



PROGRAM BOOK

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**The 1<sup>st</sup> International Conference on Ocean,  
Mechanical & Aerospace - Scientists & Engineers -**

**OMASE 2014**

**19<sup>th</sup> – 20<sup>nd</sup> November 2014, Resty Menara Hotel,  
Pekanbaru, Indonesia**

Organized by:



Universiti Teknologi Malaysia,  
Malaysia



Universitas Riau, Indonesia



International Society of Ocean,  
Mechanical, Aerospace  
- Scientists & Engineers -

# OMAsE CONFERENCE'S SCHEDULE

**Day 1:** **Wednesday, 19<sup>th</sup> November 2014**

08.00 - 09.00

Registration

## Opening Ceremony

09.00 - 09.20

Progress Report of ISOMAsE

President of ISOMAsE  
Prof. Dr. Eng Jaswar Koto

09.20 - 09.40

Speak from BKM-PII

The 1<sup>st</sup> Vice President of BKM-PII, Indonesia  
Ir. Bambang Purwohadi, MSI, MT

09.40 - 10.00

Speak from UR

Rector of Universitas Riau  
Prof. Dr. Ir. Aras Mulyadi, MSc

10.00 - 10.20

The opening of OMAsE 2014  
Conference

Secretary General  
Ministry of Marine Affairs and Fisheries  
Mr. Sjarief Widjaya

10.20 - 11.00

Coffee Break

Session 1: Advanced FPSO		Chair:
11.20 - 11.40	Experimental Study on Hydrodynamics Characteristic of Rounded- Shape FPSO	C.L.Siow, Jaswar Koto, H.Yasukawa, A.Matsuda, D.Terada
11.00 - 11.20	The Floating Production, Storage and Offloading Vessel Design for Oil field development in Harsh Marine Environment	Ezebuchi Akandu, Atilla Incecik, Nigel Barltrop
11.40 - 12.00	Analysis Effect of Turret Location on Dynamic Response of Moored Twin Hulls FPSO System	Nik Mohd Khairuddin B. Nik Ismail, Jaswar Koto, H.Yasukawa, A.Matsuda, D.Terada
12.00 - 13.00		Lunch Break
Session 2 : Computational Fluid Dynamic		Chair:
13.00 - 13.20	Flow Phases Analysis of Oil and Gas in Subsea Pipeline	Adeeb Alias, Jaswar Koto, Yasser M. Ahmed
13.20 - 13.40	Performance Dynamic Simulation of Hydraulic Transmission for Low Speed Vertical Axis Marine Current Turbine using Simulink Mat-Lab	Adi Maimun, Atef Salem
13.40 - 14.00	Mathematical Model for the Inclusion of Livability Items in Conceptual General Arrangement Design of Long Term Habitable of Mega Floats	A. Z. N. Hanani, Mohd.Zamani, J. Koto,
14.00 - 14.20	Subsea Petroleum Pipeline Design in Deepwater	Abd Khair Junaidi, Jaswar Koto
14.20 - 15.00		Break
15.20 - 15.40	Aerodynamic Characteristics of Helicopter Tail Rotor Propeller Using Quasi-Continuous Vortex Lattice Method	Firdaus Mahamad, Jaswar Koto, M.S Ammoo and I.S.Ishak

15.40 - 16.00	Prediction of Propeller Performance Using Quasi-Continuous Method	Hao Rui, Jaswar Koto
16.00 - 16.20	Computational Analysis of The influence of Two Circumferential Grooves On Performance of Journal Bearing With Palm Oil as Lubricant	Asral, Dodi Sofyan Arief, Jamaluddin Md Sheriff
16.20 - 16.40	Motion of Three Offshore Structures Due To the Effect of Hydrodynamic Interaction	Muhammad Farid Abdul Halim, Jaswar Koto, C.L.Siow
16.40 - 17.00	Numerical Analysis and Experimental Tests about Water Entry of Trimaran Vessels	M. Nikfarjam, O. B. Yaakob, J. Koto, M. S. Seif, A. Aref

Day 2:

Thursday, 20<sup>nd</sup> November 2014

<b>Session 2 : Safety and Environment</b>		<b>Chair:</b>
09.00 - 09.20	The Susceptibility of FPSO Vessel to Green Water in Extreme Wave Environment	Ezebuchi Akandu, Atilla Incecik, Nigel Bartrop
09.20 - 09.40	Integrated System of AIS, Radar and Vessel Movement for Port Traffic Management	Nur Aireen, Jaswar Koto, Adi Maimun, Hidenari Makino
09.40- 10.00	Potential Threat to Ship and Port Security-Case Study	Arastu Sajjad Husain
10.00 - 10.20	Application Low Cost Air Drying Model in Indonesian Traditional Shipbuilding	Jaswar Koto and Mohd.Zamani
10.20 - 10.40	Break	
10.40 - 11.00	Prediction of CO2 Emission Caused By Marine Transport Using AIS	M.Rashidi, Jaswar Koto, Adi Maimun, Hidenari Makino
11.00 - 11.20	Collision Preventing System of Marine Navigation using AIS System	M.Rashidi, Jaswar Koto, Hidenari Makino
11.20 - 11.40	Improving Hull Design for Better Efficiency and Environmental Protection	Arastu Sajjad Husain
11.40 - 12.00	Application of Dependency Structure Matrix Model in FPSO Electrical House Module Fabrication Scheduling	Moh Hafidz Efendy, N. H. A. Ahmad, Jaswar Koto, Mohd.Zamani
12.00 - 13.00	Lunch Break	
<b>Session 4 : Thermodynamic and Structure Analysis</b>		<b>Chair:</b>
13.00 - 13.20	Effect of Bending Angle Variation to the Strength of Steel Reinforcement Bar	Kana Sabatul Ikhwan, M.Dalil, Dedy Masnur
13.20 - 13.40	Performance of Double Acting Tanker in Astern Condition	Efi Afrizal, Jaswar Koto
13.40 - 14.00	Sound Source LocalizationBy a Single Linear Moving Microphone	Meifal Rusli, Lovely Son, Mulyadi Bur, Agus Arisman
14.00 - 14.20	Performance of Air Conditioning Water Heater with Trombone Coil Type as Dummy Condenser at Different Cooling loads	Azridjal Aziza, Arya Bhima Satria
14.20 - 14.40	Adsorption Equilibrium Model of Copper(Cu <sup>2+</sup> ) Dissolved in Water Using Particle of Tricalcium Phosphate as Adsorbent	Ahmad Fadly, Sunarno, Erniwita S, Cory D.A
14.40 - 15.00	Hydroxyapatite Powder Prepared by Low Hydrothermal Method from Sea Shells	Ahmad Fadli, Fajril Akbar, Pancasila Putri, Ikhbal Muhara, Dewi Indah Pratiwi
15.00 - 15.20	Model Scale Mooring Line Design and Pre-Hydrodynamic Model Test Study for FPSO	C.L.Siow, Jaswar Koto, H.Yasukawa, A.Matsuda, D.Terada, C. Guedes Soares
15.20 - 15.40	Hydrothermal Synthesis of Hydroxyapatite from Cockle Shell Waste	Yelmida Azis, Zultiniar

15.40 - 16.00

Closing Ceremony