

# JOURNAL OF MARINE SCIENCE AND TECHNOLOGY

April, 2017

Vol. 25, No. 2

## CONTENTS

### Section A: Marine Engineering, Maritime, and Marine Affair (Management, Tourism)

A Heuristic Algorithm of Vehicle Routing Problem with Time Windows and Less-Than-Truckload Carrier Selection .....	Chao-Sheng Wu, Ching-Wu Chu, and Hsiu-Li Hsu	129
Finite Element Method in Statistical Analysis of Flexible Pavement .....	.... Abdollah Shayesteh, Elahe Ghasemisalehabadi, Mohammad Worya Khordebinan, and Touba Rostami	142
An Integrated Inventory Model with Dependently Polynomial Crashing Costs and A Fuzzy Interest Rate .....	..... Li-Hsing Ho and Wei-Feng Kao	153
Experimental Investigations on Cavitations of Marine Propellers Using Quantitative Image-Based Methods .....	..... Yaw-Huei Lee, Yi-Chih Chow, and Yu-Chi Chang	158
The Research on Compressor Performance Degradation Caused by Tip Clearance Enlargement Due to Corrosion in Marine Environments .....	Hai-Ou Sun, Jing-Yuan Ma, Zhong-Yi Wang, and Lei Cao	166
Study of Junction Flow Structures with Different Turbulence Models .....	..... Jun Pei Lee, Jiahn-Horng Chen, and Ching-Yeh Hsin	178
Fuzzy Grounding Alert System for Vessel Traffic Service via 3D Marine GIS .....	..... Sheng-Long Kao, Ki-Yin Chang, and Tai-Wen Hsu	186
Application of Coupled FEM/BEM on the Analysis of Underwater Radiated Noise of a Surface Ship Induced by Hull Vibrations .....	Hua-Tung Wu and Pei-Tai Chen	196
Well Control Capacity-Based Risk Analysis of Gas Cut in Deepwater Drilling .....	..... Yuqiang Xu, Zhichuan Guan, Yan Jin, Hua Pang, Yongwang Liu, Bo Zhang, and Yanan Sheng	205
Performance Evaluation of the Security Management of Changjiang Maritime Safety Administrations: Application with Undesirable Outputs in Data Envelopment Analysis .....	..... Guo-Ya Gan, Hsuan-Shih Lee, Cheng-Chi Chung, and Shu-Ling Chen	213
A Study of Fuel Temperature Dynamic Characteristics for Diesel Engine Combination Electronic Unit Pump System .....	Wensheng Zhao, Liyun Fan, Quan Dong, and Xiuzhen Ma	220
Characteristics Analysis of Vessel Traffic Flow and Its Mathematical Model .....	..... Zhao Liu, Jingxian Liu, Zongzhi Li, Ryan Wen Liu, and Naixue Xiong	230

### Section B: Oceanography, Marine Biology, Fisheries Science, and Marine Ecology

Simple Heat Processing of Brown Seaweed <i>Sargassum cristaefolium</i> Supplementation in Diet Can Improve Growth, Immune Responses and Survival to <i>Vibrio alginolyticus</i> of White Shrimp, <i>Litopenaeus vannamei</i> .....	..... Yu-Hung Lin, Yi-Che Su, and Winton Cheng	242
--	--	-----