

CONTENTS

Ocean Engineering:

Advanced Ship Hydromechanics and Marine Technology

OMAE2015-41193	1
Roll Center of a FPSO in Regular Beam Seas for All Frequencies	
<i>Antonio Carlos Fernandes, Peyman Asgari and Mohammadsharif Seddigh</i>	
 OMAE2015-41248	
Sliding-Mode Control System Design for an Experimental Model With Resonance-Free SWATH	
<i>Hiroyuki Kajiwara, Masamitsu Kanda and Motoki Yoshida</i>	
 OMAE2015-41299	14
Transducer Qualification for Wave Impact Load Measurements Using Wedge Drop Tests	
<i>Zhenjia (Jerry) Huang, Robert Oberlies, Don Spencer and Jang Kim</i>	
 OMAE2015-41309	25
Numerical Solution of 2-D Water Entry Problems Based on a CIP Method and a Parallel Computing Algorithm	
<i>Peng Wen and Wei Qiu</i>	
 OMAE2015-41313	33
Effect of Line Integral on the Computation of Forward-Speed Ship Motions	
<i>Heather Peng, Junshi Wang and Wei Qiu</i>	
 OMAE2015-41407	40
Investigation of Hydrodynamic Loads and Flow Patterns Near an Escort Tug in Oblique Flows	
<i>Fatima Jahra, Mohammed Islam, Worakanok Thanyamanta and David Molyneux</i>	
 OMAE2015-41416	48
Design Aspects of a High Speed Monohull RoPax Ferry	
<i>Florian Kluwe, Kay Martinsen, Stefan Krüger, Adele Lübcke and Johannes Will</i>	
 OMAE2015-41490	56
Sensitivity Study of Hydrodynamic Derivative Variations on the Maneuverability Prediction of a Container Ship	
<i>R. Rajita Shenoi, P. Krishnankutty and R. Panneer Selvam</i>	

OMAE2015-41558	65
Approximation of Higher-Order Derivatives of the Frequency Domain Free Surface Green Function	
<i>Yuyun Shi, Hui Li, Zhifu Li and Huilong Ren</i>	
OMAE2015-41613	71
Numerical Study on Fish Tail Shaped Rudder for Improved Ship Maneuvering	
<i>Mannam Naga Praveen Babu and P. Krishnankutty</i>	
OMAE2015-41664	77
Numerical Study of the Added Resistance of Ship Advancing in Waves Using Far-Field and Near-Field Methods	
<i>D. C. Hong, J. G. Kim, K. H. Song and H. K. Lee</i>	
OMAE2015-41782	85
A Study on Resistance Performance for Various Trim Conditions and Bulb Shapes on a Container Ship Under Slow Steaming	
<i>Hyun-Suk Park, Dae-Won Seo, Ki-Min Han, Dae-Heon Kim and Tae-Bum Ha</i>	
OMAE2015-41786	93
Time Domain Simulation Model for Research Vessel Gunnerus	
<i>Vahid Hassani, Andrew Ross, Ørjan Selvik, Dariusz Fathi, Florian Sprenger and Tor Einar Berg</i>	
OMAE2015-41789	99
Identification of Nonlinear Manoeuvring Models for Marine Vessels Using Planar Motion Mechanism Tests	
<i>Andrew Ross, Vahid Hassani, Ørjan Selvik, Edvard Ringen and Dariusz Fathi</i>	
OMAE2015-41854	106
Dynamics of a Marine Propulsion System With a Diesel Engine and a Propeller Subject To Waves	
<i>Bhushan Taskar, Kevin Koosup Yum, Eilif Pedersen and Sverre Steen</i>	
OMAE2015-41887	116
Uncertainty of Sea Trials Results Used for Validation of Ship Manoeuvring Simulation Models	
<i>Sergey Gavrilin and Sverre Steen</i>	

OMAE2015-41912	123
Validation of Ship Manoeuvring in Shallow Water Through Free-Running Tests	
<i>Katrien Eloot, Guillaume Delefortrie, Marc Vantorre and Frans Quadvlieg</i>	
 OMAE2015-41916	134
Discrete Element Modelling of Pack Ice Interaction With Floating Structures	
<i>Jie Dai and Heather Peng</i>	
 OMAE2015-41921	141
Drifting Paths of Disabled Vessels	
<i>Ørjan Selvik, Tor Einar Berg and Dariusz Eirik Fathi</i>	
 OMAE2015-41964	149
Numerical Analysis of FPSO Behavior in Ocean Towing	
<i>Dexin Zhan, Don Spencer and David Molyneux</i>	
 OMAE2015-41970	157
Development of a FPSO Motion Simulator	
<i>Dexin Zhan, Worakanok Thanyamanta, Jason McDonald and David Molyneux</i>	
 OMAE2015-42001	165
A True Transient Hydrodynamic Force Prediction Method on a Descending and Oscillating Buoy	
<i>Sungho Lee and Zhenjia (Jerry) Huang</i>	
 OMAE2015-42079	173
Hydrodynamic Study of Submerged Ice Collisions	
<i>Subodh Chander, Ayhan Akinturk and Bruce Colbourne</i>	
 OMAE2015-42219	182
A Numerical Study of Fluid Structure Interaction of a Flexible Submerged Cylinder Mounted on an Experimental Rig	
<i>Erkan Cakir, Ayhan Akinturk and Alejandro Allievi</i>	
 OMAE2015-42225	190
Validation of a Modular Mathematical Model for Low-Speed Maneuvering Using Small Scale Tests With an Oceanographic Research Vessel	
<i>Felipe Ribolla Masetti, Eduardo A. Tannuri and Pedro Cardoso de Mello</i>	

Ocean Engineering:

Advanced Underwater Vehicles and Design Technology

OMAE2015-41620 197

Applicability of Current Remotely Operated Vehicle Standards and Guidelines to Autonomous Subsea IMR Operations

Jeevith Hegde, Ingrid Bouwer Utne and Ingrid Schjølberg

OMAE2015-41781 207

Experimental Observation on a Controllable Underwater Towed Vehicle With Vertical Airfoil Main Body

Jiaming Wu, Jian Chen, Ying Xu, Xiaodong Jin, Lihua Lu and Yuqing Chen

OMAE2015-42323 214

Analysis of Hydrodynamic Characteristics in the Process of Autonomous Underwater Vehicle Docking

Xiaoxu Du and Huan Wang

Ocean Engineering:

Coastal Engineering

OMAE2015-41452 219

New Form of the Hamiltonian Equations for the Nonlinear Water-Wave Problem, Based on a New Representation of the DTN Operator, and Some Applications

Gerassimos A. Athanassoulis and Christos E. Papoutsellis

OMAE2015-41720 229

A Method for Deriving Infragravity Wave Design Criteria in Shallow Water

Rizwan Sheikh and Kevin Ewans

OMAE2015-42070 240

Wave Motion Control Over Submerged Horizontal Plates

D. Karmakar and C. Guedes Soares

OMAE2015-42179 248

Virtual Spring-Damping System for Flow Induced Motion Experiments

Hai Sun, Marinos P. Bernitsas, Eun Soo Kim and Michael M. Bernitsas