





	Friday, May 22, 2015 – Yacht Club of Greece 18 Karagiorgi Servias str., 18533 Piraeus, Hellas							
		Seafights Auditorium A Members Auditorium						
8:00	9:00	Registration & Welcome						
	Plenary - Open Ceremony - Welcome Presentations							
		Vasiliki Galiotou ASHRAE Hellenic Chapter President						
9:00		Thomas Phoenix						
	10:00	ASHRAE President  Admiral Evangelos Apostolakis						
		Chief of the Hellenic Navy General Staff						
		Dimitris A. Charalambopoulos Conference General Chair						
10:00	10:30	Topic to be confirmed Thomas H. Phoenix ASHRAE President	Topic to be confirmed Theodoros Papadopoulos President, Association of Mechanical & Electrical Engineers					
10:30	11:00	Topic to be confirmed Admiral Georgios Christopoulos General Inspector, Hellenic Navy General Staff	Navy Shore Energy Efficiency - Saving Opportunities & Security Dr. Costas A. Balaras Research Director GREC, Institute for Environmental Research & Sustainable Development. National Observatory of Athens					
11:00	11:30	COFFEE	BREAK					
		Topic to be confirmed Christos Spirtzis	The Montreal Protocol on ozone depleting substances: Policy and Compliance Obligations					
11:30	12:00	Past President, Technical Chamber of Greece (TEE) Alternate Minister for Infrastructure, Transport & Networks	Artie Dubrie UNEP Network Coordinator for Pacific Islands Countries: Montreal Protocol Compliance Assistance Programme Tonic, to be confirmed					
		Energy Efficiency of Ships: Its Impact on Environment and Ship Safety	Topic to be confirmed					
12:00	12:30	Prof. Dr. Apostolos D. Papanikolaou School of Naval Architecture & Marine Engineering, National Technical University of Athens	Special					
12:30	13:00	New Marine Postgraduate Courses - A Holistic Approach, Flexible and based on the Onsite and the Relevant Industrial Experience	Refrigerants and ASHRAE Flammability Classification- Transport Sector					
12.30	13.00	Prof. Dr. Elias Yfantis Naval Architecture & Marine Engineering, Hellenic Naval Academy	Prof. Dr. Walid Chakroun  Mechanical Engineering Department, University of Kuwait					
13:00	14:00	LUNCH						
		Building Interventions to Improve the Energy Performance of Existing Buildings	Low GWP alternatives for refrigeration in the fishing industry  Katinka Vigh					
14:00	14:30	Prof. Dr. <b>Dimitris Aravantinos</b> Civil Engineering Department, Aristotle University of Thessaloniki	Katinka Vigh Consultant, United Nations Industrial Development Organization (UNIDO)					
	15:00	Sustainability for Shipping? The Need for Life Cycle Thinking Prof. Dr. <b>Nikolaos Ventikos</b> School of Naval Architecture & Marine Engineering, National Technical University of Athens	Live discusion by attendees and speakers on the Montreal protocol as related to marine refrigerated vessels &					
14:30			Environmental Management Moderated by Bassam Elasaad ASHRAE Sub-Region Chair for Europe - Environment &					
		reasonar recommed commonsty or reasons	ASHRAE Sub-Region Chair for Europe - Environment & Regulation Consultant					
		Maritime Security and non Verbal Behaviour Stelios Kiosses	Green Offshore Structures and Shipyards Transformation Prof. Dr. Nikitas Nikitakos					
15:00	15:30	Psychologist and Human Factor Specialist	Department of Shipping, Trade and Transport, University of the Aegean					
		Engineering and Ethics Prof. Dr. Maria Venieri	Way forward for sustainable HVAC Solutions: Ten Tips for Managing Energy-Efficient Air-Conditioned Ships					
15:30	16:00	School of Philosophy & Social Studies, University of Crete	Prof. Dr. Essam Khalil  Mechanical Engineering Department, Cairo University					
16:00	16:30	COFFEE BREAK						
		Knowledge-Based Greening for a New Generation of Processes, Products and Systems: Utopia or Revolution?  Design of a Launching Ramp for the Athenian "OLYMPIAS" Following the Ancient Paradigm						
16:30	17:00	Prof. Dr. Emmanuel Koukios School of Chemical Engineering, National Technical University of Athens	Efstratios Andrianis					
17:00	17:15	COFFEE BREAK						
17:15	18:00	ROUND TABLE – OPEN DISCUSSION Dimitris A. Charalambopoulos, Chair						
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20:00	22:00	AWARDS CEREMONY – DIN	NER AT THE YACHT CLUB					

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				y 23, 2015 – <b>Hellenic Naval Academy</b> Hadjikyriakou Avenue, Piraeus		
			Trophies Auditorium	Laboratory of Naval Technology		Design Laboratory
8:00	9:00	00 Registration & Welcome				
				Plenary		
	Admiral <b>Georgios CHRISTOPOULOS</b> Hellenic Navy					
9:00	10:00	Vasileios PARASKEVOPOULOS ASHRAE Hellenic Chapter President-Elect				
10:00	10:30	То	pic to be confirmed m Phoenix HRAE President	UK Naval Ships HVACR - Maintenance of Legacy Systems Y. Abbas¹, R. Steward¹, N. Blower² ¹HVACR Design Engineer in the Analytical Engineering Group, Babcock Marine & Technology at Devonport Royal Dockyard, United Kingdom,²Has thirty years of HVACR experience maintaining operational Royal Naval vessels and eight years as a Technical Lead for Devonport Royal Dockyard	An En Fle Ale 1Q So of 1	irrent and Future Trends in Marine titiouling Coatings and the Study of lergy Efficiency Benefits for a Naval set sexandros Michelis¹, George Gougoulidis². Sexandros Michelis². Seuda, Chania, ²Member the Navy Berandros Committee Quality surance at the Navy's Detachment at lefsis Shipyards, Elefsis, Attica
10:30	11:00	En Dir	nergy Security in the Build evironment mitrios Koupatsiaris <sup>1</sup> commander (Engineer), Hellenic Navy	Life Extension of Legacy Turbines for Naval Propulsion Grahame Martin Global Business Manager ALBA Power	Novel Organic Rankine Cycle Working Fluids for Improved Ship Fuel Efficiency: DR-2 (HFO- 1336mzz(Z)) and DR-40A Konstantinos (Kostas) Kontomaris <sup>1</sup> Global technology leader for heating and power generation working fluids in the R&D department of DuPont Fluorochemicals, Wilmington, Delaware (USA)	
11:00	11:30	COFFEE BREAK				
11:30	12:00		Initiative Low Cost Methods and Applications to Increase Security and Safety Level in Merchant Ships Against Asymmetric Threads Commodore Georgios Bamplenis H.N. Deputy Commander, National Defence Academy	Conversion of Ferry to Hospital-Ship: An Architectural Approach Andreas Tsokos - Pappas¹, Stavros Giftopoulos², Thomas Mazarakos³ ¹ Architecture, Dipl. Arch. Eng., School of Architecture, NTUA, ²Architect and Assistant Professor at National Technical University of Athens, School of Architecture, ³Naval Architect, Marine Engineer and Adjunct Assistant Professor at the Dpt. of Naval Architecture, Technological Educational Institute of Athens	Proform for A.1 E. C.A.1 Ch. En. can proform NT	nomechanical and Electrochemical operties of Nano-composite Coatings Maritime Applications Frompeta <sup>1</sup> , D. K. Perivoliotis <sup>2</sup> , E. K. Karaxi <sup>3</sup> , Millioni <sup>4</sup> , A. Karantonis <sup>5</sup> , A. Skarmoutsou <sup>6</sup> , A. Charitidis <sup>7</sup> nemical engineer Dpt. of Chemical gineering, <sup>2</sup> Ph.D. candidate, <sup>3</sup> Ph.D. candidate, <sup>5</sup> Assistant offessor, Dpt. of Chemical Engineering TUA, <sup>6</sup> Post-doctoral researcher, <sup>7</sup> Professor, t. of Chemical Engineering NTUA
12:00	12:30	Workshop 1	(continued)  Commander Spiridon Kinzios H.N.	Power Plant-Related Measures for Improving Energy Efficiency in Ships G. Gougoulidis <sup>1</sup> , F. Karagiannopoulos <sup>2</sup> , O. Fakou <sup>2</sup> <sup>1</sup> Officer and Naval Architect, Hellenic Navy, <sup>2</sup> Marine Engineering Officer in the Hellenic Navy	co pro ap E.H Ko <sup>1</sup> Ph Dp <sup>3</sup> Po En	elf-healing cerium molybdate and pper oxide nanomaterials for otection of metal alloys for marine plications (K. Karaxi¹, I.A. Kartsonakis², E.P. umoulos³, C.A.Charitidis⁴ D candidate, ²Postdoctoral Researcher, t. of Chemical Engineering, NTUA, ospical Researcher, ppt. of Chemical gineering, NTUA, ⁴Professor, Dpt. of emical Engineering, NTUA
12:30	13:00		(continued)  From Asymmetric Threats to Hybrid Operations Prof. Dr. Konstantinos Grivas Hellenic Military Academy. Department of Turkish Studies and Modern Asian Studies, University of Athens. National Defence College. National Security Academy	Evaluation of Thermoelectric Generators for Waste Heat Recovery in Ships  D. Kossyvakis¹, C. Vossou¹, E Hristoforou³  ¹PhD candidate, School of Mining and Metallurgy Engineering, NTUA, ³Professor, School of Mining and Metallurgy Engineering, NTUA		
13:00	14:00	LUNCH BREAK				
14:00	14:30	p 1	(continued)  Human Error and Marine Safety Stelios Kiosses Psychologist and Human Factor Specialist	Applications of Absorption Heat Pump and Refrigeration System on Ships Cüneyt Ezgi <sup>1</sup> , <b>Ibrahim Girgin</b> <sup>1</sup> Mechanical Engineering Department, Turkish Naval Academy, Istanbul, Turkey	p 2	Commissioning, Operations & Maintenance: Ensuring the Energy Efficiency of the Built Environment. Vasileios Paraskevopoulos Mechanical Engineer, Commissioning Management Consultants
14:30	15:00	Workshop	(continued)  Designing for the new challenges Alkis Triantafyllopoulos Mechanical Engineer	Theoretical Investigation of an Optimized Turbo Compound System applied on a Marine 2-Stroke Diesel Engine Nikolaos F. Sakellaridis <sup>1</sup> , Efthimios G. Pariotis <sup>2</sup> , Dimitrios T. Hountalas <sup>3</sup> 1 PhD student, Dpt. of Mechanical Engineering, NTUA, 3 Assistant Professor, Hellenic Naval Academy, 3 Professor, Dpt. of Mechanical Engineering, NTUA	Workshop	Commissioning, Operations & Maintenance: Ensuring the Energy Efficiency of the Built Environment. (continued) Vasileios Paraskevopoulos Mechanical Engineer, Commissioning Management Consultants

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_		ENVIRONMEN	T & ENERGY in SHIPS 2015		
15:00	15:30	Design of Compact cabins for better air quality A. A. Ali <sup>1</sup> , N. A. Nasr <sup>2</sup> , A.F. Elsafty <sup>3</sup> <sup>1</sup> Senior Lecturer, <sup>2</sup> Assistant Dean Upgrading Studies Institute - Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt, <sup>3</sup> Dean of the College of Engineering - American University of the Middle East, Ahmady, Kuwait	Application of Photovoltaics on Ship Electrical Power Systems: Utopia or Reality?  G. Mpalagiannis¹, G. Tsamopoulos², C. Kalogrias³, G.J. Tsekouras⁴, F.D. Kanellos⁵¹¹Lieutenant Commander (Eng), Hellenic Navy, Fire Fighting Training Unit Director, Skaramangas Naval Fortress, Greece, ²Lieutenant Commander (Eng), Hellenic Navy, Electrical and Electronic Repair Department Deputy Director, Salamina Naval Base, Greece, ³Commander (Eng), Hellenic Navy, Electrical and Electronic Repair Department Director, Salamina Naval Base, Greece, ⁴Assistant Professor of Ship Electric Power Systems, Hellenic Naval Academy, ⁵Lecturer, School of Production Engineering and Management, Technical University of Crete, Chania, Greece	op 2	Commissioning, Operations & Maintenance: Ensuring the Energy Efficiency of the Built Environment (continued) Vasileios Paraskevopoulos Mechanical Engineer, Commissioning Management Consultants
15:30	16:00	Experience with Gas Turbines Diagnostic Methods, Application and Integration to Health Monitoring Tools Roumeliotis I. <sup>1</sup> , Aretakis N. <sup>2</sup> , Alexiou A. <sup>3</sup> , Romesis C. <sup>4</sup> , Tsalavoutas A. <sup>5</sup> , Stamatis A. <sup>6</sup> , Mathioudakis K. <sup>7</sup> <sup>1</sup> Assistant Professor, Hellenic Naval Academy, <sup>2</sup> Assistant Professor, Dpt. of Mechanical Engineering, NTUA, <sup>3</sup> Senior Researcher in the Lab of Thermal Turbomachines NTUA, <sup>4</sup> Senior Researcher in the Lab of Thermal Turbomachines NTUA, <sup>5</sup> Senior Researcher in the Lab of Thermal Turbomachines NTUA, <sup>6</sup> Associate Professor, Dpt. of Mechanical Engineering, University of Thessaly, Volos, Greece, <sup>7</sup> Professor, Dpt of Mechanical Engineering, NTUA	Sustainable Maritime Transport with LNG between Greek Mainland and Islands in the Archipelagos (ARCHIPELAGO-LNG) in the field of the trans-European network (TEN-T) Konstantinos Sfetsioris <sup>1</sup> , Antonios Gypakis <sup>2</sup> , Panagiotis Grammelis <sup>3</sup> , Adamis Mitsotakis <sup>4</sup> <sup>1</sup> Research Associate in the Centre of Research and Technology Hellas, <sup>2</sup> Senior Scientific officer of General Secretariat for Research and Technology, Athens, Greece, <sup>3</sup> Researcher in the Centre for Research and Technology Hellas, <sup>4</sup> Research Associate in the Centre of Research and Technology Hellas	Workshop	Commissioning, Operations & Maintenance: Ensuring the Energy Efficiency of the Built Environment (continued) Vasileios Paraskevopoulos Mechanical Engineer, Commissioning Management Consultants
16:00	16:30		COFFEE BREAK		
16:30	17:00	Optimal Economic Operation of a Complex Electric Power System with Shaft Generators P. Michalopoulos <sup>1</sup> , G. J. Tsekouras <sup>2</sup> , F.D. Kanellos <sup>3</sup> , J. M. Prousalidis <sup>4</sup> <sup>1</sup> Commander (Eng), Hellenic Navy and PhD candidate in the School of Naval Architecture and Marine Engineering, NTUA, <sup>2</sup> Assistant Professor of Ship Electric Power Systems, Hellenic Naval Academy, <sup>3</sup> Lecturer of Electric Circuits, School of Production Engineering and Management, Technical University of Crete, <sup>4</sup> Associate Professor, School of Naval Architecture and Marine Engineering NTUA	Investigating the applicability of Building Energy Simulation as an Energy Modelling Tool in ships Dimitrios Sfakianakis¹, Dracos Vassalos², Gerasimos Theotokatos³ ¹ Research assistant, Dpt of NAOME of the University of Strathclyde, Glasgow, UK, ²Professor of Maritime Safety Dpt of NAOME of the University of Strathclyde, ³Senior lecturer, Dpt of NAOME of the University of Strathclyde, Glasgow, UK		Marine Diesel Engines Online Monitoring & Diagnostic Systems Prof. Dr. Elias Yfantis Naval Architecture & Marine Engineering, Hellenic Naval Academy
17:00	17:30	Miller Cycle Application in Marine Diesel Engines for NOx Reduction: A Review Elias Yfantis¹, Theodoros Zannis², Ioannis Katsanis³, Roussos Papagiannakis¹, Petros Siritoglou⁵, Athanasios Lamprou⁶¹Professor, Hellenic Naval Academy, ²Assistant Professor, Hellenic Naval Academy, ⁴Associate Professor, Hellenic Naval Academy, ⁴Lecturer, Hellenic Naval Academy, ⁵Lecturer, Hellenic Naval Academy, ⁵Lieutenant Jr Grade Engineer in Hellenic Navy, ⁶Lieutenant Jr Grade in Hellenic Navy	CFD as a Tool for Thermal Comfort Assessment Koubogiannis Dimitrios <sup>1</sup> , Tsimperoudis Georgios <sup>2</sup> , Karvelas Evangelos <sup>3</sup> <sup>1</sup> Assistant professor, Dpt of Energy Technology Engineering, TEI Athens, Greece, <sup>2</sup> Undergraduate student, Dpt of Energy Technology Engineering, TEI Athens, Greece, <sup>3</sup> Postgraduate student, Dpt of Energy Technology Engineering, TEI Athens, Greece	Workshop 3	Marine Diesel Engines Online Monitoring & Diagnostic Systems (continued) Prof. Dr. Elias Yfantis Naval Architecture & Marine Engineering, Hellenic Naval Academy
17:30	18:00	A Novel Method for Water Thermolysis and CO <sub>2</sub> Transformation to Hydrocarbons  N. D. Papadopoulos <sup>1</sup> , E. V. Hristoforou <sup>2</sup> <sup>1</sup> Holds a Ph.D. and a D.Eng. Degree in Metallurgy Engineering and an M.Eng. Degree in Materials Science, <sup>2</sup> Professor, School of Mining and Metallurgy Engineering, NTUA			Marine Diesel Engines Online Monitoring & Diagnostic Systems (continued) Prof. Dr. Elias Yfantis Naval Architecture & Marine Engineering, Hellenic Naval Academy
18:00	18:30	COFFEE BREAK			
20:00	22:00	DINNER & SOCIAL EVENT			

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				24, 2015 – <b>Hellenic Naval Academy</b> Hadjikyriakou Avenue, Piraeus			
			Trophies Auditorium	Laboratory of Naval Technology		Design Laboratory	
8:00	9:00			Registration & Welcome			
				Plenary			
		Admiral Athanasios NASOPOULOS Hellenic Navy					
9:00	10:00	Dr. Ioanna Deligkiozi ASHRAE Hellenic Chapter Secretary					
10:00	10:30	Crisis Communication Plan – A luxury or a necessity? The importance of protecting the reputation of a company in an environmental crisis  Katerina G.Skourtanioti <sup>1</sup> , Georgios V.Lykos <sup>2</sup> , Nikolaos P.Ventikos <sup>3</sup> <sup>1</sup> Strategic communication and crisis management expert. Managing Director at VenLys, <sup>2</sup> Lt. Commander (Eng) in Hellenic Navy, Ph.D. candidate at Lab for Maritime Transport, NTUA, Member of Maritime Risk Group, Greece, <sup>3</sup> Assistant Professor at Laboratory for Maritime Transport, NTUA, Manager of Maritime Risk Group, Greece		Capital Budgeting Techniques In Energy Systems - Appliance In Marine Industry Athanasios Lamprou <sup>1</sup> , Elias Yfantis <sup>2</sup> , Ioannis Katsanis <sup>3</sup> , Theodoros Zannis <sup>4</sup> , Petros Siritoglou <sup>5</sup> <sup>1</sup> Lieutenant Jr Grade in Hellenic Navy, <sup>2</sup> Professor in Hellenic Naval Academy, <sup>3</sup> Lecturer in Hellenic Naval Academy, <sup>4</sup> Assistant Professor in Hellenic Naval Academy, <sup>5</sup> Lieutenant Jr Grade Engineer in Hellenic Navy	Utilization of Vertical Axis Wind Turbines in Port Areas Argyrios D. Stouras¹, George Kouzilos², Dimitrios E. Manolakos³¹ Undergraduate student, School of Mechanical Engineering, NTUA, ²Researcher with PhD in Mechanical, NTUA, ³Professor, School of Mechanical Engineering, NTUA		
10:30	11:00	Statistical Survey for Common Health Problems Onboard Ships: a Study Focused on Marine Engineers A. F. Elsafty <sup>1</sup> , N. A. Nasr <sup>2</sup> <sup>1</sup> Dean of the College of Engineering - American University of the Middle East, Ahmady, Kuwait, <sup>2</sup> Assistant Dean Upgrading Studies Institute - Arab Academy for Science, Technology and Maritime Transport, Alexandria, Egypt		Life Cycle Assessment as a Prerequisite Tool in Maritime Industry  N.Vlachou¹, A.Trompeta², H. Sarimveis³, C.A.Charitidis⁴ ¹Chemical engineer that serves at the Master Program of Materials Science and Engineering, in the School of Chemical Engineering, ²Chemical engineer and serves at the Master Program of Materials Science and Engineering, in the School of Chemical Engineering, ³Associate professor in the Department of Chemical Engineering, NTUA, ⁴Professor in the Department of Chemical Engineering, NTUA	Av Im Ge Ge <sup>1</sup> He CA Pro	Similarities and Differences between Aviation and Shipping Environmental Impact to Climate Change Georgia Lykou <sup>1</sup> , Nikolaos P. Ventikos <sup>2</sup> , Georgios V. Lykos <sup>3</sup> <sup>1</sup> Head of Environmental Protection Dpt, Hellenic Civil Aviation Authority and ICAO/CAEP representative for Greece, <sup>2</sup> Assistant Professor, Laboratory for Maritime Transport, NTUA, <sup>3</sup> Phd candidate, Laboratory for Maritime Transport, NTUA	
11:00	11:30	COFFEE BREAK					
11:30	12:00		Advaned Technologies for Green Ships/Green Ports Prof. Dr. Emmanuel Koukios School of Chemical Engineering, National Technical University of Athens	Determination of the Plastic Deformation and Residual Stress Tensor Distribution Using Surface and Bulk Intrinsic Magnetic Properties Polyxeni Vourna <sup>1</sup> , Aphrodite Ktena <sup>2</sup> , E Hristoforou <sup>3</sup> <sup>1</sup> PhD candidate, at the School of Mining and Metallurgy Engineering, NTUA, <sup>2</sup> Associate Professor at the TEI of Sterea Ellada, Greece, <sup>3</sup> Professor at the School of Mining and Metallurgy Engineering, NTUA		Anchored Platforms for Desalination Production Prof. Dr. Evangelos Hristoforou School of Mining & Metallurgical Engineering, National Technical University of Athens	
12:00	12:30	13:00 Avarkshop Workshop	Advaned Technologies for Green Ships/Green Ports (continued) Prof. Dr. Emmanuel Koukios School of Chemical Engineering, National Technical University of Athens	An Electrical Pulsing Technique for Capacity Restoration of Lead Acid Batteries K. Assimakopoulos <sup>1</sup> , N. Hadjigeorgiou <sup>2</sup> , D. Kossyvakis <sup>3</sup> , E. Hristoforou <sup>4</sup> <sup>1</sup> M.Sc. student in the School of Mechanical Engineering, NTUA, Athens, <sup>2</sup> PhD student in the School of Electrical Engineering, NTUA, Athens, <sup>3</sup> PhD student in the School of Mining Engineering and Metallurgy, NTUA, <sup>4</sup> Professor at the School of Mining and Metallurgy Engineering, NTUA	Workshop 5	Anchored Platforms for Desalination Production (continued) Prof. Dr. Evangelos Hristoforou School of Mining & Metallurgical Engineering, National Technical University of Athens	
12:30	13:00		Advaned Technologies for Green Ships/Green Ports (continued) Prof. Dr. Emmanuel Koukios School of Chemical Engineering, National Technical University of Athens	Experimental Investigation of Harmonic Distortion in Port Crane Systems C.S. Psomopoulos¹, S.D. Kaminaris¹, G.Ch. Ioannidis¹, A. Apergis², S. Zilakos², P. Pizanis², A. Gampletsas² ¹Professor in the Department of Electrical Engineering, Piraeus University of Applied Science (Technological Education Institute of Piraeus), Athens, Greece, ²Electrical engineers employees in Piraeus Container Terminal S.A., Piraeus Greece		Anchored Platforms for Desalination Production (continued) Prof. Dr. Evangelos Hristoforou School of Mining & Metallurgical Engineering, National Technical University of Athens	
13:00	13:30						
13:30	14:30	End of Conference - Farewell Cocktail					

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