7th INTERNATIONAL CONFERENCE ON SHIP & OFFSHORE TECHNOLOGY – INDIA

ICSOT 2023

Green Technologies in the Maritime Industry

8th – 9th December 2023 Kharagpur, India





DEPARTMENT OF OCEAN ENGINEERING & NAVAL ARCHITECTURE, IIT KHARAGPUR

AND

THE ROYAL INSTITUTION OF NAVAL ARCHITECTS, UK

7 th December, 2023: High Tea: 6 pm – 8pm			
8 th December, 2023			
08:00 - 09:00	BREAKFAST		
	INAUGURAL SESSION		
09:00 - 09:05	LIGHTING THE LAMP		
09:05 - 09:10	WELCOME ADDRESS BY ORGANIZING SECRETARY		
09:10 - 09:15	ADDRESS BY HEAD, OENA		
09:15 - 09:25	ADDRESS BY ASSOCIATE DEAN, CE&T		
09:25 - 09:35	ADDRESS BY REGISTRAR, IIT KHARAGPUR		
09:35 – 09:50	ADDRESS BY DIRECTOR, IIT KHARAGPUR, PATRON		
	OF THE CONFERENCE		
09:50 - 09:55	VOTE OF THANKS		
	END OF INAUGURAL SESSION		
10:00 - 10:40	KEYNOTE ADDRESS:- NUNO MIGUEL MAGALHAES		
	DUQUE DA FONSECA, SCIENTIST, SINTEF OCEAN		
10:40 - 11:00	TEA BREAK		
11:00 – 11:30	INVITED TALK:- CHIA-CHENG TSAI, PROFESSOR,		
	NATIONAL TAIWAN OCEAN UNIVERSITY		
11:40 - 13:00	TECHNICAL SESSION AT GARGI AUDITORIUM		
	SEA KEEPING I & MANEUVERING I		
11:40 - 12:00	Adequacy of Hydrodynamic Coefficients in a Generalised Submarine Maneuvering Model- Debabrata Sen		
	A Study of Active Fin System to Reduce Vertical Motion of		
12:00 - 12:20	Ships Using 3D Panel Method - Shivaji Ganesan T		
	Development of a 3D NWT for the Forward Speed Ship Motion		
12:20 – 12:40	Problem-Shivaji Ganesan T		
12.40 12.00	A Ship Weather Routing System for Route Optimization Using		
12:40 – 13:00	A* Algorithm - Anandu Raj		
11:40 – 13:00	TECHNICAL SESSION AT MAITRAYEE AUDITORIUM		
11:40 – 15:00	SHIP BUILDING AND REPAIR		
11:40 – 12:00	Molecular Simulation of AA 5083 & HSLA Steel Welding by		
11.40 12.00	FSW Techniques for Marine Structure Gaurav Chauhan		
12:00 – 12:20	Multi-Severity Corrosion Classification Using Computer Vision		
12.00 12.20	- A Jose		
12:20 – 12:40	Composite Boat Construction in Bangladesh: Quality,		
	Durability, and Sustainability Aspects - Shaikha Shohuda		
12:40 – 13:00	Drone-Based Anomaly Detection for Structural Health		
	Monitoring Using Deep Learning – A Jose		
13:00 – 14:00	LUNCH VEVNOTE ADDRESS, ASOVENDU SAMANTA CHIEF		
14:00 - 14:40	KEYNOTE ADDRESS:- ASOKENDU SAMANTA, CHIEF		
	SURVEYOR AND SENIOR VICE PRESIDENT, INDIAN		

	REGISTER OF SHIPPING	
14:40 – 14:50	BOOK LAUNCH: 'GLORIOUS WATER TRANSPORT HERITAGE OF KALINGA – ANCIENT TO RECENT TIMES'	
	Name of the Author	Prof. S. C. Misra
14:50 – 16:10	TECHNICAL SESSION AT GARGI AUDITORIUM SHIP STRUCTURES	
14:50 – 15:10	Coupled Dynamic Response of Hull-Mooring Interaction - Akshay Suresh Shimpi	
15:10 – 15:30	DAA-Based Investigation of Whipping Response of Ship Exposed to Underwater Explosion- Sachin S. Awasare	
15:30 – 15:50	Isogeometric Finite Element Analysis of Laminated Composite Stiffened Plates for Ship Structures - Ashish Kr. Singh	
15:50 – 16:10	Numerical Assessment of Air Lubrication System for Tanker – Himanshu Uppal	
14:50 – 15:50	TECHNICAL SESSION AT MAITRAYEE AUDITORIUM SEA KEEPING II & MANEUVERING II	
14:50 – 15:10	Collision Avoidance of Maritime Autonomous Surface Ships (MASS) Based on Heading Set Approach with Multiple Ships Encounter in Compliance with COLREGs - Rishi Gajapathy	
15:10 – 15:30	Added Wave Resistance Prediction Using a 3D Panel Method - Shivaji Ganesan T	
15:30 – 15:50	On Preparation of Operation Measures Under the Second Generation of Intact Stability Criteria - Amresh Negi	
16:10 – 16:30	TEA BREAK	
16:30 – 17:30	INDUSTRY PRESENTATION AT GARGI AUDITORIUM	
19:30 – 22:00	CONFERENCE DINNER	

9 th December, 2023		
09:40 - 10:20	KEYNOTE ADDRESS:- MIKE MEYLAN, FACULTY OF SCIENCE, NEWCASTLE UNIVERSITY	
10:20 – 11:20	TECHNICAL SESSION AT GARGI AUDITORIUM WAVE POWER	
10:20 - 10:40	Wave power extraction by an OWC device in the presence of a porous bottom – H Behera	
10:40 - 11:00	Hydro-kinetic energy harvesting from vortex – induced vibrations – Mohammad Rabius Sunny	

Power extraction by a submerged piezoelectric plate near rig		
wall – N Naik	gid	
1 10:70 = 11:70 1	TECHNICAL SESSION AT MAITRAYEE AUDITORIUM MARITIME TRANSPORTS AND PORTS	
Auto Pilot for Free Running Models - Yashwanth Krishna		
10:20 – 10:40 Chityala		
*	ridges:	
10:40 – 11:00 Unhindered Traffic Across and Inland Vessels along the		
Ganges – Om Prakash Sha	10,01	
Race Towards Zero Emission in Inland Waterways – The	Future	
11:00 – 11:20 Is Electric - Harshit Nagar	1 utuic	
11:20 – 11:40 TEA BREAK		
11:40 – 13:00 TECHNICAL SESSION AT GARGI AUDITORIUM		
SEA KEEPING III & MANEUVERING III		
	Using	
Incompressible SPH – Praneeth Lanka	8	
12:00 – 12:20 A Time Efficient Approach for Prediction of Slamming Loa	ad -	
Ranadev Datta		
12:20 – 12:40 Exploring Deep Learning Methods for Solving the Navier-S	Stokes	
Equation: A Review - Vijaya Lakshmi Thiagarajan		
14:40 – 13:00 Numerical Modelling of VOF to Investigate Ventilation in I	High-	
Speed Craft - Kalyanam Shanmukha Srinivas	C	
13:00 – 14:30 LUNCH		
14:30 – 15:10 KEYNOTE ADDRESS:- MICHEL ORYCH, MANAGI	ING	
DIRECTOR, FLOWTECH INTERNATIONAL AB		
15:15 – 16:25 TECHNICAL SESSION AT GARGI AUDITORIUM		
MARINE OPERATIONS		
Twin Delayed Deep Deterministic Policy Gradients for	r Path	
Following of Autonomous Surface Vehicles - Vishnu K I		
15:25 – 15:45 Fin effect of Stiffeners in Bulk/Ships Carrying Liquefied	Gases	
for Heat Transfer Analysis - Arun Kishore Eswara		
15:45 – 16:05 Marine Cycloidal Propeller with Electromagnetic Coil -	Abbas	
Haider		
16:05 – 16:25 PID-Based Anti-Sway Control for Oscillation Minimizat	ion in	
Cranes - Manika Matta		
15:15 – 16:05 TECHNICAL SESSION AT MAITRAYEE AUDITORI	IUM	
AI IN MARITIME ENGINEERING		
15:15 – 15:35 Parameters Optimization of Oyster Wave Energy Con		
	Koley	
Devices using Artificial Neural Network Model – Santanu I		
Devices using Artificial Neural Network Model – Santanu I Resistance Prediction of Sailing Yachts Using Machine Lea	arning	
Devices using Artificial Neural Network Model – Santanu I	arning	

	Approach - Fahad Peerali Paloth	
	Modelling metal plasticity and patterns in hydrogels using data driven approaches – Gurudas Kar	
16:25 – 16:45	VALEDICTORY	
16:45 - 17:00	HIGH TEA	

- All Functions will be at Gargi Auditorium except the paper presentations as Mentioned above
- Tea/Breakfast/Lunch will be at the Foyer of the Conference Venue