## Abstract

It is with great honor and enthusiasm that I present *Volume 21, Issue 1* of the *Journal of Naval Sciences and Engineering* (JNSE) as the newly appointed Editor-in-Chief. I am deeply grateful to the editorial board for their trust, and I look forward to serving our academic and professional community by fostering high-impact research and interdisciplinary dialogue in the fields of naval sciences, engineering, and maritime technology.

This issue brings together six carefully selected and peer-reviewed articles that collectively reflect the journal's dedication to scientific excellence and innovation. The studies featured in this volume address a broad spectrum of contemporary challenges, ranging from electronic signal processing and computational marine hydrodynamics to photovoltaic energy systems, ship inspection, maritime safety, and sustainable fuel alternatives in marine propulsion.

The research presented in this issue demonstrates a strong orientation toward both theoretical development and practical application. From the use of bio-inspired optimization algorithms in analog filter design, to advanced numerical simulations for analyzing ship propulsion dynamics, the authors exhibit a clear commitment to solving real-world engineering problems. Likewise, the integration of thermoelectric systems into photovoltaic modules highlights the growing importance of hybrid renewable energy solutions, while the human factors analysis of pilotage-related maritime accidents underscores the relevance of interdisciplinary approaches to safety and risk management. On the other hand, the comparative assessment of alternative marine fuels offers timely insights into decarbonization efforts and the evolving landscape of ship energy systems. Finally, the effectiveness of flag state control highlights the importance of the ship inspection frequency.

Each of these contributions not only advances knowledge within its respective field but also enriches our understanding of complex, interconnected systems within naval engineering. The combination of methodological rigor, originality, and practical relevance ensures that this issue will be a valuable resource for researchers, practitioners, and policy-makers alike.

On behalf of the editorial board, I would like to express my sincere appreciation to the authors who entrusted us with their scholarly work and to the anonymous reviewers whose meticulous evaluations and constructive feedback have upheld the quality and integrity of this publication. Their voluntary dedication is indispensable to the academic publishing process.

I hope this issue inspires further research, collaboration, and critical engagement within our field. As *Editor-in-Chief*, I am committed to supporting the journal's continued growth as a dynamic platform for the dissemination of pioneering research in naval sciences and engineering.

**Dr. Atılgan ALTINKÖK, PHD** Editor in Chief, *Journal of Naval Sciences and Engineering* Volume 21, Issue 1 June, 2025