

## Mini-Symposium on:

### Trends in “Eco-Friendly Shipbuilding and Marine Technology”

The purpose of the "Eco-Friendly Shipbuilding and Marine Technology" mini-symposium is to create an inclusive platform that facilitates the exchange of the latest research trends and technological developments in the maritime industry, with a particular emphasis on sustainability and environmental impact reduction. This symposium aims to delve into the latest advancements in eco-friendly materials, renewable energy integration, energy-efficient propulsion systems, and smart monitoring technologies that contribute to greener shipbuilding practices. By gathering experts, researchers, engineers, and industry professionals, this session aspires to foster interdisciplinary collaboration and the sharing of innovative solutions that address the complex challenges of reducing greenhouse gas emissions, minimizing fuel consumption, and improving marine ecosystem preservation. In addition to discussing technical advancements, this symposium offers a unique opportunity for participants to expand their professional networks and establish connections that could lead to future collaborations. By bringing together diverse perspectives from academia, industry, government, and regulatory bodies, the event seeks to stimulate discussions on how emerging technologies can meet international environmental standards and regulations, ultimately contributing to the sustainable evolution of the maritime industry. This aligns seamlessly with ICMR's mission of advancing materials science and reliability in real-world applications, driving innovation, and promoting sustainable practices in the shipbuilding and marine sectors. Furthermore, the mini-symposium aims to highlight how cutting-edge research and technological trends can be translated into practical applications that enhance the durability, efficiency, and safety of marine structures while reducing environmental footprints. This event will serve as a catalyst for knowledge dissemination and collaborative research, encouraging the adoption of sustainable practices that ensure the maritime industry's competitiveness and environmental responsibility in the long term. Through this platform, we hope to inspire the maritime community to pursue eco-friendly technologies and approaches that contribute to the global movement toward a greener and more sustainable future.

#### ❖ Mini-Symposium Developers:

- Dr. Yongjin Kim, KIMM (Korea)



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#### ❖ Mini-Symposium Chair:

- Dr. Yongjin Kim, KIMM (Korea)

#### ❖ Paper List (Tentative):

- Research Trends and Project Planning Status of Eco-Friendly Ships in the Shipbuilding and Marine Industry, Dr. Young Ki Kim (KIMM)
- Hydrogen as an Eco-Friendly Alternative Fuel for Ship, Prof. Jung-Hyun Kim (Pusan National University)
- Numerical Analysis of Cooling Phenomenon for the Concentric Double Pipe Heat Exchanger, Prof. Yang Gon Kim (Mokpo National Maritime University)
- Optimum Alignment of the Propulsion Shafting System Equipped with the Shaft Generator, Prof. Sung Woog Choi (Gyeongsang National University)