

CONTENTS

Wave Diffraction and Independent Radiation by a Buoyant Body in Finite-Depth Water by Using an Exact NtD Boundary Condition <i>Un-Ryong Rim, Hyo-Song Ko, Gum-Chon Ri</i>	287
Preliminary Design of a Catamaran Ship for Water Tourism in Lake Sunter <i>Augustinus Pusaka Kindangen, Lurimarna Syahdan, Shanty Manullang, Ayom Buwono, Rizky Irvana</i>	297
Revitalization of Environmentally Friendly Pinisi PELRA Fleet as a Feeder for Perintis Routes in 3TP Areas <i>Antonius Hendrawan Tio Praditya, Sjarief Widjaja, Triwilasndio Wuruk Pribadi</i>	310
Prediction of Ship Time in Port Using Machine Learning Algorithm <i>Ronald Simanjuntak, Mauritz Sibarani, Tri Cahyadi, Derma Watty Sihombing, Marudut Bernadtua</i>	320
Investigation of Planing Hull Resistance Calculation Using Smoothed Particle Hydrodynamics <i>Andi Trimulyono, Muh Fajar Nuralam, Deddy Chrismianto, S. Samuel, Imam Pujo Mulyatno, Muhammad Iqbal</i>	329
Analysis of Water Quality Correlation with the Immune Response of <i>Litopenaeus vannamei</i> in Probolinggo, East Java <i>Andhika Farras Rahardian Putra, Asus Maizar Suryanto Hertika, Yunita Maimunah</i>	334
Advancing Fucoxanthin Production from Microalgae: A Bibliometric Analysis of Research Trends and Innovations <i>Muhamad Maulana Azimatun Nur, Resti Nurmala Dewi, Faizah Hadi, Tunjung Wahyu Widayati, Danang Jaya, Nita Afroskina Tjun, Alinda Fitriani Nisya</i>	343
The Implementation of Nonlinear Signal Techniques for Enhanced Monitoring of Marine Propulsion Systems <i>Iradiratu Diah Prahmana Karyatanti, Istiyo Winarno, Belly Yan Dewantara, Anggo Suryo Wibisono</i>	359
Application of the Finite Element Method for Evaluating the Stress Due to Operating Load in High Energy Piping System <i>Pekik Mahardhika, Adi Wirawan Husodo, Ekky Nur Budiyo, Benedicta Dian Alfanda, Rina Sandora</i>	368
Integration of OHSMS and Marketing Strategies in Shipbuilding: Literature Review and Its Implications on Productivity <i>Melani Quintania, Mohammad Danil Arifin</i>	376
Integrity Assessment of Dented Aboveground Steel Storage Tank After Hydrostatic	387



INTERNATIONAL JOURNAL OF MARINE ENGINEERING INNOVATION AND RESEARCH

VOL. 10, NO. 2

JUNE 2025

Testing

Wira Herucakra, Luh Putri Adnyani

- Inspection of the Adequacy of Closed-Drain and Open-Drain Systems Using Hydraulic Analysis for Aging Offshore Platforms** 397
Mutadi Mutadi

- Analysis of Suitability and Carrying Capacity for Ecotourism Purposes in the Sepanjang Beach Tourism Area** 406
Clara Ammelia Sucahyo, Supriyadi Supriyadi, Rezky Lasekti Wicaksono, Galuh Masyithoh

- Analysis of the Influence of F.O Purifier Maintenance on the Performance of the Main Engine on the KM. Logistik Nusantara 2 Ship** 416
Satrio Wibowo Ajie, Antonius Edy Kristiyono, Teguh Pribadi, Nasri Nasri, Rama Syahputra Simatupang, Imam Sutrisno

- Risk Assessment for Speedboat Tourism in Raja Ampat Using the Swiss Cheese Model (SCM)** 427
Antoni Arif, Dodik Widarbowo, Dwi Haryanto, Fajar Gumelar, Filemon Filemon

- Design of Internet of Things (IoT)-Based Control and Monitoring System of Eco-Aquaculture** 431
Jonathan Hervianto, Raden Sjarief Widjaja, Sintia Megawati, Yuda Apri Hermawan, Totok Yulianto

- Adaptive Management for Coastal Sanitation Governance in Jakarta, Indonesia: Bridging Community Resilience and the 100-0-100 Development** 443
Evi Siti Sofiyah, I Wayan Koko Suryawan

- An Experimental Study of Stagger Angle Effect Placed in Front of Returning Side Toward the Savonius Wind Performance Using Overlap Myring Blade for $n=1$** 451
Priyo Agus Setiawan, Projok P. S. Lukitadi, Ennie Santoso, Nokpen Arivyowius, Armainatus Sa'diyah, Daisy Ika, Galih Amindita S., Burhan Prakoso B., Cepene E. Kusuma, Gelar Andriadi Isti, Resy Kiswanto S., Endang K. P. Purwani, Bambang Antoko S., Mohammad M. Munir

- Assessment of Safe Loading Conditions for the SPCB Deck Crane Using Hydrostatic and GZ Curve Analysis** 458
Budhi Santoso, Romadhoni Romadhoni, Polaris Nasution, Hardiyanto Hardiyanto, Zulfaidah Ariany

- Simulation of Solar Energy Harvesting on a 25-Meter Electric Passenger Ferry** 471
Danang Cahyagi, Naufal Abdurrahman Prasetyo, Jansen Anugrah Siregar, Floribertus Rio Ferdinand

- Analysis of Causes of Starting Failure on Auxiliary Engine MT Green Stars with** 478



INTERNATIONAL JOURNAL OF MARINE ENGINEERING INNOVATION AND RESEARCH

VOL. 10, NO. 2

JUNE 2025

HAZOP Method

Ardiansyah Nur Rahman, Shofa Dai Robbi, Akhmad Kasan Gupron, Aziz Nugroho, N. Nasri, Rama Syahputra Simatupang, Imam Sutrisno

387Optimization of the Standalone Hybrid Energy Storage System in the All-Electric Sea397bus Power System Based on Pulsed Propulsion Load Prediction 486
Moham406mad Yusqi Shoubil Haq, Vita Lystianingrum, Agoes Santoso
416

Nu427merical Evaluation of Post-Deck-Flooding IMO Criteria for a Low-Freeboard Harbo431r Tugboat 500
Romadhon443i Romadhoni, Budhi Santoso, Polaris Nasution

Overflow Analysis on the FO Purifier of KM Tanto Sukses Vessel 510
Bagas Sadewo, Agus Prawoto, Trisnowati Rahayu, Azis Nugroho, Nasri Nasri, Rama Syahputra, Imam Sutrisno

Stress Analysis on Emergency Pipeline from Flare to Pressure Vessel 519
Projek Priyonggo Sumangun Lukitadi, Priyo A. Setiawan, Tarikh A. Ramadani, Mirza Z. I. Mulya

Hospital Auxiliary Vessel Fore Part Zone Planning to Improve Productivity with Precedence Diagram Method 525
Wenny Prawati, Intan Baroroh

Population Shift of The Family Scaridae: An Ecological Study in the Threatened Habitat of Tikus Island 537
Novita Nanda Syafitri, Deddy Bakhtiar, Ari Anggoro, Maestro Munru, Herni Iman Sari

Analysis of Microplastic Contamination in Vaname Shrimp (*Litopenaeus vannamei*) with Different Cultivation Methods 543
Puji Hastuti, Asih Fitriana Dewi, Defri Yona, Muhammad Mahmudi

Fatigue Life Analysis of Car Deck Construction on a Ferry Ro-Ro 551
Amam Baharullah, Achmad Baidowi, Edi Jadmiko

Light-Emitting Diode for Mitigating Horseshoe Crab (Limulidae) Bycatch of Bottom Gillnet Fishery for Blue Swimming Crab in the Waters of Ambulu Village, Cirebon Regency 568
Wazir Mawardi, Muhammad Faishal Ashshiddiqi, Zulkarnain Zulkarnain, Am Azbas Taurusman, Fis Purwangka

The Effect of Manhole Form on Double Bottom Ship Construction 574
Rudianto Rudianto, Ede Mehta Wardhana, Jangka Rulianto, R. Puranggo Ganjar Widityo, Ansori Ansori

Optimization of Hybrid Battery-Supercapacitor Storage System in Electric Ship Using Multi-Objective Genetic Algorithm 584



INTERNATIONAL JOURNAL OF MARINE ENGINEERING INNOVATION AND RESEARCH

VOL. 10, NO. 2

JUNE 2025

Sreymey Meng, Vita Lystianingrum, Agoes Santoso

Optimal Sizing of Hybrid Battery-Supercapacitor-Generator System in Electric Ship Using Genetic Algorithm

Chanraksa Sorn, Vita Lystianingrum, Agoes Santoso

593

Load Cell Failure Risk in Tandem Mobile Crane Lifting: A Fuzzy Fault Tree Analysis Approach

Fatih Pradana Putra, Priyambodo Nur Ardi Nugroho, Imam Sutrisno

601

Load Variation Analysis Of Generator On Lembar-Padang Bai Ro-Ro Ships For Safety Maritime

Haryanti Rivai, Baharuddin Baharuddin, M. Rusydi

610

