

EMERGING TECHNOLOGIES IN INTELLIGENT MARINE & OFFSHORE ENGINEERING SYSTEMS

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ABSTRACT

The marine and offshore engineering sectors are currently undergoing a technological revolution driven by advancements in smart technologies and intelligent systems. This session, "Emerging Technologies in Intelligent Marine & Offshore Engineering Systems," aims to explore cutting-edge innovations that enhance the efficiency, safety, and sustainability of marine and offshore projects.

The session invites creative and innovative researchers and field experts to delve into the integration of embedded sensors for real-time monitoring, providing critical data that enhances operational awareness and safety. Explore the application of artificial intelligence (AI) for design and optimization and discover how AI can revolutionize project planning and execution by improving precision and reducing costs. We will also highlight the fusion of data science techniques with experimental results analysis, showcasing how big data can unlock new insights and drive decision-making. Further, the session will explore the role of digital twins in simulating and optimizing marine and offshore systems, showcasing the benefits in the early stages of design and lifecycle management, including maintenance and asset life extension.

The session's goal is to bridge the gap between academia, government, and industry by fostering collaboration and knowledge exchange. Attendees will gain insights into the latest research developments, understand government sector needs, and explore industry-driven innovations. This collaborative approach will help identify practical solutions and strategies to address the complex challenges facing the marine and offshore engineering sectors.

Join us to discover how emerging technologies can transform marine and offshore engineering, creating a safer, more efficient, and sustainable future.