

Tuesday, September 15, 2026 – Symposium Day #1

Eugenides Foundation Conference Center, Athens

PRELIMINARY PROGRAMME

08:00 – 08:30 REGISTRATION

08:30 – 09:00 Opening Addresses

Apostolos Papanikolaou, SOME 2026 Chair
 John E. Kokarakis, SNAME Greek Section Chair
 Elizabeth Bouchard, SNAME Executive Director

09:00 – 09:30 Keynote Speech I

Harilaos Psaraftis (DTU)
 The road to Net Zero: In search of the elusive convergence

09:30 – 10:30 Panel Discussion

Carbon capture technologies

Coordinator: Lambros Nikolopoulos (GASLOG)

Panelists: Chara Georgopoulou (DNV), Giorgos Skevis (CLEOS), Thanos Niotis (C-Job Naval Architects), Yiannis Christopoulos (Wartsila)

10:30 – 10:50 Coffee Break

10:50 – 13:00 Session No.1: Decarbonization, Alternative Fuels

10:50 – 11:50 Technical comparison of emissions and assessment of use of alternative fuels on large containerships

Dale Pederson (Herbert Engineering), Dimitris Konovessis (National Technical University of Athens)

Ongoing rule and regulatory developments for the safe use of ammonia as a marine fuel

Vassilis Zouzoulas, Spyros Hirdaris (American Bureau of Shipping)

A critical assessment of alternative fuels for shipping

Panos Zachariadis (Atlantic Bulk Carriers Management)

11:50 – 12:00 10-min Break

12:00 – 13:00 Robust and simulation driven design optimization for dual LNG–Hydrogen powered large bulk carriers

Lampros Nikolopoulos (University of Strathclyde), Antonios Trakakis (Registro Italiano Navale), Evangelos Boulougouris (University of Strathclyde)

	Model-based assessment of various decarbonization pathways considering multiple SAFs, powertrain and vessel type configurations Georgios N. Rossopoulos, Vasileios Karystinos, Leonidas N. Tsaganos, Georgios Charvalos, Georgios Dimopoulos, Christos I. Papadopoulos (National Technical University of Athens) Perspectives on marine nuclear energy systems: Thermodynamics, economics and system integration George Dimopoulos and Anastasia Vlachou (National Technical University of Athens)
13:00 – 13:45	Lunch Break

13:45 – 16:00	Session No.2: Decarbonization Measures and WAPS
13:45 – 14:45	Design challenges and solutions for purpose-built wind-assisted vessels Smit P. Dhanani, Roy de Winter, Austin A. Kana (Delft University of Technology) Uncertainty analysis of simulation-based performance evaluation for wind-assisted propulsion systems Foivos Lemonakis, Stavros Kontos, Sofia Werner (RISE) Assessing the potential of wind-assisted propulsion for the decarbonization of deep-sea shipping Timoleon Plessas, Apostolos Papanikolaou, Aimilia Alissafaki (National Technical University of Athens)
14:45 – 14:50	5-min Break
14:50 – 15:50	Design and assessment of a cryogenic desublimation carbon capture system onboard ships Dimitrios E. Sykas, Ahmed G. Elkafas, Iraklis Lazakis (University of Strathclyde) Hydrodynamics and multi-physics simulations supporting development of digital twin in shipping: The case of a futuristic RoRo vessel Kostas Belibassakis (National Technical University of Athens), Brian Bender Madsen (Knud E. Hansen A/S), Anders Oster (Wartsila Finland), Lokukaluge Prasad Perera (The Arctic University of Norway, SINTEF Digital) A model for identifying the impact of lateral excitations of ships with WAPs in realistic operating conditions Manolis Angelou, George Papadakis, Dimosthenis Triperinas, Kostas Belibassakis (National Technical University of Athens)
15:50 – 16:10	Coffee Break

16:10 – 19:00	Session No.3: Decarbonization Measures - Regulatory Impact
16:10 – 17:30	Eligible removal units from direct air capture of CO2 as an optional compliance pathway in the IMO Net-Zero framework Georgios Remoundos (University of the Aegean), Sofia Peppas (University of West Attica), Stylianos Perissakis (University of Piraeus), Nikolaos Papanikos (National and Kapodistrian University of Athens), Georgios Charvalos and Christos I. Papadopoulos (National Technical University of Athens)

Evaluating the impact of hydrodynamic upgrades on vessel efficiency, regulatory compliance, and operational costs

Constantine P. Manoudakis (Devore Marine Inc.), Simone Mancini (FORCE Technology), Huang Guofu (China Ship Scientific Research Center)

QFD-based framework for multi-criteria evaluation of maritime energy efficiency technologies

Thomas Papacharizanos, George Kontaras and Chara Georgopoulou (DNV Hellas), George Dimopoulos, Dimitrios Lyridis and George Charvalos (National Technical University of Athens), Angelos Filippatos and Elias Bilalis (University of Patras), Igor Bačkalov (DST e. V.), Nikoletta Trivyza (RINA), Ioannis Gergis and Spyros Pappas (Hydrus Engineering Ltd)

Special considerations following ship electrification – The Aegis project

Dora Tsiourva and John Prousalidis (National Technical University of Athens)

17:30 – 17:40 5-min Break

17:40 – 19:00 **Decomposing maritime environmental regulations: A lifecycle approach to milestone mapping and regulatory effectiveness**

Eirini Stamatopoulou and Nikos Ventikos (National Technical University of Athens)

Operational and decarbonisation-oriented structural design of modular cargo vessels

Alexander Egorov and Bohdan Urum (Marine Engineering Bureau)

The end of shipping decarbonization as we know it: Rethinking the IMO Net-Zero framework's economic architecture

Paraschos Liadis and Stela Spiraj (QueSeas)

D-NAVIO: Supporting stakeholder-driven architecture for cybersecurity and ship systems resilience during maritime operations

Stamatina Rassia, Timoleon Plessas, Thodoris Tsikis (Le.D.R.A. Group)

19:00 – 19:10 **Day 1 Closing Remarks**

Apostolos Papanikolaou, SOME 2026 Chair

John E. Kokarakis, SNAME Greek Section Chair

Wednesday, September 16, 2026 – Symposium Day #2

Eugenides Foundation Conference Center, Athens

PRELIMINARY PROGRAMME

08:25 – 10:30	Plenary Session
08:25 – 08:30	Welcome (Day 2) – John E. Kokarakis, SNAME Greek Section Chair
08:30 – 09:00	Keynote Speech II
	John Prousalidis (National Technical University of Athens) The sustainable decarbonization of maritime sector as part of a Holistic Electrification Plan
09:00 – 09:45	Panel Discussion
	Nuclear Energy for Shipping <u>Moderator:</u> Harilaos Petrakakos (PNP Marine) <u>Panelists:</u> Lia Athanasiou, Kostantinos Economou, Oded Gaur Lavie (nT-Tao), Spyros Hirdaris (American Bureau of Shipping)
09:45 – 10:30	Session No.4: Autonomous Shipping
	Port call optimisation in Piraeus: Integration assessment and expected benefits Manolis Annetis, Christoforos Diamantis, Dimitris Roniotis, Thanasis Chaldeakis, Charalampos Papargyris, Sofia Koufou, Violeta Ampela, Nikolaos P. Ventikos (National Technical University of Athens, Piraeus Port Authority) The SEAMLESS approach to enabling fully automated waterborne freight feeder loop services Vassilis Podimatas, Alexandros Koimtzoglou, Konstantinos Louzis, Angeliki Stouraiti, Dimitrios Konovessis, Nikolaos P. Ventikos, Håvard Nordahl (National Technical University of Athens, SINTEF Ocean)

Autonomous tugboats in port operations: A digital twin architecture for berthing and unberthing

Alexandros Koimtzoglou, Anastasia Roukouni, Giannis Kanellopoulos, Konstantinos Louzis, Serafeim Lianna, Angelos Amditis, Nikolaos P. Ventikos (National Technical University of Athens, Institute of Communication and Computer Systems)

10:30 – 10:50 Coffee Break

10:50 – 13:00 Session No.5: AI Maritime Applications

10:50 – 11:50 Fuel oil consumption prediction model for AI optimisation platform

Andreas Kouvaras, Dimitris Stavropoulos, Aikaterini Karampasi and Constantine Abazis (VesselFront), Michael Fan (Tsakos Energy Navigation Ltd.), George Margelis (Tsakos Shipping and Trading S.A.)

VesselAI: AI-powered maritime analytics and decision support toward low-emission ship operations

Afroditi Blika (Institute of Communication and Computer Systems), Theodoros P. Gerostathis (University of West Attica), Georgios Grigorios Klavdianos, Theodoros Florakis, Anastasia Askouni, Loukas Ilias, Ariadni Michalitsi-Psarrou, Giannis Xidias and Spiros Mouzakitis (Institute of Communication and Computer Systems), Kostas Belibassakis (National Technical University of Athens), Lokukaluge Prasad Perera (The Arctic University of Norway)

A responsible-AI green digital twin framework for lifecycle decarbonization in shipping

Christos Spandonidis, Areti Petsa, Chrysa Rompidou (Prisma Electronics SA)

11:50 – 12:00 10-min Break

12:00 – 13:00 Intrinsically safe drones for remote inspections in confined spaces and tanks

John E. Kokarakis and Constantinos Pallis (Bureau Veritas)

The evolution of maritime inspections with unmanned aerial vehicles

Georgios Koutsoumpas, Chris Leontopoulos, Orestis Vlachos, Costas Xidis (American Bureau of Shipping)

AI-assisted crash astern maneuvers: Reducing trajectory uncertainty in emergency ship stopping

John E. Kokarakis and George Andreadis (Bureau Veritas)

13:00 – 13:45 Lunch Break

13:45 – 16:10	Session No.6: Fuel Consumption Optimisation
13:45 – 14:45	Influence of hull structural material on economics and decarbonization John C. Daidola (AENY Naval Architects and Marine Engineers) Energy boom or budget bust? A data-driven systems elements analysis workflow for tanker retrofit decision-making Zacharias P. Oikonomou, Ioannis Papachlimintzos, Spyridon Moraitis, Jeroen Pruyn, Austin Kana (Delft University of Technology, Rotterdam University of Applied Science, Olympic Shipping & Management, S.A.) From Onboard Sensor Data to Optimal Routes: Physics-Informed Machine Learning for Ship Fuel Consumption Dimitrios Kaklis and Takis J. Varelas (DANAOS Research Centre)
14:45 – 14:50	5-min Break
14:50 – 16:10	Energy efficiency assessment of shaft generators on LNG carriers and VLCC tankers Nikolaos Aletras and George Skevis (CLEOS) Spray angle analysis of marine diesel and plastic pyrolysis oil fuel blends Marios Mountzalias, Marios Patsiadis, George Veropoulos, Stamatios Kalligeros (University of West Attica, Hellenic Naval Academy) A techno-economic tool for ship energy saving technologies assessment Eleni Eleftheriadou, Georgios Charvalos, Ioannis Pervelis, Christos Papadopoulos (National Technical University of Athens) Validation of the improved SNNM method for the added resistance of a ship advancing in waves Shukui Liu (Nanyang Technological University) and Apostolos Papanikolaou (National Technical University of Athens)
16:10 – 16:30	Coffee Break

16:30 – 19:00	Session No.7: Ship Design and Operation - Holistic Approaches to the Shipbuilding Industry
16:30 – 17:50	Probabilistic network constrained layout generation for early-stage inland ship design Richmond S. Anku, Jeroen Pruyn, Cornel Thill (Delft University of Technology and Rotterdam University of Applied Science) Towards ship-hull structural digital twins for safe operations: A lab-scale experimental case study Evangelia Eleni Sapountzaki, Nicholas Silionis, Konstantinos Anyfantis (National Technical University of Athens) Design and application of a Charterers' Satisfaction Index (CSI): Modelling of fuel oil consumption onboard an LNG carrier Marios I. Gaitanos, Iraklis Lazakis, Robert VD. Meer, Yaseen A. Ahmed (University of Strathclyde, Universiti Kuala Lumpur) Statistical analysis of technical characteristics of contemporary bulk carriers George Dafermos, Aphrodite Kanellopoulou, Aimilia Alissafaki, George Zaraphonitis (National Technical University of Athens)
17:50 – 18:00	10-min Break
18:00 – 19:00	Holistic framework for the environmental assessment of shipbuilding processes according to GHG protocol standards Jason Markatos, Dimitris Polyzogopoulos, Marc Bonazountas (Epsilon International Ltd, National Technical University of Athens) Competency-based seafarer training as a driver of reliability and safety for gas carriers Adolf Jacob Vegter and Speros Stamatis (Edugas) Seafarers' soft skills: Measurement and impact on performance Petros Dimas, Georgia Tzourmana, Pelia Giannoulatou, Odysseas Tsouvalis, Dimitrios V. Lyridis (National Technical University of Athens)
19:00 – 19:10	Day2 Closing Remarks
	Apostolos Papanikolaou, SOME 2026 Chair John E. Kokarakis, SNAME Greek Section Chair