

Corrosion Technical Series:

Corrosion in Marine Exhaust Gas Cleaning Systems (Scrubbers)

Saturday, March 14, 2020 | 9 a.m. – 4 p.m.

held in conjunction with **CORROSION**
Conference & Expo **2020**
March 15-19 • Houston, Texas



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Hilton Americas – Houston
1600 Lamar Street, Houston, TX 77010

This one-day seminar focuses on guidance and current discussion of materials selection and corrosion of marine exhaust gas cleaning systems (EGCS or scrubbers). The marine industry is facing the challenge of adopting new technologies and/or operational practices to comply with stricter international, regional, national and local regulations introduced to reduce air emissions from ships. The adverse effects of exhaust gas emissions from internal combustion engines and boiler exhaust gases on human beings and sensitive ecosystems have been well documented by the scientific community.

Critical amongst these regulations are the measures to reduce sulfur oxide (SO_x) emissions inherent to the relatively high sulfur content of marine fuels. Ship designers, owners and operators have a number of different routes to achieve SO_x regulatory compliance:

- Use low-sulfur marine fuels in existing machinery
- Install new machinery (or convert existing machinery where possible) designed to operate on a low sulfur alternative fuel, such as liquefied natural gas (LNG)
- Install an Exhaust Gas Cleaning System (EGCS) as an after-treatment device

For more information, visit www.nace.org/cts

Featured Speakers:

- Bud Ross, *Nickel Institute*
- Peter Bock, *Performance Polymers Americas, LLC*
- John Grocki, *Sandra Le Manchet & Pierre Petit ArcelorMittal*
- Tim Mournian, *Titanium Marine Technologies, LLC*
- Kai Latun, *Yara Marine*
- Nick Subotsch, *Peerless Industrial Systems*
- Dr. Helena Alves & Volker Wahl, *VDM Metals International GmbH*

Topics Include:

- Understanding the corrosivity of the components of the EGCS
 - Gas inlet duct
 - Absorber towers
 - Gas outlet duct
 - Piping systems
- Reviewing the corrosion resistance of various materials in EGCS
 - Sulfuric acid corrosion
 - Seawater corrosion
 - Caustic soda corrosion
- Examining case studies on corrosion
Impacts on marine exhaust gas scrubbers
- Understanding materials selection process in EGCS
 - Coatings
 - FPR and other plastics
 - Duplex stainless steels
 - 6-7 % Mo stainless steels
 - Nickel alloys
 - Titanium alloys
- Identifying pitfalls of fabrication and welding of the various EGCS alloys
 - Weld heat tints
 - Embedded iron
 - Weld contamination
 - Overmatching weld metal

Who Should Attend:

This seminar is targeted for managers, maritime stakeholders and technical experts in the maritime market space who are seeking guidance on the corrosion of marine exhaust gas scrubbers. This would include professionals associated with:

- Ship owners and operators
- Ship builders
- Marine consultants
- Naval engineers
- Naval scientists

Program Pricing:

- NACE Member: \$425
- Non-Member: \$495

NOTE: Registration is separate from CORROSION 2020. Sessions can be added individually or added-on to full registration.

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