



3rd INTERNATIONAL CONGRESS ON SHIP AND MARINE TECHNOLOGY

“Shipbuilding Towards Sustainability”

Green Ship, AI and Blue Economy for Marine Industry

(GMO-SHIPMAR 2024)

Karadeniz Technical University Osman Turan Congress Center,
Trabzon **10-12 December 2024**

Preliminary Program

10.12.2024 Tuesday

09.00-09.30

- Registration - Coffee

Opening Ceremony and Opening Speeches

09.30-09.50

- Prof. Ercan KOSE | Symposium Chair

09.50-10.10

- -Opening Speech 2-

10.10-10.30

- -Opening Speech 3-

10.30-11.00 -- Keynote Lecture (Room A1)

- Prof. Dr. Sander ÇALIŞAL, “Selection of Ship Main Dimensions with EEDI and CII”, University of British Columbia-Canada & Piri Reis University-Turkiye

11.00-11.20 -- Coffee Break

11.20-12.30 PANEL

Moderator: Prof. Dr. Murat ÖZKÖK

- Shipbuilding Industry in Türkiye Panellists: Salih Zeki ÇAKIR, Başaran BAYRAK, Prof. Dr. İ. Hakkı HELVACIOĞLU, Kenan ŞENGÜN

12.30-13.30 -- Lunch Break

13.30-14.00 -- Keynote Lecture (Room A1)

- Prof. Dr. Toru KATAYAMA, “Introduction of Research Activity for High-Speed Planing Craft Performance Evaluation at Osaka Metropolitan University”, Osaka Metropolitan University-Japan

14.00-14.30 -- Keynote Lecture (Room A1)

- Prof. Dr. Mehmet ATLAR, “A Novel Way of Ship Propulsion and Steering with Double Digits Percentage of Energy Saving and Underwater Noise Reduction” University of Strathclyde-UK

(Room A1) Session 1- Application of Numerical Methods (Chair: Prof. Dr. Toru KATAYAMA)

Time	Title	Authors
14:30-14:50	Verification of Structural Applications Conforming to or Exceeding Class Rules by Direct Strength Calculations Using Finite Element Method: Two Recent Case Studies	Hasan Ölmez
14:50-15:10	Numerical Investigation of Wake Angle and Wave Patterns for a DTC Hull in Shallow Water	Deniz Bayraktar Bural
15:10-15:30	Derivation of Vref in EEXI Framework by Sea-Trials and Numerical CFD Calculations for Sister Ships	Ziya Saydam, Mustafa İnel
15:30-15:50	Moderate-Reynolds Number Flow Around Tandem Foils with Ground Effect by CFD	Mehmet Delikan, Şakir Bal
15:50-16:10	Natural vibrations of partially immersed, thick rectangular plates based on hybrid isogeometric-based approach	İbrahim Tuğrul Ardiç, Erden Yıldızdag, Ahmet Ergin

16.10-16.30 -- Coffee Break

(Room B1) Session 2- Green Technologies (Chair: Prof. Dr. Ahmet Dursun ALKAN)

Time	Title	Authors
14:30-14:50	Design and analysis of a cold-ironing power system for Trabzon Port	Osman Yanık, İsmail Altın
14:50-15:10	Building a simulation platform for energy efficient ships to determine the decarbonization pathway	Cem Güzelbulut, Hideaki Murayama, Katsuyuki Suzuki
15:10-15:30	Integration of Environmental Life Cycle Assessment (LCA) in the Shipbuilding Industry: Evaluation Through SWOT Analysis	Bilge Baş
15:30-15:50	Investigation of Suitable Savonius Wind Turbines for The Black Sea Coasts By Using Computational Fluid Dynamics	Muhammed İsmet Göktuğ, Mehmet Zeki Şener, Erhan Aksu

16.10-16.30 -- Coffee Break

(Room C1) Session 3- Shipbuilding Materials (Chair: Prof. Dr. Gökdeniz NEŞER)

Time	Title	Authors
14:30-14:50	Production of aluminum foams as a lightweight material for sustainable maritime transportation with additive manufacturing and experimental determination of their performance	Tolga İreş ,Gökdeniz Neşer, Levent Turhan
14:50-15:10	Effect of filler dispersion on the dynamic properties of jute fibre composites	Mehmet Cihan
15:10-15:30	Effect of Heat Treatment on the Tribological Properties of as-cast AlSi10MgCu Commercial Alloy	Murat Beder

16.10-16.30 -- Coffee Break

(Room B1) Session 4- Local Session (Chair: Prof. Dr. İsmail Hakkı HELVACIOĞLU)

Time	Title	Authors
16.30-16.50	Türk Gemi İnşa Sektöründe Sürdürülebilirlik Kültürü	Şebnem Helvacioğlu, İsmail Helvacioğlu
16.50-17.10	Deniz Taşımacılığında Emisyon Azaltımı: Çift Yakıtlı Motorlar Ve Alternatif Yakıt Teknolojilerinin Çevresel Ve Ekonomik Etkileri	Taha Celal Alemdar, Mustafa Tuti
17.10-17.30	Gemi Bakım Onarım Tersanelerinde Yenilenebilir Enerji Kaynaklarının Kullanımı	Berna Bektaş
17.30-17.50	Kara Ve Denizcilik Sektöründe Kullanılan Gaz Temizleyiciler (Scrubbers) Hakkında Literatür İncelemesi	Furkan Türkoğlu, Seyfettin Bayraktar

(Room B1) Session 5- Local Session (Chair: Prof. Dr. Betül SARAÇ)

Time	Title	Authors
16.30-16.50	Gemilerin Sevk Performansı Değerlendirmesi İçin Eşdeğer Pervane Metodolojisi	Berkay Başarınürk, Ömer Kemal Kınacı
16.50-17.10	PI Kontrolü ile Bir Denizaltı Formunun Sevk Performansının Sayısal olarak Belirlenmesi	Berkay Başarınürk, Cihad Delen, Duygu Ünlü, Ömer Kemal Kınacı
17.10-17.30	Dinamik Konumlandırma Sistemleri İçin Özel Geliştirilmiş Bir Manevra Matematik Modeli	Burak Güngüder
17.30-17.50	Deniz Altı Boru Hatlarının Maliyet Bileşenlerine İlişkin Bir İnceleme	Mesut Erkan
17.50-18.10	L/B Form Parametresinin ve Trim Koşullarının Trol Balıkçı Gemilerinin Viskoz Direncine Etkilerinin İncelenmesi	Haydar Palavar

19.30 - GALA DINNER

11.12.2024 Wednesday

09.00-10.00 - Registration /Coffee

10.00-10.30 - Keynote Lecture (Room A1)

- Prof. Dr. Giorgio TRINCAS & Prof. Dr. Radoslav NABERGOJ , “**Advantages Attainable from an ACS-fitted Bulk Carrier in Rough Seas**” University of Trieste, Italy & NASDIS-PDS, Slovenia

(Room A1) Session 6- Ship Motions and Manoeuvring (Chair: Prof. Dr. Hyeon Kyu YOON)

Time	Title	Authors
10.30-10.50	Investigation of Initial Stability Effects on Flooding Dynamics in Damaged Ro-Pax Ships with RANS-Based CFD Analysis	Mehmet Zeki Şener, Hyeon Kyu Yoon, Ercan Köse, Thi Thanh Diep, Aeri Cho
10.50-11.10	Comparison Of Ship Manoeuvrability Prediction Methods: Curve Fitting Vs. Transfer Function	Elis Atasayan, Evgeni Milanov, Ahmet Dursun Alkan
11.10-11.30	Experimental Investigation of the Effect of Bilge Keel Geometry on Roll Damping	Ayşegül Saraç, Hasan İslam Çopuroğlu, Naofumi Yoshida, Emre Peşman
11.30-11.50	Experimental and Numerical Investigation of Effects of Forward Speed on Bilge-keel Roll Damping of RORO Ship	Naofumi Yoshida, Emre Peşman, Hasan İslam Çopuroğlu, Tomoki Taniguchi, Toru Katayama
11.50-12.10	Impact of General Arrangement Changes on Probabilistic Damage Stability Analysis of a Diesel Electric Yacht	Arda Can Akbaş, Yasemin Arıkan Özden
12.10-12.30	Development of ship maneuvering motion simulation at low speed using machine learning	Mizuki Kinugasa, Toru Katayama

12.30-13.30 -- Lunch Break

(Room B1) Session 7- Sustainability in Shipbuilding, Maritime Operations And Safety (Chair: Associate Prof. Dr. Hasan ÖLMEZ)

Time	Title	Authors
10.30-10.50	Evaluation Of Strategies for European Ports: The Content Analysis of Espo Report	Mahmut Mollaoğlu, Canberk Hazar, Murat Bayraktar, Onur Yüksel
10.50-11.10	Risk Prioritization of Ship Detention Deficiencies Using Fault Mode and Effect Analysis	Hürol Hocek, Devran Yazır
11.10-11.30	Comparison Method by Ship Applications to Evaluate Return of Investment (Roi) Of The Carbon Intensity (Cii) Regulation Requirements For Alternative Underwater Coating, Foil Type Of Silicone Based Marine Underwater Coatings	Sertaç Kesebol, Uğur Buğra Çelebi
11.30-11.50	Occupational Accidents on Fishing Vessels: A Descriptive Analysis Based on Turkish Marine Casualty Investigation Reports	Fatih Yılmaz
11.50-12.10	Toward A Smarter Future: Evaluating Automation Levels in Turkish Container Ports	İsmail Kurt, Gökhan Budak
12.10-12.30	A Blockchain-Based Approach to Enhance Predictive Maintenance Operations in Ship Engine Room	Çağatay Kandemir

12.30-13.30 -- Lunch Break

(Room C1) Session 8- Local Session (Chair: Associate Prof. Dr. Dursun Murat SEKBAN)

Time	Title	Authors
10.30-10.50	Küçük Tekne Üretiminde Kullanılan Yüksek Yoğunluklu Polietilen Malzemenin Viskoelastik Davranışının Modellenmesi Üzerine Bir Araştırma	Mustafa Kafalı, Koray Şahin, Mustafa Öncül
10.50-11.10	Yüksek Yoğunluklu Polietilen Tekne Üretiminde Bağlantı Teknolojilerinin İncelenmesi	Gülizar Şener Kafalı, Mehmet Çevik
11.10-11.30	Ön Isıl İşlem Koşullarının Al 6061 Alaşımının Sürtünme Karıştırma Kaynak Kabiliyetine Olan Etkisi	Abdülkadir Coşkun, Harun Yanar, Dursun Murat Sekban
11.30-11.50	Gemi Yapılarındaki Ana Taşıyıcı Sistemin 3B Kiriş Modeli ile Analizi Üzerine Bir Uygulama	Yaşar Gül, Ömer Birler

12.30-13.30 -- Lunch Break

13.30-14.30 - Keynote Lecture (Room A1)

- Dr. İsmail BAYEZİT, “The Design and Development of Fully Autonomous Unmanned Surface Ship Technology: A Case Study on Samsung Autonomous Ship” Autonomous Ship Research Center
Samsung Heavy Industries, Daejeon, Korea

(Room A1) Session 9- Shipbuilding Technologies (Chair: Prof. Dr. Murat ÖZKÖK)

Time	Title	Authors
14.30-14.50	Analyzing The Emissions of Current And Alternative Welding Techniques In Shipyard Panel Lines	Dursun Murat Sekban
14.50-15.10	Advanced 3d Printing Techniques For Prototype Design in Wave Energy Systems	Fatih Alver
15.10-15.30	Usage Fields of Linear Programming Models and Evaluation In Terms Of Ship Production Management	Yusuf Genç, Mustafa Kafalı, Uğur Buğra Çelebi
15.30-15.50	Length And Beam Extension Procedures In Black Sea Type Fishing Vessels	Dursun Saral
15.50-16.10	Comparison Of Life Cycle Assessment and Manufacturing Techniques For Glass Reinforced Plastics And HDPE Boats	Ayberk Sözen, Mehmet Önal, Gökdeniz Neşer
16.10-16.30	Friction And Wear Performance of CrAlN And TiCrAlN Coatings Deposited On Cam Tappet Shims	Semih Mahmut Aktarer

16.30-17.00 -- Coffee Break

(Room B1) Session 10 - Ship Resistance, Propulsion and Fuel Efficiency (Chair: Prof. Dr. Haydar KÜÇÜK)

Time	Title	Authors
14.30-14.50	Impacts Of Biofouling on The Operational Efficiency of Fishing Vessels Under Loaded and Lightship Draft Conditions.	Refik Özyurt, Mehmet Atlar, Osman Turan
14.50-15.10	Comparison Of Methanol and Diesel Fuel Emissions in Marine Prime Movers	Ahmet Hancı, Ahmet Dursun Alkan
15.10-15.30	An Investigation on Methanol and Biomethanol Utilization in Maritime Sector	Ömer Karadağ, Levent Bilgili
15.30-15.50	Development of Ship Maneuvering Simulator for Control Testing	Ahmad Irham Jambak, Mostafa Helmy, İsmail Bayezit, Ömer Kemal Kınacı
16.50-16.10	Methods For Reducing the Impacts of Underwater Noise From Commercial Ships On Marine Life: A Review Of Mepc.1/Circ 906 Guidelines	Haluk Çoban
16.10-16.30	CFD Analysis of Drag Coefficient in Biomimetic Structures Around A Submarine Cross-Section	Aleyna Ulucutsoy

16.30-17.00 -- Coffee Break

17.00 - CLOSING CEREMONY

12.12.2024 Thursday

Allday - LOCAL TRIPS AROUND TRABZON



Please watch all Live Streaming broadcast on the following YouTube channel:

Tüm canlı yayınlara ulaşabileceğiniz YouTube kanalı:

<https://www.youtube.com/channel/UCGqORGwzzpnaITgNDZ0sLaQ>