

NEXT GENERATION MARINE Power & Propulsion

CONFERENCE

Grand Harbour - Southampton UK
26 - 28 April 2016

A dynamic group of international experts, including 3 Keynote Speakers and 20 Presenters, will highlight how innovative power and propulsion solutions can be integrated into next generation vessels

Relevant to Professional - Commercial - Military:

End-user organizations // Boat Builders // Engine Manufacturers
Mechanical & Electrical Engineers // Naval Architects // Maritime Legislators

Hybrid Systems include Diesel - Electric - Battery for:

Work Boats // Pilot Boats // Patrol Craft // Wind Farm Support Vessels
Survey Vessels // Superyacht Tenders // Unmanned Craft

2 DAY - CONFERENCE - 26 & 27 April 2016

1 DAY - WORKSHOP - 28 April 2016

Supported By



UK Maritime Pilots Association



UK Harbour Masters Association



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CONFERENCE DAY 1: Tuesday 26 April

08.30 to 09.00	Registration & Coffee
09.00 to 09.10	Introduction to Next Generation Marine Power & Propulsion John Haynes – Conference Organiser & Chairman
09.10 to 09.50	KEYNOTE: Global Marine Technology Trends - 2030 and Beyond Professor R Ajit Shenoi – Director, Southampton Marine and Maritime Institute
09.50 to 10:30	Hybrid Technology & The Hour Of Power for Workboats, Patrol Vessels and Superyachts John Haynes – Managing Director, Shock Mitigation
10.30 to 11.00	Coffee
11.00 to 11.40	Hybrid Fuel Cell Electric Propulsion for Marine Transport Applications: Ferry Case Study Ameen Bassam – Fluid Structure Interactions Group, Southampton University
11.40 to 12.20	The Potential for Hybrid and Low Emission Solutions in Offshore Wind Dan Kyle Spearman – Naval Architect, The Carbon Trust
12.20 to 13.00	Development of High Technology Hovercraft Mark Downer – Chief Engineer, Griffon Hoverwork
13.00 to 14.00	Lunch
14.00 to 14.40	Optimising the Balance Between Energy Storage and Production on Small Craft Ken Wittamore – Managing Director, Triskel Marine
14.40 to 15.20	The Scientific and Engineering Approach to the Manufacture and Use of Emulsified Fuels Alan Priddy – Global Powerboat Circumnavigation Record Team
15.20 to 15.50	Coffee
15.50 to 16.30	Viable Solutions for Reducing Weight and Improving Fuel Efficiency of Vessels Julian Morgan – Managing Director, KPM Marine
16.30 to 17.00	Discussion Session Presentation TBC
17.00 to 19.30	DRINKS RECEPTION at Grand Harbour Hotel Sponsored by: XALT Energy

Please Note: Updates and changes may be made to this agenda

The Programme includes 20 expert speakers covering 3 phases:

Here and Now Technology - How the marine industry is utilising the latest engineering

Next Generation Systems - Within a few years of commercial release

Innovation and Future Possibilities - Pushing the boundaries far and wide



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CONFERENCE DAY 2: Wednesday 27 April

08.30 to 09.00	Registration & Coffee
09.00 to 09.10	Introduction to Next Generation Marine Power & Propulsion John Haynes – Conference Organiser & Chairman
09.10 to 09.50	KEYNOTE: Powering the Modern Port - Ships, Tugs & the Hidden Fleet of Support Vessels Capt. Don Cockrill – Secretary General, UK Maritime Pilots Association
09.50 to 10:30	Optimising Energy Sources to Fit the Vessel, Duty Cycle and the Environment David Adamiak – Senior Manager Business Development, BAE Systems HybriDrive
10.30 to 11.00	Coffee
11.00 to 11.40	Emissions Control and Alternative Fuels for Propulsion Capt. Muhammad Shafique – Senior Lecturer, Petrochem - Warsash Maritime Academy
11.40 to 12.20	Windship Sail Power Could Revolutionise the Way Vessels Carry Goods Across Oceans David Barrow & Simon Rogers – Directors, Windship Technology
12.20 to 13.00	The Hydrocontest – Designing, Building & Racing Electric Powered Boats Ariadna Pons Forn – Team Leader, Southampton Hydro Team 2016
13.00 to 14.00	Lunch
14.00 to 14.40	Integrating Vessel Management Systems Using the NMEA 2000 Protocol Johnny Lindstrom – Chairman, National Marine Electronics Association
14.40 to 15.20	New Power & Propulsion Systems Need New Skills Training for Engineers & Integrators Tony Birr – Director, Century Maritime
15.20 to 15.50	Coffee
15.50 to 16.30	Shape-Changing Pulsed Jet-Thrusters for a New Generation of AUVs Francesco Giorgio-Serchi & Gabriel Weymouth – Fluid Structure Interactions Group
16.30 to 17.00	How SMMI Engages with both Academics and Businesses in the UK and Globally Dr Simon Gerrard - Industrial Liaison Manager, SMMI
17.30 to 19.30	DRINKS RECEPTION at Southampton Marine & Maritime Institute Sponsored by: SMMI - including engineering led tour of test tank & innovation centre

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Wednesday ends with a guided tour of the Southampton Marine and Maritime Institute

SMMI is a unique centre of excellence bringing together research, innovation and education

The SMMI facility is located alongside Lloyd's Register at Boldrewood Innovation Campus

Please speak to the events team to confirm your place and for transportation to SMMI



**NEXT GENERATION
MARINE
Batteries & Energy
WORKSHOP**
Grand Harbour - Southampton UK

WORKSHOP DAY: Thursday 28 April	
FOCUS ON: Batteries / Stored Energy / Safety / Hybrid Applications	
08.30 to 09.00	Registration & Coffee
09.00 to 09.10	Introduction to Stored Energy and High Power Marine Batteries John Haynes - Workshop Lead
09.10 to 09.50	How Emerging Technology Can Create Problems at Sea as well as Providing Solutions KEYNOTE: Andrew Moll – Deputy Chief Inspector, Marine Accident Investigation Branch
09.50 to 10:30	The Footprint, Weight and Cost Benefits of Marine Lithium-ion Battery Systems Robert Young – Marine Technical Lead, XALT Energy
10.30 to 11.00	Coffee
11.00 to 11.40	Performance and Safety Aspects of Maritime Battery Systems Ben Gully – Engineer, DNV-GL Research & Innovation
11.40 to 12.20	Hybrid Battery Electric Propulsion Systems - Challenges in System Integration Dr Dennis Doerffel - Founder & Chief Technology Officer, REAP Systems
12.20 to 13.00	Hybrid Marine Power & Propulsion Discussion Session
13.00 to 14.00	Lunch
14.00 to 14.40	Risks Associated with Maritime Battery Installations and their Mitigation Tania Berry – Lloyd's Register
14.40 to 15.20	Marine Batteries & Stored Energy Discussion Session
15.20 to 15.50	Coffee
15.50 to 16.30	Hybrid Electric Vessel Propulsion with Integrated Motor Assist Mehdi Hendijanizadeh, Suleiman Sharkh – Southampton Uni / Dennis Doerffel – REAP Systems
16.30 to 17.00	Workshop Summary Discussion Session
17.00	End of Workshop Day

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The workshop day considers 'new marine energy'. Fast moving sessions focus on informal discussion and industry experience from subject matter experts. Presenters highlight how fuel can be saved, maintenance costs reduced and engine life extended. The Hour Of Power concept enables vessels to run in and out of port for an hour on electric with battery power.

The workshop utilises expertise from automotive, aviation and land based applications to highlight the capabilities of next generation electric, battery and hybrid technology. This is not just green energy for the sake of it - the event focuses on simple and viable business cases for next generation vessels of all sizes.

