IoS-OP Singapore Seminar 2023

29th August (Tuesday) 13:00-17:30

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13:00-13:05

Opening Address
Tomoyuki Koyama
Chairman of IoS-OP Consortium
CEO & President, Master Mariner
JAPAN MARINE SCIENCE INC.

13:05-13:30

Latest Trends in GHG Emissions Reduction
Ajay T.P
GHG Auditor
Nippon Kaiji Kyokai (ClassNK)

Maritime industry is in tremendous shift towards GHG reduction. Latest regulations and trends of GHG reduction including IMO DCS, CII and EEXI is introduced. GHG related outcome of MEPC 80 held in July 2023, including change in IMO GHG strategy is elaborated. The presentation will touch some parts of EU-MRV and EU-ETS which is also a latest development.

Keywords: GHG Reduction Regulations, MEPC 80, CII, EU ETS, Operational efficiency

13:30-13:55

IoS-OP Contribution to the Shipping Companies
Hiroshi Ochi
Corporate Officer, General Manager of Sales Department
Ship Data Center Co., Ltd. (ShipDC)

IoS-OP is a digital platform consisting of data handling rules and a data center. It is developed for sharing vessel operational data including high frequency data among stakeholders fairly and transparently. At the IoS-OP, the data is shared for creating new data driven solutions.

Keywords: Benefit of data analysis, High frequency data, Big data, GHG reduction (CII), Innovations

13:55-14:20

The latest technological development of the J-ENG UE engine for zero emission and digital transformation
Katsumi Imanaka
Senior Engineering Manager, Development & Design Department
Japan Engine Corporation

Japan Engine Corporation (J-ENG) is trying to achieve Zero Emission as a licensor of two stroke diesel engine. J-ENG will introduce the latest technological development for zero emission and digital transformation.

Keywords: Engine, GHG, Fuel, Zero emission, CBM

---------- Coffee Break ----------

IoS-OP Consortium

---------- Coffee Break ----------

14:30-14:55

Efforts to improve ship performance

Takehiro Ikeda
Assistant Manager, R&D Division, Ship Hydrodynamics Department
Akishima Laboratory Inc.

With the environmental regulations such as EEXI and CII, reducing greenhouse gas emissions from ship operations has become an urgent issue. Akishima Laboratory provides engineering services related to performance improvements based on our accumulated expertise. In this seminar, we will explain what can be understood through the "visualization" of ship operation data and discuss potential performance improvement measures that can be considered.

Keywords: Performance improvement, Monitoring data analysis, EEXI & CII

14:55-15:20

Advanced PBCF (Propeller Boss Cap Fins) for EEXI and CII

Hideyuki Kitanishi
Manager, PBCF & Wind Propulsion Dept.
MOL Techno-Trade, Ltd.

In the environmental era, reducing GHG emissions must be considered right away. However, what are the effective measures in shipping? One of the answers is to install MOL's Advanced "PBCF", which is the original & best-selling brand of a propeller-cap with fins. This seminar will focus on the key features of Advanced PBCF, the latest findings through R&D and how effective for new regulations, EEXI and CII.

Keywords: PBCF, ESD, Retrofit, GHG reduction, Fuel-saving

15:20-15:45

Nakashima's initiatives for CII, EEXI - Technologies of propellers and other devices

Hirokazu Nakayama
Area Sales Manager
NAKASHIMA ASIA PACIFIC PTE. LTD.

Nakashima Propeller is now working on new environmental regulations, CII and EEXI. How can we take advantage of our experiences developed in propeller design and manufacturing totally? At this opportunity, we will not only optimize the propeller design, but also introduce new devices that have been put into practical use.

Keywords: Propeller, CPP, Thruster, ESD, Propulsion Efficiency

15:45-16:10

CII solutions by retrofitting with antifouling coating system

Hirohisa Mieno
Antifouling Coatings Tech. Dept. Technical Headquarter / Ph.D.
Chugoku Marine Paints, LTD.

Due to the requirement to reduce CO2 emissions, which is cause of global warming, efficient vessel operation is required by international treaty (EEXI/CII by IMO from 2023). Retrofitting with antifouling coating is one of the most efficient and easy solution that suitable for above situation. Example of vessel performance improvement by recent antifouling coating and information service "CMP-MAP" which contribute to performance improvement by visualization of hull (antifouling) performance.

Keywords: Antifouling coatings, Retrofit, Data monitoring, Operational profile, Performance improvements

16:10-16:35

Generating value using SMART Technologies

Sanjeev Namath
Chief Business Officer
Alpha Ori Technologies Pte. Ltd.

Alpha Ori is the leading Maritime Technology Solution provider driving transformation using real time Shipboard data to improve transparency, efficiency, and productivity. Using its patented AI based Fuel Optimisation solutions, Ship Owners & Operators are driving their sustainability agenda by reducing their carbon footprint. During this program, Alpha Ori will touch on how to drive value realisation using digital tools; the importance of Digital Transformation.

Keywords: SMARTShip, RoI, Decision Support System

16:35-17:00

Introduction of the new IACS requirements on cyber resilience

Makiko Tani
Deputy Manager, Cyber Security Team,
Maritime Education and Training Certification Department
Nippon Kaiji Kyokai (ClassNK)

As vessels become more digitally connected, the shipping industry is increasingly vulnerable to cyber threats. A cyber-attack could disrupt operations, communication and even cause physical harm. To address the issue, IACS (International Association of Classification Societies) has adopted two new Unified Requirements (UR) on the cyber resilience of Ships: UR E26 and E27 with their mandatory implementation being 2024 next year. This presentation will discuss the outline of the requirements and the implication to the industry.

Keywords: Cybersecurity, Digitalization, Compliance, IACS rules, Classification societies

17:00-17:25

Building the Infrastructure for Digitalization Through Onboard Data Collection

Christian Treu
Senior Vice President DanelecConnect and IoT Business
Danelec

In our rapidly evolving digital landscape, robust, reliable, and high-frequency data capture has emerged as a critical pillar of infrastructure advancement. Our presentation will spotlight how Danelec is at the forefront of this revolution, focusing particularly on onboard data collection solutions.

Keywords: High-Frequency Qualified Data, Onboard Data Collection, Digitalization Infrastructure, Data-Driven Innovation, Operational Efficiency

17:25-17:30

Closing Remarks

Yasuhiro Ikeda
President
Ship Data Center Co., Ltd. (ShipDC)

For enquiries, please contact IoS-OP Consortium secretariat at consortium@shipdatacenter.com.