

International Conference on Ship and Offshore Technology (ICSOT 2014)

Development in Ship Design & Construction

Makassar, Indonesia
4-5 November 2014

Editors:

**Faisal Mahmuddin
Rahmad Patarru**

**Wira Setiawan
M. Uswah Pawara**

ISBN: 978-1-5108-1170-6

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2015) by The Royal Institution of Naval Architects
All rights reserved.

Printed by Curran Associates, Inc. (2016)

For permission requests, please contact The Royal Institution of Naval Architects]
at the address below.

The Royal Institution of Naval Architects
8-9 Northumberland Street
London, WC2N 5DA
United Kingdom

Phone: 44 207 235 4622

Fax: 44 207 259 5912

publications@rina.org.uk

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

CONTENTS

	Page
Finite Element Analysis on the Ship Hull Girder Under Longitudinal Bending with Bottom Damage Muhammad Zubair Muis Alie / Hasanuddin University	1
Study on the Plate Thickness Deduction on BKI Class Crude Oil Tanker Siti Komariyah, Fredhi Agung Prasetyo, Mohammad Arif Kurniawan / Indonesian Bureau of Classification	5
Composite Structure Design in Passenger Ship Using Multi-Objective Optimization Algorithm Abdi Kükner, Baran Serdar Sarıoğlu / Istanbul Technical University	11
Experimental and Numerical Investigation into the Effect of Water Depth on the Resistance Components of Multihull Configuration I K A P Utama, D. Setyawan / Institute of Technology Sepuluh Nopember E. Suwarni, A. Jamaluddin / Indonesian Hydrodynamics Laboratory M. Iqbal / Diponegoro University	19
Challenges On Designing Sustainable Fishing Vessels For Indonesian Fisheries Putu Arta Wibawa, R. W. Birmingham, M. D. Woodward / Newcastle University	25
Analysis of Propulsion Efficiency on Fishing Boat 30 GRT Mansyur Hasbullah, A. Haris Muhammad, Syarifuddin Daud / Hasanuddin University	35
Cruising Performance of Indonesian Ro-Ro Ferries Under Action of Wind and Waves Daeng Paroka, A. H. Muhammad, Syamsul Asri / Hasanuddin University	41
Parametric Simulation Of Semi-Swath Ship Running In Following Regular Waves Rahimuddin, Surya Haryanto, Syerly Klara, Haryanti Rivai, Hasnawiyah Hasan, Azis Karim / Hasanuddin University Adi Maimun / Universiti Teknologi Malaysia	49
Application of Logic Programming Technique on Maritime Accident Analysis Zobair Ibn Awal, Kazuhiko Hasegawa / Osaka University	59

Hydroplane Development as Diving Plan Equipment on a Submarine	67
Ali Munazid, Bagiyo Suwasono, Gde A. Prabhawatyia Poundra, Alfred Agry Mohamad / Hang Tuah University	
The Fluid Flowing Analysis of RC Hydroplane with Ansys 14.0	71
Agum Gumelar, Eris Andicky, Intan Baroroh, Bagiyo Suwasono / Hang Tuah University	
Initial Preview on Re-Mapping Wave Scatter Area of Indonesian Waterways	75
Mohammad Arif Kurniawan, Siti Komariyah, Fredhi Agung Prasetyo / Indonesian Bureau of Classification	
Mapping Ocean Wind Energy Density around Sulawesi and Maluku Islands	81
Faisal Mahmuddin / Hasanuddin University	
The Analysis of Diesel Engine Performance Using Coal Oil Mixture (COM)	87
Wira Setiawan, Uswah Pawara / Hasanuddin University I Made Ariana, Semin / Institute of Technology Sepuluh Nopember	
Measurement of Maritime Connectivity at Sulawesi Corridor	95
Andi Siti Chairunnisa Mappangara, Resky Khalik, Lawalenna Samang, Rahardjo Adisasmita, Ganding Sitepu / Hasanuddin University	
Performance of the Zinc Anode Shape Design Installation on the Seabus ALU-01 Fastship	105
Neny Praharsiwi Utomo, Ali Munazid, Bagiyo Suwasono / Hang Tuah University	
Gravity Model Applications in Determination of Distribution Model for Goods Movement among Ports at Sulawesi Corridor	109
Ahzar, Mislih Idrus, Andi Siti Chaerunnisa / Hasanuddin University	