

## **Making Shipping Smarter**

## - Future Developments in Autonomous Shipping



Use this opportunity to attend the mini-seminar hosted by SINTEF Ocean to learn about some of its activities related to developments in autonomous shipping!

TOPIC	
Autonomous ship research priorities in SINTEF.	Ørnulf Rødseth, Senior Research Scientist
Cost and benefits of autonomous ships in short sea transport	Håvard Nordahl, Research Scientist
Ship design aspects of autonomous and unmanned vessels.	Kourosh Koushan, Senior Adviser
The model-simulation-experiment triangle: a new capacity in hybrid marine power systems.	Anders Valland, Research Manager
Development of a auture marine energy system: X-in-the-loop approach.	Kevin Koosup Yum, Research Scientist
How to use CFD to cost-effectively reduce fuel consumption.	Anders Östman, Senior Research Scientist

The Norwegian maritime cluster has taken a leading role in the development of autonomous shipping. Among the initiatives, the vessel YARA Birkeland is now under construction and will be the world's first fully electric and autonomous container ship, with zero emissions.

SINTEF Ocean (former MARINTEK) is an active research partner for the maritime industry in these developments. As part of its activities, SINTEF Ocean holds the secretariat for the Norwegian Forum for Autonomous Ships (NFAS) and the International Network for Autonomous Ships (INAS).

Coffee/tea and light snack will be served.

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