

## ASPEN ROOM · WEDNESDAY, MARCH 22 · 3:30 - 4:30 PM

The maritime industry is shifting towards decarbonization with the introduction of green ship technology. Starting in 2023, ships must meet Energy Efficiency Existing Ship Index (EEXI) and Carbon Intensity Indicator (CII) requirements to remain compliant. Ships that fail to maintain an acceptable rating on CII will face taxes proportionately higher than those which demonstrate efficient emissions levels - meaning it pays for operators to invest now in energy-efficient vessels! Through Ecochlor's innovative environmental technology affiliates we are able to provide shipowners with a full suite of "green marine" options, all proven to lower carbon emissions and save shipowners money. Learn more about these three technologies below:



## Ecochlor, Inc.

EcoOne® Filterless or Hybrid Ballast Water Management System (BWMS) Shipowners should act fast to get on board with reducing GHG emissions - Ecochlor's filterless BWMS with hybrid options is a great way to remain compliant. Its power

requirements are industry-leading low, and it doesn't have TRO sensors, complex power requirements or electrodes; making its maintenance and operation convenient for crew members while also providing low cold ironing costs that lead to a lower overall carbon footprint for the vessel.



## Sinotech CCS Co., Ltd.

Carbon Capture & Storage (CCS)

Sinotech, a China-based company specializing in carbon capture and storage (CCS), has a long history of success with more than 50 installations around land-based power stations. The Sinotech system is a cost-effective option via low sulfur fuels or cheaper HFO options with their modular designs; the stand-alone CCS (for use with low sulfur fuel VLSFO) or scrubber and CCS (for use with HFO). Their CCS system has a comparatively low energy demand per captured ton of CO2 due to a 25% lower amine regeneration temperature and high efficiency heat recovery. They have been in technical discussions with shipowner Wah Kwong and in the beginning of 2023 entered into a Joint Development Program to affect the first marine installation of Sinotech's CCS on one of their existing vessels. The Sinotech CCS has received Approvals in Principal (AiP) from Lloyd's Register (LR), Bureau Veritas (BV) and Nippon Kaiji Kyokai (NK).



## Armada Technologies, Ltd.

Air Lubrication System (ALS)

The Armada Technologies 2nd generation hull air lubrication system will soon be available to the market. During this presentation, we will be introducing an innovative method of operation that boosts efficiency - no compressors needed, low power consumption at all vessels speeds or weather conditions! Even more impressive: the Armada "passive air lubrication system" (PALS) requires just the vessel's own forward motion- driven through aperture branches, venturis and injectors this provides passive delivery of a unique mix of air and water ensuring superior hull coverage to deliver system control and drag reduction optimization aligned to the vessels speed, draft and the prevailing weather conditions.