

Overview of the 3rd International Symposium of Maritime Sciences

Monday 10-November		Tuesday 11-November			Wednesday 12-November			Thursday 13-November		Friday 14-November	
Arrival Check-in	9:30-9:40	Welcome Address		9:00-10:20	Concurrent Sessions III		Exchange Meeting with Students	Check-out Departure			
		Umeki-Y Hall			III-A	III-B					
	9:40-12:00	Keynote Session I		Umeki-Y Hall	Umeki-N Hall						
		Umeki-Y Hall		9:00	III-A-1	III-B-1					
	9:40	Keynote Speech 1		9:20	III-A-2	III-B-2					
				9:40	III-A-3	III-B-3					
				10:00	III-A-4	III-B-4					
				10:20-10:40	Coffee Break						
	10:40-10:50	Coffee Break		10:40-12:00	Concurrent Sessions IV						
	10:50	Keynote Speech 2			IV-A	IV-B					
				Umeki-Y Hall	Umeki-N Hall						
				10:40	IV-A-1	IV-B-1					
			11:00	IV-A-2	IV-B-2						
	11:50	Keynote Speech 3		11:20	IV-A-3	IV-B-3					
			11:40		IV-B-4						
	12:10-13:00	Lunch		12:00-13:20	Lunch						
	13:00-14:00	Keynote Session II		13:20-15:00	Concurrent Sessions V						
		Umeki-Y Hall			V-A	V-B					
	13:00	Keynote Speech 4		Umeki-Y Hall	Umeki-N Hall						
				13:20	V-A-1	V-B-1					
				13:40	V-A-2	V-B-2					
				14:00	V-A-3	V-B-3					
	14:00-15:20	Concurrent Sessions I		14:20	V-A-4	V-B-4					
		I-A	I-B	14:40	V-A-5	V-B-5					
	Umeki-Y Hall	Umeki-N Hall	15:10-17:50	Campus Facility Tour Cultural Exchange							
14:00	I-A-1	I-B-1									
14:20	I-A-2	I-B-2									
14:40	I-A-3	I-B-3									
15:00	I-A-4	I-B-4									
15:20-15:40	Coffee Break		18:00-20:00	Commendation Ceremony Closing Address Farewell Party							
	Concurrent Sessions II										
15:40-17:20	II-A	II-B									
	Umeki-Y Hall	Umeki-N Hall									
15:40	II-A-1	II-B-1									
16:00	II-A-2	II-B-2									
16:20	II-A-3	II-B-3									
16:40	II-A-4	II-B-4									
19:00-21:00	Welcome Dinner Nichii-Gakkan	17:00	Move to Nichii-Gakkan								

* Bold font means non-student presentations.

Program of the 3rd International Symposium of Maritime Sciences

Tuesday 11-November

9:30-9:40 **Welcome Address**

Room: Prof. Yuji Hayashi

Umeki-Y Hall Dean, Graduate School of Maritime Sciences, Kobe University

9:40-12:10 **Keynote Session I**

Room: Moderator: Kazuyo Yamaji, Kobe University, Japan

Umeki-Y Hall Speaker 1: NO_x Emissions from Maritime Shipping in European Seas inferred from OMI Satellite NO₂ Observations and the Updated GEOS-Chem CTM
Geert C.M. Vinken, Eindhoven University of Technology, The Netherlands

Moderator: Tokihiro Katsui, Kobe University, Japan

Speaker 2: Development and Implementations of NEOWAVE for Tsunami Hazard Assessment
Yoshiki Yamazaki, University of Hawaii at Manoa, USA

Moderator: Hidenobu Matsumoto, Kobe University, Japan

Speaker 3: Outline of International Policy in Japanese Maritime Field
Naohito Sato, Ministry of Land, Infrastructure, Transport and Tourism, Japan

12:10-13:00 **Lunch**

13:00-14:00 **Keynote Session II**

Room: Moderator: Tomoya Yamauchi, Kobe University, Japan

Umeki-Y Hall Speaker 4: Metrology of Ionizing Radiation and Environmental Measurements in Europe
Nourredine Abdel-Mjid, Institut Pluridisciplinaire Hubert Curien, Univeristé de Strasbourg, France

14:00-15:20 **Concurrent Sessions I**

I-A **Numerical Simulation and its Application (1)**

Room: Chair: Takaaki Tanaka, Kobe University, Japan

Umeki-Y Hall I-A-1 Numerical Analysis of the Effect of Anthropogenic Emission Control for NO_x and NMHC on Photochemical Oxidant in Japan
Kazuyo Akiyama, Osaka University, Japan

I-A-2 Cavitation in Mini-sac Fuel Injector for Diesel Engines
Raditya Hendra Pratama, Kobe University, Japan

I-A-3 Design of Neuro-fuzzy Based Maximum Power Point Tracking on Photovoltaic System for Ship Lighting System
Adi Kurniawan, Institut Teknologi Sepuluh Nopember Surabaya, Indonesia

I-A-4 Numerical Simulation of Turbulent Cavitating Flow in Diesel Fuel Injector
Bicer Baris, Kobe University, Japan

I-B **Maritime Education and Strategy**

Room: Chair: So Murakami, Kobe University, Japan

Umeki-N Hall I-B-1 Enhancing Maritime Education: Measuring a Training Ship between Instructor and Student Communications
Chenchen Peng, Kobe University, Japan

I-B-2 Cal Maritime's Golden Bear Facility - An Introduction
Richard Muller, California Maritime Academy, USA

I-B-3 Knowing the Students We Groom into Seafarers: Going beyond the Traditional Admission Forms
Livingstone Divine Caesar, University of Tasmania, Australia

I-B-4 Exploring the Relationships among Cruise Passengers' Environmental Knowledge, Attitudes, and Behavioral Intentions
Wang Chiu-Yi, National Kaohsiung Marine University, Taiwan

15:20-15:40 **Coffee Break**

Ground Floor

15:40-17:00 **Concurrent Sessions II**

II-A **Maritime Topics Peculiar to Regions**

Room: Chair: Fuko Okayama, Kobe University, Japan

Umeki-Y Hall II-A-1 Validation of WRF-and MANAL-estimated Wind Speed Fields in Coastal Waters off Shirahama
Takeshi Misaki, Kobe University, Japan

II-A-2 Rip Current Dynamics and Nearshore Circulation in Nha Trang Coastal Area
Bay Nguyen Thi, Ho Chi Minh City University of Technology, Vietnam

II-A-3 Effects of the Kuroshio Current on Ship Navigation
Chen Chen, Kobe University, Japan

II-A-4 Study on the Flow Regime at Cua Lap Estuary Area
Chinh Lieou Kien, Ho Chi Minh City University of Technology, Vietnam

II-B **Maritime Transport and Logistics**

Room: Chair: Hidemi Hirokawa, Kobe University, Japan

Umeki-N Hall II-B-1 An Evaluation of Supply Chain Environmental Collaboration in the Container Shipping Industry
Hsu Wei-Lin, National Kaohsiung Marine University, Taiwan

II-B-2 Revenue Management Analysis in Liner Shipping
Zhang Qian, Dalian Maritime University, China

II-B-3 A Study on Carrier's Liability of Cruise Contract - Focusing on Athens Convention
Su Chi-An, National Kaohsiung Marine University, Taiwan

II-B-4 Development of Logistics in Maritime Transportation in Vietnam
Ngô Thị Ngọc Hoa, The University of Danang, Vietnam

Wednesday 12-November

9:00-10:20 **Concurrent Sessions III**

III-A **Numerical Simulation and its Application (2)**

Room: Chair: Fuko Okayama, Kobe University, Japan

- Umeki-Y Hall*
- III-A-1 A Numerical Study on 3-D Effects of Marine Rudder by using CFD
Nguyen Van Trieu, Osaka Prefecture University, Japan
 - III-A-2 Numerical Simulation of Fuel Film Deformation in Gas Turbine Engine
Ippei Oshima, Kobe University, Japan
 - III-A-3 Estimation of Drag Force on Tug Hulls at Different Drift Angles
Buddhika Nirman Jayarathne, University of Tasmania, Australia
 - III-A-4 Numerical Simulation of Sloshing by using PLIC-volume Tracking Method
Helvines Corazon Aquino, Kobe University, Japan

III-B **Terminal Operation and Management**

Room: Chair: Hidemi Hirokawa, Kobe University, Japan

- Umeki-N Hall*
- III-B-1 A Feasibility Study for Multi-user Container Terminal in Port of Kaohsiung based on Transshipment Model and Cost-Benefit Analysis
Chen Li-Jen, National Kaohsiung Marine University, Taiwan
 - III-B-2 Optimization on Truck Routing Problem in a Container Terminal
Bian Zhan, Dalian Maritime University, China
 - III-B-3 Service Quality Evaluation of Free Trade Port Zone in Taiwan
Sheng Teng Huang and Chen Ying Chi, National Taiwan Ocean University, Taiwan
 - III-B-4 Combined Optimization of External Truck Appointment and Equipment Deployment: Outbound Container
Li Na, Dalian Maritime University, China

10:20-10:40 **Coffee Break**

Ground Floor

10:40-12:00 **Concurrent Sessions IV**

IV-A **Maritime Engineering and its Application (1)**

Room: Chair: Takaaki Tanaka, Kobe University, Japan

- Umeki-Y Hall*
- IV-A-1 Numerical Simulation of Urea SCR for Marine Diesel Engines
Masayoshi Hayashi, Kobe University, Japan
 - IV-A-2 Numerical Study on Transient Heat Transfer for Forced Convection Flow of Helium Gas over a Twisted Plate
Li Wang, Kobe University, Japan
 - IV-A-3 Superconducting Characteristics of MgB₂ Short Wires of Label Sensor for Liquid Hydrogen Carrier
Yuki Inoue, Kobe University, Japan

IV-B **Future Technology and its Application**

Room: Chair: Wu Yanbin, Kobe University, Japan

- Umeki-N Hall* IV-B-1 Optimising a Route Finding Strategy for Coordinated Autonomous Maritime Platforms
 Cameron Edwards, Jarrah Orphin and Mark Francis Symes, University of Tasmania, Australia
- IV-B-2 Wing-assisted Vessel's Energy Saving Potential Calculation on Typical Route
 Huang Lianzhong, Dalian Maritime University, China
- IV-B-3 The Green Ship Application of the Composites for IMO's CO_x/NO_x Emission Control from Ships
 Jin-Woo Lee, Korea Maritime and Ocean University, Korea
- IV-B-4 Design and Research of Flap Wing Sail for Wind-assisted Vessel
 Ma Ranqi, Dalian Maritime University, China

12:00-13:20 **Lunch**

13:20-15:00 **Concurrent Sessions V**

V-A **Risk Analysis and Ballast Water Management**

Room: Chair: Wu Yanbin, Kobe University, Japan

- Umeki-Y Hall* V-A-1 Transport Risks Analysis of Frozen Fish Cargoes
 You Jhih-Jiao, National Kaohsiung Marine University, Taiwan
- V-A-2 Collision Risk Assessment of Vessel and Offshore Platform: Case Study of Platform Construction Project at Bintuni Bay-West Papua
 Muhammad Habib Chusnul Fikri, Institut Teknologi Sepuluh Nopember Surabaya, Indonesia
- V-A-3 Numerical Simulation of Shock Wave Bubble Interaction for Ballast Water Treatment
 Nao Taniguchi, Kobe University, Japan
- V-A-4 Ballast Water Management System Testing Facility at the California Maritime Academy, USA: Undergraduate Engagement to Solve Applied Problems and Protect California's Coastal Resources
 Hannah Foster and Richard Muller, California Maritime Academy, USA
- V-A-5 Study on Underwater Shock Wave Generation using Diaphragmless Shock Tube for Application to Ballast Water Treatment System
 Yohei Yamada, Kobe University, Japan

V-B **Maritime Engineering and its Application (2)**

Room: Chair: So Murakami, Kobe University, Japan

- Umeki-N Hall* V-B-1 Moisture-uptake Induced Internal Stresses in Balsa Core Sandwich Composite Plate: Modeling and Experimental
 Trần Văn Luận, The University of Danang, Vietnam
- V-B-2 Research of Engine Monitoring System based on Multi-parameter and Micro-variable Database Process Technology
 Cui Hua, Shanghai Maritime University, China
- V-B-3 Enhancement on Methodology for Estimating Emission Distribution at Madura Strait by Integrating Automatic Identification System (AIS) and Geographic Identification System (GIS)

Emmy Pratiwi, Institut Teknologi Sepuluh Nopember Surabaya, Indonesia

V-B-4 Assessment Ultimate Bending Strength of Floating Dock Structure by using Finite Element Analysis
Nguyễn Tiên Thừa, The University of Danang, Vietnam

V-B-5 Migration of Radionuclides in Soils
Guillaume Fleury, University of Strasbourg, France