



E.I.N.T.

**ΕΛΛΗΝΙΚΟ ΙΝΣΤΙΤΟΥΤΟ ΝΑΥΤΙΚΗΣ ΤΕΧΝΟΛΟΓΙΑΣ
HELLENIC INSTITUTE OF MARINE TECHNOLOGY**



2020 ΠΡΟΓΡΑΜΜΑ • PROGRAMME



PROGRAMME

ANNUAL CONFERENCE OF MARINE TECHNOLOGY 2020

Wednesday, 2 December 2020

09:00 - 09:05

Welcome

Chair: N. Liapis, ELINOIL S.A.

Gr. Grigoropoulos, Chairman of Hellenic Institute of Marine Technology

09:05 - 09:30

Opening Addresses

Chair: N. Liapis, ELINOIL S.A.

E. Kyriazopoulos, Ministry of Mercantile Marine and Insular Policy

G. Alexandratos, Hellenic Chamber of Shipping

Ch. Simantonis, Hellenic Shortsea Shipowners Association

D. Fafalios, International Association of Dry Cargo Shipowners

09:30 - 10:30

Session 1

Moderator: P. Yannoulis, Oceanking Technical & Trading S.A.

Thermodynamic analysis and optimization of a dual-loop regenerative supercritical CO₂ brayton cycle/orc system coupled to the main diesel engine of a bulk carrier

A. G. Vallis¹, Th. C. Zannis², E. A. Yfantis^{2,3}, K. D. Asimakopoulou³, E. G. Pariotis², J. S. Katsanis²

¹Hellenic Navy, ²Hellenic Naval Academy, ³Univ. of Nicosia

More electric ship initiative: customized solutions advantages

A. Karlis¹, A. Kladas², C. Mademlis³, E. Mitronikas⁴, J. Prousalidis², E. Strangas⁵

¹Democritus Univ. of Thrace, ²National Technical Univ. of Athens, ³Aristotle Univ. of Thessaloniki,

⁴Univ. of Patras, ⁵Michigan State Univ.

ShipFC: piloting multi-mw ammonia ship fuel cells

E. Boulougouris¹, M. Cheliotis¹, N. Trivyza¹, G. Theotokatos¹, G. Livanos², N. Kalogiratou³,

G. Mantalos⁴, A. Stubos⁵, E. Stamatakis⁵, A. Venetsanos⁵

¹Univ. of Strathclyde, ²Capital-executive Ship Management Corp, ³Capital Ship Management Corp.,

⁴Starbulk, ⁵NCSR "Demokritos"

10:30 - 11:30

Session 2

Moderator: S. A. Zolotas, RINA Hellas Ltd.

Monitoring of a ship's energy efficiency based on artificial neural networks and innovative KPIs

P. Theodoropoulos¹, C.C. Spandonidis², N. Themelis³, C. Giordamlis², S. Fassois¹

¹Univ. of Patras, ²Prisma Electronics, ³National Technical Univ. of Athens

Application of condition monitoring techniques in ships

J. Ch. Dermentzoglou

International Univ. of Greece

Thermal, environmental and economic study of a marine diesel engine waste heat recovery dual-loop bottoming system

A. G. Vallis¹, Th. C. Zannis², E. A. Yfantis^{2,3}, K. D. Asimakopoulou³, E. G. Pariotis², J. S. Katsanis²

¹Hellenic Navy, ²Hellenic Naval Academy, ³Univ. of Nicosia

11:30 - 11:40

Break

11:40 - 12:30

Session 3

Technical presentations

Moderator: N. Nikitakos, *Univ. of Aegean*

Advanced and smart methods and technologies for the monitoring, performance assessment and optimization of the operation of ship and its subsystems

D. Galanis, *Marichem Marigases Worldwide Services*

The key for predictive maintenance (acceleration monitoring)

N. Bezentes, *C&A Stauros Kassidiaris S.A.*

RINA Cube Electronic LogBooks: from paper to digital

D. Zisimopoulos, *RINA Hellas Ltd.*

ClassNK cyber security initiatives

M. Tani, *ClassNK*

12.30 - 13.30

Session 4

Moderator: N. Themelis, *National Technical Univ. of Athens*

A statistical analysis for the technical features of bulk carriers

S. Efstathiou, G. Dafermos, E. Iliopoulou, G. Zaraphonitis
National Technical Univ. of Athens

Hydrodynamic analysis of a moored floating structure for the wind potential exploitation

Th. P. Mazarakos^{1,2}, S.A. Mavrakos¹
¹*National Technical Univ. of Athens*, ²*Univ. of West Attica*

Analysis of the technical and operational characteristics of the Greek owned tug boat fleet and the specifications of the Greek regulatory framework

N.P. Ventikos, P. Sotiralis, K. Louzis, A. Koimtzoglou
National Technical Univ. of Athens

13.30 - 14.00

Lunch break

14.00 - 15.00

Session 5

Technical presentations

Moderator: A. Arvanitakis, *PHOENIX Register of Shipping*

Innovative methods for enhancing productivity in shipbuilding

T. De. Jonge, *Centraalstaal BV*

Service and maintenance challenges in complicated systems

R. Krikkis, *Oceanking Engineering*

Siri high performance ropes in the marine industry

L. Mavrodimos, *KATRADIS Marine Ropes IND S.A.*

Cathodic protection applications

E. Tsergas, *Environmental Protection Engineering S.A.*

Seven challenges in technical ship management

L. Riisberg, *Logimatic*

15.00 - 15.40

Session 6

Technical presentations

Moderator: Ch. Georgousopoulos, *Ariston Navigation Corp.- INSB Class*

Composite materials in shipping. The cases of NOV FGS & Strongwell

A. Papapetros, *N. Bogdanos Marine Bureau*

Wind assistance. norsepower rotor sails

A. Angelidis, *TECHNAVA S.A.*

Digitalizing our operations: DNVGL's experience so far

G. Dimopoulos, *DNV GL Hellas S.A*

Physics-based engineering simulation & digital twins for marine industry

S. Kokkinos, *FEAC Engineering*

Close-up survey of the structure of ships and mobile off -shore units with the intuitive indoor drone elios 2-the new megatrend

E. Tzitzis, *Hellenic Drones S.A.*

The role of synergies towards the new era in shipping

E. Hajiefremidis, *WIMA*

15.40 - 17.10

Session 7

Moderator: D. Lyridis, *National Technical Univ. of Athens*

Building up the knowledge of the composite structures in naval applications

I. Vichos, Y. Yiannoulis, N. Melanitis, P. Adonakos, S. Kalligeros
Hellenic Naval Academy

Optimising the ballast water treatment system retrofit installation with the application of 3d modelling

N.P. Ventikos, P. Sotiralis, D. Iliopoulos
National Technical Univ. of Athens

The new era of risk-based decision-making process in shipping

K. Kyrou¹, D. Stavrou²

¹Capital Ship Management Corp., ²National Technical Univ. of Athens

Risk management in big maritime projects

E. Sklavounou¹, G. Chamilothis¹, N. Nikitakos², D. Papachristos²

¹Univ. of West Attica, ²Univ. of Aegean

17:10 - 18:40

Session 8

Round Table Discussion

2020 sulphur cap - experience so far

Moderator: A. Vamvakaris, *Vamuaship Maritime S.A.*

G. Drossos, *MAN PrimeServ Piraeus*

S. Hatzigrigoris, *MARTECMA*

G. Plevrakis, *ABS*

G. Teriakidis, *DNV GL Hellas S.A.*

S. Themelarou, *Lloyd's Register*

A. Trakakis, *RINA Hellas Ltd.*

18:40 - 18:45

Closing of the conference

Chair: N. Liapis, *ELINOIL S.A.*

Gr. Grigoropoulos, *Chairman of Hellenic Institute of Marine Technology*



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