



INSTITUTE OF
CORROSION



FOR ALL WET CORROSION ISSUES

Welcome to MCF –
Marine Corrosion Forum
/ ICorr – Institute of
Corrosion 2021 January
Webinars.



**INSTITUTE OF
CORROSION**



FORUM

FOR ALL WET CORROSION ISSUES

Institute of Corrosion and MCF
partnering with:

- Dr. Jeffrey D. Rogozinski

20th January 2021



“Flow Efficiency Coatings Value and Safety”

Dr. Jeffrey D. Rogozinski, Global Product Director
The Sherwin-Williams Company,
20th January 2021

About Me

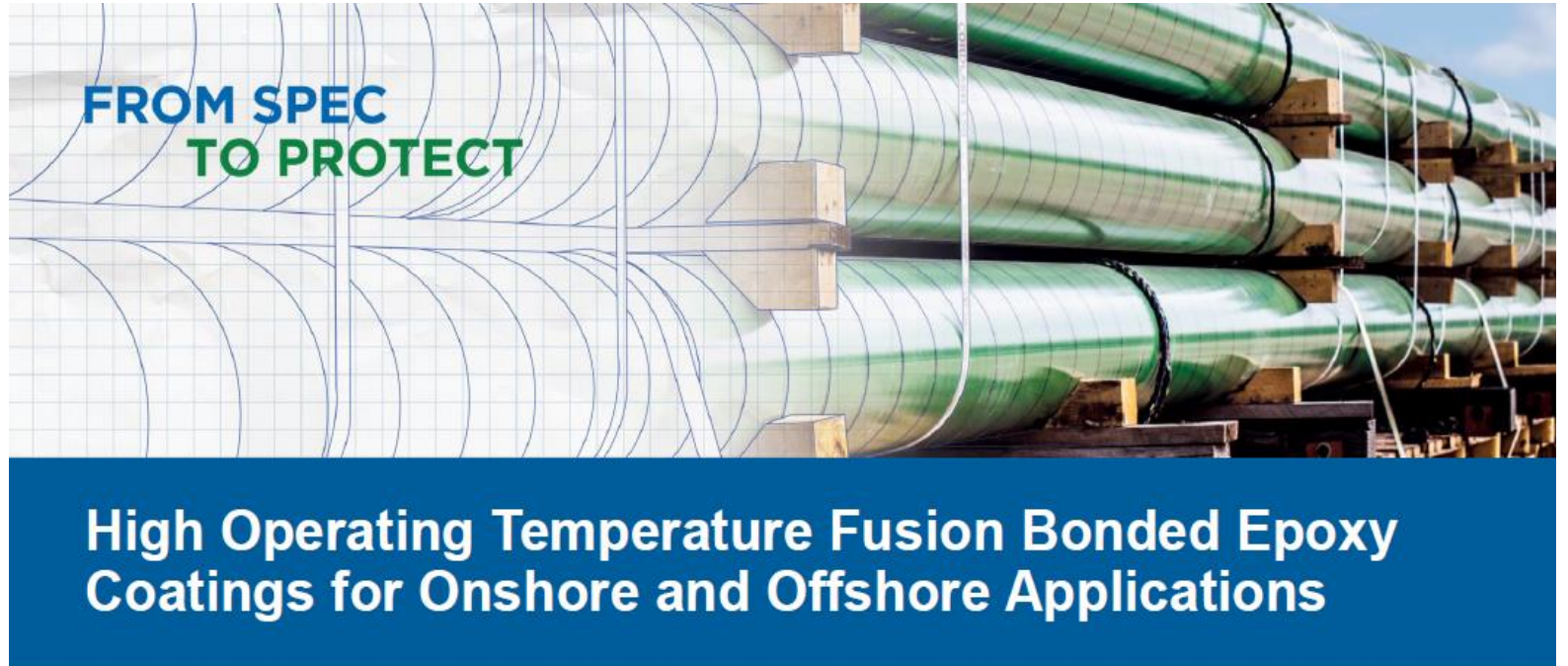
- **Dr. Jeffrey D. Rogozinski**, Global Product Director, The Sherwin-Williams Company.
- Dr. Jeffrey D. Rogozinski has over 29 years of coatings experience and is a Global Product Director in Sherwin Williams Protective & Marine Coatings division. He is a member of multiple coatings societies and is an active consultant on global specification writing including CSA, ISO, API, ASTM and NACE. He has been with Sherwin Williams for 10 years and held previous positions in protective coatings and powder coatings, resin and additive development for coatings science with an emphasis on polymer synthesis and structure-property characterisation as well as multiple academic positions. Dr. Rogozinski has his PhD in Applied Science: Polymer and Composite Chemistry from The College of William and Mary in Virginia.



SHERWIN-WILLIAMS®

About our Work

- The **SHERWIN-WILLIAMS COMPANY** was founded by Henry **Sherwin** and Edward **Williams** in 1866. Today, the company is a global leader in the development, manufacture and sale of coatings and related products with more than 33,000 employees and business in 109 countries.



Dr. Jeffrey D. Rogozinski
Global Product Director

SHERWIN-WILLIAMS.

Q&A

- Selection of Questions to Dr. Jeffrey D. Rogozinski, Global Product Director
 - The Sherwin-Williams Company,
Post-Presentation 20/01/2021

Questions and Answers – MCF / ICorr Joint Event Aberdeen – Jan.2021

- Q1. What is the life of internal coating and resistance to localized damage ?
- A1. It is very flow specific product, predication may not be accurate but there are many testimonials available to support its L/T performance.

Questions and Answers – MCF / ICorr Joint Event Aberdeen – Jan.2021

- Q2. What is the minimum diameter than can successfully be internally coated ?
- A2. 50mm, possibly smaller.

Questions and Answers – MCF / ICorr Joint Event Aberdeen – Jan.2021

- Q3. Thanks Jeff. I assume that the welded internal joints would not be coated at all ?
- A3. Yes, 8in in every pipe length (~2%) would be left uncoated internally but it's not primarily a corrosion protection product, more for flow assistance.

Questions and Answers – MCF / ICorr Joint Event Aberdeen – Jan.2021

- Q4. Can the flow efficiency coatings affect inspection results e.g. ILI Pigging ?
- A4. End users have not seen a problem with that. Greater risk is of mechanical damage occurring to coating by ILI tools. ILI Vendor would need to take this into account when specifying Inspection Tool.

Questions and Answers – MCF / ICorr Joint Event Aberdeen – Jan.2021

- Q5. Hi Jeff, can these coatings be used to restrict hydrogen absorption into steel pipelines for hydrogen pipelines ?
- A5. Challenge, there is no established test method presently. Sherwin Williams are developing their own Test Methodologies for this purpose or testing Mech Props. and coating efficiency, both for Liquids + Powder Coatings.

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- Q6. Thanks Jeff for an interesting presentation, Just wondering if the coating can be used for wet gas or multiphase transmission ? Do you have any data on to of line corrosion or other types of corrosion ?
- A6. Coating designed for Dry Gas really. Need to use X-Linked Products like Powder Coatings for other pipeline uses.

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- Q7. in the few cases I have dealt with IFC's, clients have raised a concern about how these coatings (when damaged or degraded) would affect the predictability of corrosion, i.e. its location and rate. If you were sat in front of a client with this concern, what approach would you take to calm their fears? is this just corrosion engineer "scaremongering", or is there evidence we should be worried ?
- A7. Step back and think what is going through pipe, Flow Coatings are not primarily Corrosion Protectors. In such cases again think to use X-Linked products, they are best. e.g. Phenolic primer + FBE.

Questions and Answers – MCF / ICorr Joint Event Aberdeen – Jan.2021

- Q8. Was this tested on different materials, i.e. CS or SS pipeline materials ?
- A8. Generally we are talking about Carbon Steels for coating application here. Exotic CRA's can have coating adhesion issues.

Questions and Answers – MCF / ICorr Joint Event Aberdeen – Jan.2021

- Q9. What about use on dense phase CO₂ at High Pressures / Liquid Transition conditions.
- A9. Sorry this is more of an Engineer Question really, I am more of a Chemist myself.

Questions and Answers – MCF / ICorr Joint Event Aberdeen – Jan.2021

- Q10. Good paper. I for one was not aware of gas odourant loss during transmission (or its use in canned beer) !
- A10. Thank you, there are very many considerations in successful and safe Gas Transmission.

THANK YOU FOR ATTENDING

This Webinar was brought to you by MCF working in partnership with ICorr and **Sherwin Williams.**