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Western Joint Branch

Technical Lecture

Energy Efficient Commercial Shipping

Speaker: John Buckingham CEng FIMechE

Date: 7th December 2020
Time: Webinar begins at 19:00
Venue: This lecture will be delivered through IMarEST Webinar.

Summary:

The recent availability of regular parametric data on ship's machinery and behaviour has opened up new possibilities to develop and apply active mathematical models of ship propulsion systems.

The BMT-led VTAS project has combined large publically-available metocean datasets with onboard ship performance data to build the best possible models for specific vessels and the seagoing conditions experienced. These models enable the fuel-saving benefit of energy saving technologies (EST) to be assessed and thus support a business case for their introduction.

This lecture presents the potential benefits of hydro-dynamic, wind and thermal based technologies for a 61,000 dwt ship. An assessment of the benefits of wind-based technologies such as Flettner rotors, Wingsails and Turbosails is presented alongside those for an Organic Rankine Cycle-based technology. These studies provide the foundation for supporting a wider assessment of feasibility and economic viability of an EST installation. Adoption of EST would support the IMO's target to reduce the carbon intensity of international shipping by at least 40% by 2030.

Speaker:

John Buckingham CEng FIMechE, is the Chief Mechanical Engineer of BMT Defence & Security UK Limited, Bath, UK. John was the Chief Technologist for the ETI-funded Vessel Technology Assessment System (VTAS) project which developed tools and methods for the analysis of ship propulsion systems. Since 1999, John has been involved in a range of studies to assess the utility of EST for the commercial and military marine.

This month's lecture will be preceded by an introduction from the new IMarEST Chief Executive Gwynne Lewis.

Gwynne has a passion for everything marine and brings a great deal of experience to the role. Gwynne has a background in marine consultancy and, prior to joining the IMarEST, was the Global Head of Data and Digital at Lloyd's Register.



Image: IMarEST [<https://www.imarest.org>]



CPD Certificates will be sent out to the email address used to register to the Eventbrite.

Next event: Frigate Marine Integration De-Risking

Date: Mon 18/01/2021 **Time:** Webinar to start at 19:00

Venue: Webinar hosted on IMarEST TV

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Webinar Joining Instructions



Our Webinars will be hosted through IMarEST TV live-streams, where you will be able to see and listen to the presenter and their slides and ask questions via Slido. The speaker will monitor questions raised during the lecture and answer as many of these as possible during the Q&A session.

As with our face-to-face lectures we will adopt the following format:

1. Introductions and Parish Notices from the WJB Chair and Lecture Sponsor
2. Lecture
3. Q&A
4. Details of Next Lecture and Close

Following the meeting, a recording will then be made available on IMarEST TV (for members) and, if permission is granted, on YouTube as well (for wider audiences).

A recording of last month's lecture is available to watch on [IMarEST TV](#).

To join the Webinar please sign up to the Eventbrite:

<https://www.eventbrite.co.uk/e/webinar-energy-efficient-commercial-shipping-tickets-129865760987?aff=ebdssbonlinesearch>

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