity to be onboard for detailed studies and close look at the most advanced shipbuilding technology.

Due to unforeseen issues, the visit of Hudong-zhonghua Shipyard (滬東-中華船廠) was postponed. Therefore, the delegation took this chance to detour to Zhujiajiao (朱家角), a historical water town on the outskirts of the city. This cultural interlude offered a chance to experience local traditions, architecture, and cuisine, providing a balance to the week’s technical focus. Strolling along ancient stone bridges, cruising on canals, and interacting with residents allowed the delegation to appreciate the rich cultural heritage of the region, further strengthening the personal and professional bonds forged during the visit.



*Group photo in front of the 2nd cruising ship, the “Adora Flora City”*



*Photo on the Sundeck of the “Adora Flora City”*



*HKIMT Chairman present the souvenir to Wai Gao Qiao Shipyard on behalf of HK delegation*



*Group photo at Zhujiajiao, a historical water town*

#### *Day 4: Exploring High-Performance Ships and Propulsion Systems in Wuxi (無錫)*

On 4 December (Thursday), the delegation travelled to Wuxi for technical visits to two manufacturers who specialized in shipbuilding and rudder propellers. The first stop was Wuxi Dongfang High-Performances-Ship Engineering Co., Ltd., a subsidiary of the China Ship Scientific Research Center and a trailblazer in green and innovative maritime solutions. With endeavor in the integrated design and construction of fully transparent, new energy-powered high-performance boats and yachts. The delegation was particularly impressed by the company's tailor-made style as well as the short building period.

Following the morning tour, the delegation visited Wuxi Oriental Changfeng Marine Propulsion Co., Ltd., a professional manufacturer of full-rotate rudder propellers under the 702 Institute. As an enterprise integrating design, production, manufacturing, and after-sales service, Wuxi Oriental Changfeng boasts a robust R&D team and state-of-the-art production facilities. The delegation learned that the company currently produces 80 rudder propellers annually, with a single-unit power capacity of up to 3,000KW, and is actively developing 5,000KW products set to serve military and civilian sectors—including ferries, tugboats, engineering vessels, and high-performance ships. A hands-on tour of the production line, from machining to assembly, provided the delegation with an overall understanding of the precision engineering required for reliable marine propulsion systems.



*Group photo in front of a customer made sightseeing vessel at Wuxi Dongfang High-Performances-Ship Engineering Co., Ltd*

#### *Key Outcomes and Future Collaboration*

The technical visit to Marintec China 2025 and Shanghai-Wuxi's maritime hubs proved to be a resounding success, achieving its goals of knowledge exchange, networking, and collaboration. The Hong Kong delegation returned with a deeper understanding of Chinese Mainland's advancements in green shipping, high-performance shipbuilding, and marine propulsion technology, while mainland manufacturers gained insights into Hong Kong's strengths as an international maritime services center.

This technical visit not only strengthened ties between Hong Kong and Chinese Mainland's maritime industries but also laid the foundation for future collaboration that will drive innovation, sustainability, and excellence in the global maritime sector.

*(Reported by Simon Chen & Leslie Lee)*

## Guangdong Society of Naval Architecture and Marine Engineering (GDSNAME) Integrated Academic Report Meeting and Technical Forum Cyber Security on 23 December 2025

HKJB, HKIMT and HKIE-MMNC members attended the captioned event at Nansha, Guangzhou (廣州南沙) on 23 December 2025.

The event started with GDSNAME reporting the latest developments in 2025, including increase of 20 company members and breakthrough record of engineers' certification, comprising 47 senior engineers, 142 engineers, 115 assistant engineers and 3 technicians. GDSNAME outlined future outlook that included strengthening of industrial cohesion, influence, and friendship. It was also announced that INMEX China (廣州國際海事展覽會) in Guangzhou will be their flagship event in 2026.

The GDSNAME Academic Reports Meeting commenced afterward. Theme of this year was digital transformation and development of quality manufacturing of ship and offshore engineering equipment. Prominent speakers came from Huawei Technologies Co Ltd, CSSC Huangpu Wenchong Shipbuilding Co Ltd, and CSSC Industrial Internet Co Ltd. The meeting completed in the morning followed by active discussion throughout the lunch period.

The GDSNAME Technical Forum on Cyber Security was arranged in the afternoon, with respective experts in the subject topic from Bureau Veritas, China Classification Society, CSSC 714 Research Institute, Guangdong Ship and Offshore Engineering Research Institute. Challenges and opportunities of current situations like shortage of industrial experts in this profession and potential for lengthy certification lead times were discussed among subject experts, ship designers, ship builders, and ship owners.

In addition to knowledge sharing, this event also helped strengthen good working relationships with related stakeholders, especially those having Memorandum of Agreement signed with GDSNAME. We look forward to working with GDSNAME together for a better future of our maritime profession.



*Members from HKJB, HKIMT and HKIE-MMNC attending GDSNAME Academic Reports Meeting and Technical Forum at Nansha Guangzhou on 23/12/2025*

*(Reported by Leslie Lee and Simon Chen)*

## HKJB & HKIMT Coming Activities

Date	Event
24 March 2026	1 <sup>st</sup> HKJB Committee Meeting 2026
April 2026	HKIMT visit to Zhejiang Province on Zhejiang SNAME invitation
18 April 2026	Final Round of STEM x Marine Vehicle Design and Construction Competition
9 May 2026	Prize awarding ceremony of STEM x Marine Vehicle Design and Construction Competition
27 Jul 2026	Football match with Guangdong SNAME and technical visit(s) in Guangdong Province Joint Chairman Reception
August 2026	Marine Vehicle Design Competition in Zhuhai
November 2026	Hong Kong Maritime Week
7 November 2026	Joint Annual Ball 2026
December 2026	Guangdong INMAX

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