

## OEMT 2023

# Ocean Energy and Maritime Transport Conference 2023

7-8 June 2023

TL423/325a, Learning and Teaching Building, University of Strathclyde, Glasgow

## Conference Programme

The place of useful learning

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## Wednesday, 07<sup>th</sup> June

09:30 – 10:00	<b>Preparation and Greeting (Tea and Coffee)</b>	
10:00 – 10:30	<b>Invited speaker</b> – Assistant Prof. Murat AYMELEK, Iskenderun Technical University (Online) <b>Chair:</b> Prof. Evangelos Boulougouris	
	<b>OE Session 1</b> <b>Chair:</b> Prof. Atilla Incecik  <b>Academic panel members:</b> Prof. Chengi Kuo, Prof. Erkan	<b>MT Session 1</b> <b>Chair:</b> Prof. Evangelos Boulougouris  <b>Academic panel members:</b> Dr Sefer Gunbeyaz, Dr Haibin Wang
10:30 – 10:55	<i>Investigating challenges of using Ammonia as a future fuel for Marine Industry.</i> Kishore Bedekar (1 <sup>st</sup> Year)	<i>Development of multipurpose shipyard (Shipbuilding, ship repair and ship recycling yard) to increase productivity and profit (Case study: Indonesian Shipyard)</i> Mohammad Arif (1 <sup>st</sup> Year)
10:55 – 11:20	<i>Dynamic Analysis of Launching and Recovering ROV</i> Yulin Deng (3 <sup>rd</sup> Year and Over)	<i>Dynamic Life Cycle Assessment toward carbon-neutral shipping</i> Chybyung Park (3 year and over)
11:20 – 11:35	<b>BREAK</b>	
11:35 – 12:00	<i>Approximating piecewise nonlinearities in dynamic systems with sigmoid functions: advantages and limitations</i> Cristiano Martinelli (3 <sup>rd</sup> Year and Over)	<i>Prognostics and Health Management for Ship Machinery Systems</i> Jaehan Jeon (2 <sup>nd</sup> Year)
12:00 – 12:25	<i>Structural Analysis of Offshore Pipelines to Prevent Oil Spills and Gas Leaks</i> Frederick Ebili (2 <sup>nd</sup> Year)	<i>Comparison between Conventional Life Cycle Assessment and IMO Draft Life Cycle Proposal</i> Ioannis Chalaris (2 <sup>nd</sup> Year)
12:25 – 13:25	<b>LUNCH BREAK</b>	
13:25 – 13:55	<b>Invited speaker</b> – Assistant Prof. Önder Canbulat, Bursa Technical University ( <b>In-person</b> ) <b>Chair:</b> Prof. Chengi Kuo	
	<b>OE Session 2</b> <b>Chair:</b> Prof. Chengi Kuo <b>Academic panel members:</b> Prof. Maurizio Collu, Dr. Laibing Jia	<b>MT Session 2</b> <b>Chair:</b> Prof. Peilin Zhou <b>Academic panel members:</b> Dr. Haibin Wang, Dr Iraklis Lazakis
13:55 – 14:20	<i>Reliability-based maintenance scheduling for leading edge erosion offshore wind turbine blades.</i> Javier Contreras Lopez (3 <sup>rd</sup> Year and Over)	<i>Identifying Safety Issues with Traditional Shipping operations in the Indonesian Archipelago Using Gap Analysis</i> Eka Ardhi (1 <sup>st</sup> Year)
14:20 – 14:45	<i>Internal State Estimation for Dynamic Floating Offshore Wind Turbine Modelling</i> Kobe Hoi-Yin Yung (1 <sup>st</sup> Year)	<i>Natural Language Processing for Automatic Classification of Human Factors from Maritime Incident Reports</i> Hollie Black (1 <sup>st</sup> year)

14:45 – 15:10	<i>Structural Optimization Considering Automated (Robot-Based) Ship Production</i> Sufian Imam Wahidi (1 <sup>st</sup> Year)	<i>Navigating Cyber Risks in the Maritime Industry: Enhancing Crew Awareness for Effective Cybersecurity in Maritime Cyber-Physical Systems</i> Yasin Burak Kurt (2 <sup>nd</sup> Year)
15:10 – 15:25	<b>BREAK</b>	<b>BREAK</b>
15:25 – 15:50	<i>A vortex induced vibration energy harvesting mini wave device</i> Jane Nyokabi Njeri (2 <sup>nd</sup> Year)	<i>A Circular Economy Approach for the Maritime Industry: Increased Value Extraction from End-of-Life Marine Assets</i> Dogancan Okumus (2 <sup>nd</sup> year)
15:50 – 16:15	<i>Analysing cracks in hydrogen pipeline using finite element analysis techniques</i> Abdulsamad Adeniran (2 <sup>nd</sup> Year)	<i>Risk Assessment of Hydrogen Fuel Bunkering on Ships</i> Insik Hwang (1 <sup>st</sup> year)
16:15 – 16:40	<i>Effects of fuel cells on polymer electrolyte membrane (PEM) using peridynamics</i> Poovendan Adhiyamankottai (1 <sup>st</sup> Year)	
16:40 – 17:05	<i>Unsteady RANS CFD Simulation on the Parametric Roll of Small Fishing Boat under Different Loading Conditions</i> Muhammad Iqbal (2 <sup>nd</sup> Year)	

# Thursday, 08<sup>th</sup> June

09:30 – 10:00	<b>Preparation (Tea and Coffee)</b>	
10:00 – 10:30	<b>Invited speaker</b> – Assistant Prof. Bassam Mohammedsleh S Aljahdali, King Abdul Aziz University ( <a href="#">online</a> ) <b>Chair:</b> Dr Iraklis Lazakis	
	<p><b>OE Session 3</b> <b>Chair:</b> Dr Julia Race</p> <p><b>Academic panel members:</b> Prof. Chengi Kuo, Prof. Qing Xiao</p>	<p><b>MT Session 3</b> <b>Chair:</b> Dr Iraklis Lazakis</p> <p><b>Academic panel members:</b> Dr Sefer Gunbeyaz, Dr Haibin Wang</p>
10:30 – 10:55	<i>Floating Offshore Wind Turbine Structures - Potential Areas of Research.</i> John Harris (1 <sup>st</sup> Year)	<i>Enhance Reliability Onboard Maritime Operations using Scissors Approach as Risk Analysis Model.</i> Bebetebe Fetimi (2 <sup>nd</sup> Year)
10:55 – 11:20	<i>An introduction to Phase-Field modelling for SN-curve prediction.</i> Emmet Mclaughlin (1 <sup>st</sup> Year)	<i>Numerical modelling of methanol combustion in marine engines</i> Panagiotis Karvounis (2 <sup>nd</sup> Year)
11:20 – 11:45	<i>Fluid Structure Interaction Simulations of a Flexible Plate for Tidal Current Energy Harvesting with Smart Material</i> Estefan Diaz-Mercado (1 <sup>st</sup> Year)	<i>HF's and Maritime Hydrogen-Fuelled Systems: An Investigation of Human Performance and the Influence on System Design</i> Yaser Farag (2 <sup>nd</sup> Year)
11:45 – 13:00	<b>LUNCH BREAK</b>	
13:00 – 13:30	<b>Invited speaker</b> – Dr Nikoletta Trivyza, RINA ( <a href="#">online</a> ) <b>Chair:</b> Prof. Erkan Oterkus	
	<p><b>OE Session 4</b> <b>Chair:</b> Prof. Erkan Oterkus, <b>Academic panel members:</b> Prof. Atilla Incecik, Prof. Chengi Kuo</p>	
13:30 – 13:55	<i>Effect of Erosion on Tidal Turbine Blade</i> Payvand Habibi (1 <sup>st</sup> Year)	
13:55 – 14:20	<i>How additive manufacturing could play a role in offshore structures</i> Fraser O'Neill (1 <sup>st</sup> Year)	
14:20 – 14:45	<i>Numerical simulation of two-dimensional steady state temperature distribution in buried dense phase CO<sub>2</sub> pipelines</i> Babafemi Olugunwa (3 <sup>rd</sup> Year or Over)	
14:45 – 15:10	<b>BREAK</b>	
15:10 – 15:35	<i>Factors influencing airgap of a semi-submersible offshore platform</i> Renjeev Gopalakrishnakurup (1 <sup>st</sup> Year)	

15:35 – 16:00	<i>Various integrated systems based on FOWT</i> Haitao Wu (1 <sup>st</sup> Year)	
16:00 – 16:25	<i>An FEA approach to simulate hydrogen embrittlement using Abaqus Software</i> Dario Gravina (2 <sup>nd</sup> Year)	
16:25 – 16:50	<i>Investigation into a novel tidal device using vortex induced vibrations in two degrees of freedom.</i> Sarah Kelly (2 <sup>nd</sup> Year)	
<b>16:50 – 16:55</b>	<b>BREAK</b>	<b>BREAK</b>
<b>16:55 – 17:05</b>	<b>ANNOUNCEMENT OF BEST PRESENTERS AND CLOSE</b>	
<b>17:05 ~ 19:00</b>	<b>Social Event (Level 2, Students Union, LT Building)</b>	