The Arctic is the new and challenging frontier with its opportunities for both general shipping and offshore support vessels servicing the emerging and growing energy sector.

Speakers from Finland, France, Germany, Norway, Russia and the UK at the Institute of Marine Engineering, Science and Technology (IMarEST) 2nd Arctic Shipping Technology Conference to be held in London on 4th and 5th February 2014 will discuss and demonstrate solutions to the technical challenges of operating ships in a safe, environmentally compliant and profitable way in this hostile and highly regulated environment.

Explained Professor John Carlton, Professor of Marine Engineering, City University London, a Past President of IMarEST. “The business case for a Northern Sea Route (NSR) delivering impressive savings in transit times, fuel savings and reduced emissions is well understood by shipping, as are the opportunities to service the oil and gas industry developing the Arctic’s energy resources. Servicing the oil and gas industry in this inhospitable environment presents special challenges for the offshore support sector, at least equal to those transiting the NSR.

“Things are moving on fast and it is true to say that while shipping leaders see opportunities to reduce transit times to markets and for servicing the offshore sector, it will be engineers who provide solutions to the engineering and technical challenges of operating in this region. IMarEST and its members are particularly well placed to respond to the questions posed by the technical and regulatory challenges of operating in Arctic waters – engineers relish rising to challenges. The answers they produce will determine the attractiveness, in terms of both economics and environmental safety, of operating in these conditions.

“It is these challenges - and some of the answers - that will be presented and discussed during our two day event in February, with its theme ‘Technical Challenges of Profit with Environmental Safety’, by means of keynote addresses; presentations; case histories; and that most invaluable tool of all – networking....”

About the conference
Following introductory remarks by Professor Carlton, the conference will see two scene setting keynote addresses delivered – ‘Strategic drivers’ by Christian
Le Mière, Senior Fellow for Naval Forces and Maritime Security, International Institute for Strategic Studies (IISS); and Colin Manson FIMarEST, Director, Manson Oceanographic Consultancy who will address ‘Regulation and the Polar Code: The impact the Code will have on Engineering’.

Following on from those, the first session of the day looks at ship design – ‘Green ship for the Arctic’; EEDI and ice-going vessels – the key questions; ‘Complex approach to ice going vessels’ design: Ice performance, ice belt strength, manoeuvrability in ice, propulsions system’; and ‘Latest technology developments for ice transiting vessels’. This is followed by a session on Winterisation looking at ‘Reducing the impact of icing on operations and costs’; ‘Minimising icing by the efficient use of power and environmentally friendly methods’; Using vibration – a new de-icing method for LNG and other pipes’; and the ‘Coatings Technology Forum’.

Day two begins with a session on Arctic Operations and with a presentation by Simon Culshaw FIMarEST, Director, CTS Marine Consultants Limited on ‘Sub-arctic environmental impact study and route optimisation through remote sensing’; and then continues with ‘Crew training and risk management for Arctic operations’; ‘Life saving equipment – latest advances’; and ‘Spotlight on LNG – technical challenges of the NSR’.

The final session of the two day conference covers the all-important issue of Propulsion. Oskar Levander, VP Innovation, Engineering & Technology – Marine, Rolls-Royce will address ‘Propulsion solutions for ice operations’; which will be followed by ‘Podded propulsion in ice’; ‘Two-stroke main engines for ice classed ships’; ‘Finnish-Swedish Ice Class Rules for azimuthing thrusters’; and finally, under the topic heading ‘Ice Class approval and real time measurement’ there will be a case study on MV Scarven.

The Gordon Hodge Memorial Lecture
The first day of the Arctic Shipping Technology Conference will end with the Gordon Hodge Memorial Lecture which will be open to conference delegates and non-delegates alike. The conference and lecture reception will follow providing an opportunity for networking.

Further information
Aimed at shipowners and operators; superintendents, marine engineers, structural and design engineers; naval architects and marine surveyors; health and safety executives; engine and equipment manufacturers; shipbuilding and ship repair experts; maintenance specialists; maritime administrations; and salvage and pollution response professionals, online registration for the 2nd Arctic Shipping Technology Conference is at www.imarest.org/arctic - an early
bird discounted registration price is in operation until 3rd January. Information is also available from events@imarest.org and from +44 (0)20 7382 2702/2617

About the IMarEST
The Institute of Marine Engineering, Science and Technology (IMarEST) is the leading international membership body and learned society for all marine professionals. The IMarEST is the first Institute to bring together marine engineers, scientists and technologists into one international multi-disciplinary professional body. It is the largest marine organisation of its kind with a worldwide membership of 15,000 based in over 100 countries.

Working with the global marine community, the IMarEST promotes the scientific development of marine engineering, science and technology, providing opportunities for the exchange of ideas and practices and upholding the status, standards and expertise of marine professionals worldwide.

The IMarEST is a respected authority in every maritime country. It is a Non-Governmental Organization with consultative status at the International Maritime Organization (IMO), observer status at the International Oceanographic Commission, and it has special consultative status with the Economic and Social Council of the United Nations (ECOSOC), which facilitates its access to other international intergovernmental meetings where its specialized marine expertise is of particular use, e.g., the United Nations meetings on Areas Beyond National Jurisdiction, the Intergovernmental Panel for Climate Change (IPCC) and the work of the International Seabed Authority on marine mining. It is a nominated and licensed body of the Engineering Council (UK), a member of the Science Council and has significant links with many other maritime organisations worldwide.

IMarEST also runs a series of industry leading events and conferences as well as publishing internationally recognised titles: Marine Engineers Review (MER); Shipping World and Shipbuilder; Maritime IT and Electronics; Marine Scientist; and Offshore Technology.