Background Information

Over the past two decades ASTM International has published the following standards to evaluate corrosion inhibitors in the laboratory:

- ASTM G184, “Standard Practice for Evaluating and Qualifying Oil Field and Refinery Corrosion Inhibitors using Rotating Cage”
- ASTM G185, “Standard Practice for Evaluating and Qualifying Oil Field and Refinery Corrosion Inhibitors using Rotating Cylinder Electrode”
- ASTM International is currently coordinating interlaboratory tests on rotating cylinder electrode (RCE).
Objectives for this Workshop

• Review the current status of ASTM standards on corrosion inhibitors
• Identify opportunities to develop additional standards and/or to further improve current ASTM standards
• Identify companies /laboratories who are interested in participating in future ASTM Interlaboratory tests on corrosion inhibitors
• Develop opportunities to liaison with other associations on corrosion inhibitors evaluation, selection, and usage
TUESDAY, NOVEMBER 5, 2019

8:00 AM  Welcome Address  
Sankara Papavinasam and Brad Finley, Workshop Co-Chairs

8:05 AM  ASTM Committee G01 Overview  
Krista Robbins, ASTM International

8:15 AM  Background and Anticipated Outcomes of The Workshop  
Sankara Papavinasam, CorrMagnet Consulting Inc. Calgary, AB, Canada

8:30 AM  Realism vs. Idealism: An Operators Perspective of Laboratory Inhibitor Performance Testing  
Trevor Place, Enbridge Pipelines, Edmonton, AB, Canada

9:00 AM  Impact of Corrosion Tests Set-up and Procedures on Corrosion Inhibitor Performance  
Saadedine Tebbal, SET Laboratories, Stafford, TX, USA

9:30 AM  Laboratory Test Methodologies to Evaluate Corrosion Inhibitors for Oil and Gas Pipeline  
Nihal Obeyesekere, Clariant Oil Services, The Woodlands, TX, USA

10:00 AM  BREAK

10:30 AM  Establishment of Robust Laboratory Methodology for Evaluation of Corrosion Inhibitor - A Manufacturer’s Perspective  
Raja Naveen Varma and Sai Mudiam, Metal Samples, Munford, AL, USA

11:00 AM  Mindful Multi-Disciplined Engineering for Laboratory Corrosion Inhibitor Evaluation  
Binder Singh, Pragmatica, Houston, TX, USA

11:30 AM  Corrosion Inhibitor: Laboratory Performance and Field of Performance Monitoring  
Hongwei Wang and Mark Edwards, Shell Technology Center, Houston, TX, USA

12:00 PM  LUNCH (on your own)
1:00 PM  **Surface Preparation and its Effect on Localized Corrosion**  
Milan Bartos, Jorge Pacheco, and Saadedine Tebbal  
SET Laboratories, Stafford, TX, USA

1:30 PM  **Testing of Secondary Properties of Corrosion Inhibitors**  
Jorge Pacheco, Milan Bartos, and Saadedine Tebbal  
SET Laboratories, Stafford, TX, USA

2:00 PM  **Critical Micelle Concentration and Concentration for Maximum Adsorption. Can These Parameters Be Used to Define Corrosion Inhibitor Dosages?**  
Jose Rafael Vera, DNV GL, Dublin, OH, USA

2:30 PM  **Understanding of Triazine-Based H₂S Scavenger Performance Utilizing In-situ Raman Spectroscopy and Slow Strain Rate Testing**  
Vinicio Ynciarte Leiva¹, Leonardo Caseres², Jim F. Dante² and Brendy C. Rincon Troconis¹  
¹The University of Texas at San Antonio, San Antonio, TX, USA  
²Southwest Research Institute, San Antonio, TX, USA

3:00 PM  **BRAKE**

3:30 PM  **Application of Electrochemical Quartz Crystal Microbalance (EQCM) to Evaluate Corrosion Inhibitor Performance**  
Xueyuan Zhang, Dominik Moosbauer and Christopher A. Beasley  
Gamry Instruments, Warminster, PA, USA

4:00 PM  **Wall Shear Stress: Is this a “Red Herring” in the Selection of Corrosion Inhibitor in the Laboratory?**  
Sankara Papaviniasam, CorrMagnet Consulting Inc., Calgary, AB, Canada

4:30 PM  **Round Table Discussion On “Where We Go from Here?”**

4:45 PM  **Feedback Form Results**

5:00 PM  **WORKSHOP ADJOURNS**