

The Royal Institution of Naval Architects
Power and Propulsion Alternatives for Ships
 8th November, Rotterdam, The Netherlands



Wednesday 8 th November		
9:00 – 9:30	Coffee and Registration	
9:30 – 9:50	CURRENT AND FUTURE SCALE LIMITATIONS FOR ALTERNATIVE MARINE POWER AND PROPULSION SOLUTIONS <i>Jan-Erik Räsänen, Head of New Technology, Foreship Ltd</i>	SESSION 1
9:50 – 10:10	COMMERCIAL WIND PROPULSION SOLUTIONS: PUTTING THE 'SAIL' BACK INTO SAILING <i>Gavin Allwright, Secretary, International Windship Association (IWSA), UK</i>	
10:10 – 10:30	NORSEPOWER ROTOR SAILS – EFFICIENT AND RELIABLE AUXILIARY WIND PROPULSION FOR SHIPS <i>Jukka Kuuskoski, Norsepower Oy Ltd, Finland</i>	
10:30 – 10:50	INFLUENCE ANALYSIS OF THE WINGSAIL SYSTEM CONFIGURATION ON THE TECHNICAL PERFORMANCES AND FINANCIAL RETURN OF THE TECHNOLOGY ON SAIL-ASSISTED VESSELS <i>D. Ferrer, M. Mantilla, A. García, F. Saenz, J. Miguel Bermúdez, C. Aleixendri, N. Ferrés</i>	
10:50 – 11:20	Coffee	
11:20 – 11:40	WIND POWERED VESSELS WITH HYBRID AND AUTONOMOUS TECHNOLOGIES <i>Ken Goh, Knud E. Hansen, Australia</i>	
11:40 – 12:00	USING HYBRID ELECTRIC PROPULSION ON A WARSHIP TO INCREASE FLEXIBILITY AND EFFICIENCY OF OPERATIONS <i>Robert Taylor, Babcock International Group, UK</i>	
12:00 – 12:20	REDUCE EUROPEAN PORT AND SHIPPING EMISSIONS - 3 STEP PROCESS <i>TBC, PBES, Canada</i>	
12:20 – 13:20	Lunch	
13:20 – 13:40	REPLACEMENT OF A DIESEL GENERATOR WITH A CONTAINERISED BATTERY SYSTEM ON-BOARD A CONTAINERSHIP <i>Petros Menegakis, I. Dimakopoulos, G. Panagoulas, S. Gkinis and N. Lampris, Newcastle University</i>	SESSION 2
13:40 – 14:00	WIND ASSISTED SHIPS DESIGN EXPLORATION AND OPERATIONAL CONSTRAINTS <i>R Eggers, G Gaillarde, Maritime Research Institute Netherlands, The Netherlands</i>	
14:00 – 14:20	LNG POWERED DRY BULK CARRIER <i>A. Trakakis, Arista Shipping, GR; M. Ioannou, M. Penfold and E. Kariambas, American Bureau of Shipping, GR and UK; D. Antonopoulos, Wärtsilä</i>	
14:20 – 14:50	Coffee	
14:50 – 15:10	ROLE OF RIM DRIVEN PROPULSORS IN FUTURE ELECTRIC SHIPS <i>Steven Fletcher, Senior Engineer, Frazer-Nash Consultancy Ltd, UK</i>	
15:10 – 15:30	HYBRID ENERGY AND PROPULSION SYSTEM FOR VESSELS IN TIMETABLE OPERATION <i>Martin Einsiedler, SHIPTEC AG, Switzerland</i>	
15:30-15:50	DESIGN-SIDE INNOVATION TO MINIMIZE THE ENVIRONMENTAL FOOTPRINT OF A RO/PAX FERRY , Donald MacPherson, Technical Director, HydroComp, Inc.,USA, Ioannis Bakas, Special Projects Manager, NAP Engineering P.C., Greece	
15:50 – 16:00	General Discussion	