

# PREDICTIVE MAINTENANCE IN BLUE DENMARK

3 March 2026  
10:00-16:00

WITH A FOCUS ON DIGITALISATION

**Venue: Fredericia Maskinmesterskole (FMS), Købmagergade 86, Fredericia**

ShippingLab, MARIKO, Green Ship of the Future and Maritime Research Alliance invite you to a dedicated conference on predictive maintenance and digitalisation in the maritime sector.

The aim is to bring together research environments, technology developers, shipowners, shipyards, and industry practitioners to share insights and experiences on data-driven maintenance and its implementation in real operational settings.

## PROGRAMME

**09:30-10:00: Arrival and registration**

**10:00-10.10: Welcome and introduction**

**10.10-10.40: Keynote: Rethinking Predictive Maintenance - Lessons from the Field**

Why have traditional approaches to predictive maintenance not delivered as expected?

Drawing on decades of work with maritime data, the fundamental challenges facing the industry are discussed, along with what alternative strategies might look like.

*Keynote speaker: Carsten Hounsgaard, Principal, product owner AI lab, Everllence*

**Shipping Lab**  
Driving Future Maritime Technology



**MARIKO**  
MARITIME UDDANNELSERS  
INNOVATIONS- OG FORSKNINGSKONSORTIUM  
INNOVATION AND RESEARCH CONSORTIUM  
MARITIME EDUCATIONS OF DENMARK

**GREEN SHIP**  
OF THE FUTURE

Maritime Research Alliance

**10:40-11:05 From Engine Data to Decarbonisation: Insights from SLGREEN**

How can real-time engine data, AI modelling, and digital twins accelerate greener and safer ship operations? Insights from the SLGREEN project. Learn how high-frequency operational data are applied to develop predictive models, and how they may reduce breakdowns, lower emissions, and improve maintenance strategies.

*Speakers: Jie Cai & Niels Rytter, University of Southern Denmark*

**11.05-11.20 Break**

**11:20-11:45 Navigator Gas - A Company Perspective on Predictive Capabilities**

Navigator Gas operates 56 gas carriers with full ship management for 38 vessels. Head of Operational Integrity Meinte van der Brug shares where they are on the journey toward predictive capabilities - including what they've learned so far and the challenges they face.

The presentation addresses the balance between safety, reliability and efficiency, the limitations of reactive KPIs, and why team performance and organizational culture matter alongside technical data. An honest perspective on the practical barriers and the work still ahead.

*Speaker: Meinte van der Brug, Head of Operational Integrity, Navigator Gas*

**11:45-12:10 Vibration-based Health Monitoring – Challenges of Implementation**

Data-driven health monitoring for condition-based maintenance has long been studied, and recent advances in computing power and data availability now make it increasingly practical.

While the principle - comparing in-situ measurements to a reference condition - is robust, real-world operational variability poses significant challenges.

PhD student, Casper Aaskov Drangsfeldt, will present key lessons from implementing a vibration-based health monitoring system on a working vessel and outlines strategies to ensure reliable performance in practice.

*Speaker: Casper Aaskov Drangsfeldt, PhD Student, SDU*

**12:10-12:20 Q&A with presenters**

**12:20-13:00**    **Lunch**

**13:00-13:25**    **From Fuel to Fouling: Predictive Biofouling Management with Data Fusion and Risk-based Triggers**

Biofouling is becoming a compliance and operational performance issue at the same time but unlike fuel, the data is sparse, inconsistent, and hard to capture in-service. In this talk, Hempel shares a practical “best practice” approach to biofouling management framed by today’s regulatory directions.

Building on a risk-based data fusion concept, we show how combining AIS data, hull performance trends, and in water inspections can create actionable triggers for scheduled and contingency maintenance actions while also strengthening compliance documentation.

*Speaker: Viktor Avlonitis, Hull Performance Solution Manager, Hempel*

**13:25-13:50**    **Building Competences for Predictive Maintenance**

The effectiveness of predictive maintenance depends on people who are equipped with the right competencies. Fredericia School of Marine Engineering brings extensive experience in practice-oriented training within this field. In this session, you will gain insight into the latest trends in training and learn how new approaches are shaping the competencies of tomorrow’s maintenance professionals.

*Speaker: Lars Jenry Petersen, Associate Professor, Fredericia Maskinmesterskole*

**13:50-14:00**    **Q&A with presenters**

**14:00-14:45**    **Panel session: From Concept to Adoption – How do we get the most out of predictive capabilities?**

*Moderated by Frederik Schuur Riis, Green Ship of the Future*

**14:45-15:00**    **Closing remarks**

**15:00-16:00**    **Tour of Fredericia School of Marine Engineering and their Data Centre (optional)**