Welcome to the CORROSION 2019 Program Preview

I am pleased to introduce the program preview for CORROSION 2019, your guide for navigating NACE International’s 74th annual conference. Located in Nashville, Tennessee, USA, our conference will offer the broad spectrum of corrosion-related technical, research, educational, public awareness, and networking activities that you and the corrosion industry have come to expect, as well as exciting new attractions specific to this conference.

More than 200 technical and administrative meetings will be held throughout the week, enabling members to work on standards and reports, exchange technical information, and manage association business. The technical program, with more than 45 symposia, will feature paper presentations on a wide range of corrosion topics. New this year are symposia focused on corrosion control for aboveground storage tanks, erosion-corrosion, advances in coatings under insulation technologies, nonmetallic materials for oil and gas production environments, and more.

Special forums will address such topics as microbologically influenced corrosion for the onshore and offshore oil and gas industry; common coating failures and how to prevent them; how to strengthen organizations with effective leadership; a regulator and industry perspective on best pipeline safety practices; and how the corrosion industry is revolutionizing corrosion management, featuring the IMPACT PLUS online portal with tools and resources to ensure best practices in corrosion programs throughout organizations. In addition, attendees are invited to learn about corrosion issues specific to areas of the world that include the Middle East, Africa, and Latin America.

The accompanying NACE Expo will feature more than 350 companies displaying the latest in corrosion control products and services. In addition, the cathodic protection (CP) test field will be available on the exhibit floor for the eighth year. New this year is an interactive “coating experience” area adjacent to the CP field.

Corrosive Chronicles returns for the fourth year, featuring corrosion professionals in a theater setting who will present their experiences on corrosion incidents in the field and lessons learned. As part of this program, the NACE Coatings Council and Water/Wastewater Council will present a joint seminar on practical solutions to real-world corrosion issues.

The 2019 MP Corrosion Innovation of the Year Awards will be presented just prior to the opening of the NACE Expo Monday evening. CoatingsPro will again recognize industry excellence in the application of commercial and industrial high-performance coatings with the third annual Contractors Awards Program. In addition, CoatingsPro and INSPECT THIS are sponsoring an interactive Protective Coatings Workshop in the exhibit hall.

The CORROSION 2019 keynote speaker is Jack Uldrich, a globally influential futurist, speaker, and award-winning author of 11 books. He is a frequent speaker on technology, change management, and leadership. His talk is entitled, “Corrosion’s Crystal Ball: The future will arrive sooner than you think.”

As always, there are numerous social opportunities to spend time with friends and expand your network of corrosion professionals. Popular annual events include the NACE Foundation’s Sunday morning NACE Race and the Darrel D. Byerley Memorial Golf Tournament; the Sunday evening Opening Night Reception; the Expo Grand Opening on Monday evening; the Corrosion Crew Social Brew event; the NACE Foundation’s Tuesday evening scholarship awards and GenNEXT Bash; and the Wednesday evening NACE Honoree Night. The Foundation will also host Wednesday’s Corrosion: Opportunities Realized mini-camp for local high school students designed to educate and spread corrosion awareness to the next generation.

Last year’s annual conference in Phoenix, Arizona, was successful by every measure. I fully expect CORROSION 2019 to once again exceed the expectations and enrich the careers of more than 6,000 participants from all over the world. This program contains complete details on all you will experience and learn. I look forward to seeing you there.

Jeffrey L. Didas, 2018-2019 NACE International President
Only ProRox® gives you the superior performance of stone wool, providing greater energy efficiency, saving money and reducing environmental impact. You’ll also realize enhanced water protection, so your equipment will last longer and perform better. Plus, ProRox® offers superior thermal properties for increased stability and acoustical properties to minimize noise.

We are the leader in stone wool insulation.

We are ROCKWOOL Technical Insulation.

Visit rti.ROCKWOOL.com
# Table of Contents

## General Conference Information & Registration
- Welcome ......................................................................................................................... 50
- General Conference Information .................................................................................. 54
- Registration Information ............................................................................................... 56
- Registration & Housing .................................................................................................. 57
- Map of Official Conference Hotels ................................................................................ 58
- Code of Ethics/Anti-Harassment Policy ........................................................................ 60
- What’s New at CORROSION 2019 ................................................................................ 62

## Technical Program
- Symposia .......................................................................................................................... 64
- Forums .............................................................................................................................. 70
- Corrosive Chronicles ...................................................................................................... 72
- Technical Committee Information ................................................................................... 74
- Technical Committee Meetings ....................................................................................... 75
- Administrative Committee, ISO, and Other Meetings ..................................................... 84
- Special Lectures ............................................................................................................... 88

## Networking Activities
- CORROSION Crew Social Brew ..................................................................................... 90
- 24th Annual NACE Race ................................................................................................ 90
- Darrel D. Byerley Memorial Golf Tournament ............................................................... 90
- Opening Reception .......................................................................................................... 90
- 14th Annual Silent Auction ............................................................................................. 91
- MP Corrosion Innovation of the Year Awards ................................................................. 91
- NACE U Student Meeting .............................................................................................. 91
- Exhibit Hall Grand Opening ............................................................................................ 91
- Headshot Station .............................................................................................................. 91
- Career Fair ...................................................................................................................... 91
- GenNEXT Bash ............................................................................................................... 92
- Section Officer Meeting on Elections ............................................................................. 92
- CORROSION: Opportunities Realized ........................................................................... 92
- NACE Honoree Night ..................................................................................................... 92
- Guest Program ............................................................................................................... 94
- 2019 NACE International Association Awards ............................................................. 96-97

## The Exhibition
- Expo Schedule & Events ................................................................................................. 100
- Student Poster Display ................................................................................................. 100
- Corrosive Chronicles ..................................................................................................... 100
- MP Corrosion Innovation of the Year Awards ............................................................... 101
- Cathodic Protection Field .............................................................................................. 101
- The Coatings Experience .............................................................................................. 101
- Harley Giveaway ............................................................................................................ 101
- Product Showcase .......................................................................................................... 101
- Dairyland Golf Lounge .................................................................................................. 101
- International Pavilion .................................................................................................... 101
- Protective Coatings Workshop ..................................................................................... 101
- Expo Floorplan .............................................................................................................. 102-103
- 2019 Exhibitors ............................................................................................................. 106
WHEN YOU NEED TO VENT, REACH FOR ALLVENT

LORESCO INC. ALLVENT® VENT PIPE MADE IN USA LORESCO.COM

Loresco International
421 J.M. Tatum Industrial Park Drive | Hattiesburg, MS 39401
Website: www.Loresco.com | Email: info@loresco.com
Phone: (601) 544-7490 | Fax: (601) 544-7531

Visit us at CORROSION 2019 Conference and Expo Booth 1910
General Conference Information

CORROSION 2019 Location
Nashville Music City Center
201 Fifth Ave. S.
Nashville, TN 37203, USA

Getting to Nashville
Nashville International Airport (BNA)
1 Terminal Dr.
Nashville, TN 37214, USA

Visa Application for International Delegates
Any individual traveling from an international location into Nashville will need to check the U.S. Department of State web site to identify their specific country Visa requirements. For detailed listings on whether you will require a U.S. Visa in order to attend CORROSION 2019, please visit travel.state.gov. Attendees requesting an invitation letter for Visa processing must send their registration confirmation email to papers@nace.org.

Registration Policies
Check refunds are processed after the conference. There are no refunds on exhibit visitors or networking tickets. Registrations received after March 22, 2019 will be processed on site.

Cancellation Policies
Paid registrations cancelled in writing at least 35 calendar days or more prior to the start of the event will receive a full refund, less a 10% service fee. Paid registrations cancelled in writing 34 to 3 days before the starting date of the event will receive a refund of 50% of the registration fee. No refunds or credit will be issued on cancellation requests received less than 3 days before the event begins. Transfer of registration is permitted one time, with the following fee: $100 USD (member/nonmember rates are applicable). Transfers may not be made less than 3 days before the event begins.

All requests for transfer or cancellation must be submitted in writing to firstservice@nace.org. No refund will be processed if the registrant is a no show.

Conference Shuttle Service
NACE International is providing shuttle service between the Nashville Music City Center and selected CORROSION 2019 hotels. This service is only for attendees and exhibitors staying at the selected official hotels. Transportation will begin on Sunday, March 24, and continue through Thursday, March 28. Detailed schedules will be posted in the CORROSION 2019 Final Program, at the official hotels, and in the convention center.

Corporate Access Lounge and Diamond Access Lounge
The Corporate Access Lounge offers qualifying corporate member representatives specialized service and an oasis for conducting business while at conference. Reserve meeting rooms, check email on our computers with Internet access, or just relax between meetings.

The Diamond Access Lounge will have extended benefits for qualifying Diamond Corporate Member representatives.

Lounge Hours:
Sunday ........................................................................ 8 a.m. to 5 p.m.
Monday through Wednesday ........................................ 8 a.m. to 6 p.m.
Thursday ........................................................................ 8 a.m. to noon

Learn how you can become a corporate member of NACE International today. Please contact our corporate member coordinator at 1 800-797-6282 U.S./Canada, or +1 281-228-6282 worldwide, or visit www.nace.org/corporate-membership.

Express Pass and Registration
CORROSION 2019 Registration will be located in Exhibit Hall A in the Nashville Music City Center.

Sponsored by:

Manage Itinerary
Create your personal schedule of events, forums, symposia, and technical committee meetings before you attend conference. Access the CORROSION 2019 visual schedule on the “Agenda” page at www.nacecorrosion.org.

Press Office
The NACE Press Office is a workspace available for registered media and includes complimentary WiFi in a quiet space away from exhibits and sessions. A press badge is required for access to the Press Office. Each preregistered member of the press will have a mailbox located in the press room. Exhibitors may deliver press kits for distribution to registered press at any time the Press Office is open.

Press Office Hours:
Tuesday ........................................................................ 8 a.m. to 5 p.m.
Wednesday ..................................................................... 8 a.m. to 5 p.m.
Thursday ......................................................................... 8 a.m. to noon

NACE Information Kiosk
Got a question? We can help. NACE staff will be available to help you with directions or answer general conference questions. The kiosks will be located at the entrance of the convention center near the shuttle drop-off. More details and shuttle schedule to follow in the CORROSION 2019 Final Program.

Official Conference Language
The official conference language is English.

Dress Code
The dress code for all official conference activities, excluding the NACE Honoree Night, is business casual. Attire for the NACE Honoree Night is business dress.
NACE Store
Looking for a certain book on corrosion? Visit the NACE Store where you can browse through corrosion-related books, standards, reports, and software. Hundreds of products will be available with many at special sale prices. The NACE Store will be located in the lobby outside Exhibit Hall B of the Nashville Music City Center.

NACE Sales Office
Marketing Solutions: Advertising, Exhibits, CORROSION 2020 sign up! One stop gives you access to information on marketing to the entire corrosion/protective coatings universe through upcoming NACE events; advertising in Materials Performance, CORROSION journal, and CoatingsPro Magazine; and a variety of cross-media options. Located behind the NACE booth (Booth 2838). Hours are the same as the Exhibit Hall.

Professional Development Hours (PDHs) Stations
Earn PDHs in technical meetings, forums, and symposia you attend. Print out your personalized PDH certificates at the PDH Station located near Registration in Exhibit Hall A. Certificates are based solely on the information provided to NACE at the time of printing.

For certificates it is necessary to:
Log on to the web site at www.nace.org/pdh.
Search for or browse to select the sessions you attended.
Email or print your certificate!
This system will be available online for six months after the conclusion of the conference, accessible from your NACE profile.

Social Media
Keep up with all things CORROSION on social media. Follow NACE on Twitter, Instagram, Facebook, and LinkedIn to get important updates about the world’s largest corrosion conference.
Remember to use the official conference hashtag #CORROSION2019 to connect with exhibitors, speakers, and attendees before and during the conference!

CORROSION 2019 Conference Papers
The CORROSION 2019 conference proceedings will be available on USB and online. Please see below for pricing details.

Register after February 1, 2019 - $149 USD for USB or Online Access
Full paid conference attendees
Full exhibitor comp registration
Student registrants
Not attending CORROSION 2019

Get connected at
CORROSION 2019 Conference & Expo
March 24-28 • Nashville, Tennessee

Stick in the know about everything happening at CORROSION. Follow NACE on Twitter, Facebook, Linkedin, and Instagram for updates and important reminders. Use #CORROSION2019 before and during the conference to join the conversation.
Registration Information

**REGISTRATION TYPE** | **PRICE (USD)** | **Open Reception Sunday** | **Expo Grand Opening Monday** | **Lunch Tuesday** | **Drink Ticket Wednesday**
---|---|---|---|---|---
Member | Nonmember | | | |
Regular Full Conference Registration | $925 | $1,095 | | | |
Sunday-Monday Two-Day Only Registration | $600 | $700 | | | |
Monday-Tuesday Two-Day Only Registration | $600 | $700 | | | |
Tuesday-Wednesday Two-Day Only Registration | $625 | $725 | | | |
Wednesday-Thursday Two-Day Only Registration | $600 | $700 | | | |
Sunday One-Day Only Registration | $400 | $500 | | | |
Monday One-Day Only Registration | $400 | $500 | | | |
Tuesday One-Day Only Registration | $425 | $525 | | | |
Wednesday One-Day Only Registration | $425 | $525 | | | |
Thursday One-Day Only Registration | $400 | $500 | | | |
Student Regular Registration | $95 | $100 | | | |
Guest Program Regular Registration | $165 | $165 | | | |
Exhibitor Visitor-Exhibit Hall Only Pass | $125 | $125 | | | |
NACE Honoree Night | $75 | $75 | | | |
Fellows Breakfast | $10 | $10 | | | |
Leadership Forum Luncheon | $50 | $50 | | | |
Protective Coatings Workshop | $279 | $329 | | | |
NACE RACE | $20 | $20 | | | |
GenNEXT Bash Individual Ticket (Regular Registration) | $65 | $65 | | | |
Golf Tournament Corporate Team (Advance Registration) | $900 | $900 | | | |
Golf Tournament Corporate Team (Regular Registration) | $1,000 | $1,000 | | | |
Golf Tournament Corporate Package with Hole Sponsorship (Regular Registration) | $1,200 | $1,200 | | | |
Golf Tournament Individual Player | $250 | $250 | | | |

**General Registration Information**
Advance registration closed on February 1, 2019. Registration is open until March 22, 2019, which then will be accepted on site at the Nashville Music City Center.

**Advance/Full Registration**
Advance full conference attendees, who register by February 1, 2019, will receive a complimentary USB drive with all technical symposium papers presented at the conference. After February 1, 2019, the USB drive of the 2019 conference papers can also be purchased on the online NACE Store or at the NACE Store at the conference for $149 USD.

**One- and Two-Day Registrations**
One- and two-day registrations allow registrants access to areas listed above on the selected day(s) registered.

**Student Registrations**
To learn about the qualifications for becoming a NACE student member and requirements for student registration, visit [www.nace.org/students](http://www.nace.org/students). Requirements must be fulfilled before conference registration can be accepted.

**Guest Program Registration**
As the guest of a registered attendee, guest registration allows access to social activities and the Exhibit Hall. It does not allow access to meetings, forums, or symposia. To attend guest program activities, additional fees may be required—visit [www.nacecorrosion.org](http://www.nacecorrosion.org) or turn to p. 94 for guest program details.
Registration & Housing

Important Dates & Information

OCTOBER 29, 2018

Housing opens
We recommend that you select your hotel early to ensure you are able to book a room at your preferred hotel.

Registration opens
Register online at www.nacecorrosion.org.

Mail:
NACE International
15835 Park Ten Place
Houston, TX USA 77084

Fax: +1 281-228-6329

Phone: 1 800-797-6223 (U.S. & Canada) or +1 281-228-6223 (Worldwide)

Payment information
NACE accepts checks, money orders, or credit card payments. Invoices will not be issued.

FEBRUARY 1, 2019

Advance registration closes
After February 1, registrations will be processed at the on-site price.

FEBRUARY 22, 2019

Housing closes
All changes, cancellations, and reservations must be handled directly by the hotels, not the housing bureau.

MARCH 22, 2019

Online registration closes
After March 22, registrations will only be accepted at the Nashville Music City Center.

MARCH 24, 2019

CORROSION 2019 begins
For times and locations of on-site registration, please visit www.nacecorrosion.org/registration.

MARCH 28, 2019

Registration closes
noon

NACE Store closes
1 p.m.

Exhibit Hall closes
noon

NACE Office closes
5 p.m.

Conference Registration Payment and Information
Registration will not be processed without payment. Registration and payment date determine price. Payment must be made in U.S. dollars from a U.S. financial institution.

If you have a disability that may hinder your participation, fax a written description of your needs to +1 281-228-6329 and a NACE staff member will contact you.

Registration Policies
Check refunds are processed after the conference. There are no refunds on exhibit visitors or networking tickets. Registrations received after March 22, 2019 will be processed on site.

Cancellation and Refund Policy
Paid registrations cancelled in writing at least 35 calendar days prior to the start of the event will receive a full refund, less a 10% service fee. Paid registrations cancelled in writing 34 to 3 days before the starting date of the event will receive a refund of 50% of the registration fee. No refunds or credit will be issued on cancellation requests received less than 3 days before the event begins. Transfer of registration is permitted one time, with the following fees: $100 USD (member/nonmember rates are applicable). Transfers may not be made less than 3 days before the event begins.

All requests for transfer or cancellation must be submitted in writing to firstservice@nace.org. No refund will be processed if the registrant is a no show.

IMPORTANT CONTACTS

<table>
<thead>
<tr>
<th></th>
<th>U.S.</th>
<th>INTERNATIONAL</th>
<th>EMAIL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration Services &amp; General Questions</td>
<td>1 800-797-6223</td>
<td>+1 281-228-6223</td>
<td><a href="mailto:FirstService@nace.org">FirstService@nace.org</a></td>
</tr>
<tr>
<td>Housing Information</td>
<td>1 877-305-5195</td>
<td>+1 980-819-4638</td>
<td><a href="mailto:nace@conferencedirect.com">nace@conferencedirect.com</a></td>
</tr>
<tr>
<td>Membership Services</td>
<td>1 800-797-6223</td>
<td>+1 281-228-6223</td>
<td><a href="mailto:FirstService@nace.org">FirstService@nace.org</a></td>
</tr>
<tr>
<td>NACE Conferences</td>
<td>+1 281-228-6413</td>
<td>+1 281-228-6413</td>
<td><a href="mailto:Lesley.Martinez@nace.org">Lesley.Martinez@nace.org</a></td>
</tr>
<tr>
<td>NACE Exhibits</td>
<td>+1 281-228-6227</td>
<td>+1 281-228-6227</td>
<td><a href="mailto:Jackie.Hune@nace.org">Jackie.Hune@nace.org</a></td>
</tr>
<tr>
<td>NACE Sponsorships</td>
<td>+1 281-228-6299</td>
<td>+1 281-228-6299</td>
<td><a href="mailto:sales@nace.org">sales@nace.org</a></td>
</tr>
<tr>
<td>Conference Symposium Papers</td>
<td>+1 281-228-6218</td>
<td>+1 281-228-6218</td>
<td><a href="mailto:papers@nace.org">papers@nace.org</a></td>
</tr>
</tbody>
</table>
# CORROSION2019

## Ways to Reserve Your Room

### Internet Reservations

To secure your reservation online, please visit [www.nacecorrosion.org](http://www.nacecorrosion.org). You will receive an automatic acknowledgement email from our housing bureau, ConferenceDirect. Acknowledgements will be emailed within six hours of your reservation being processed directly online. If you do not receive your acknowledgement in this time frame, please contact the CORROSION 2019 Housing at 1 877-305-5195, +1 980-819-4638 (International), or email nace@conferencedirect.com.

Reservations at the official conference hotels in Nashville may also be obtained through NACE International during the CORROSION 2019 registration process online. The deadline to reserve a room through online registration is February 22, 2019. After February 22, 2019, hotel reservations and conference registration will no longer be available through the NACE International website.

**ALERT! ConferenceDirect is the ONLY APPROVED HOUSING AGENCY for CORROSION 2019 in Nashville.** If you are contacted by anyone other than ConferenceDirect, please note they are not endorsed by NACE International. Despite their claims, they do not have access to our negotiated discounted rates. For accurate information regarding reservations or availability, please contact our official housing bureau, ConferenceDirect, or call 1 877-305-5195 (U.S. and Canada), +1 980-819-4638 (International).

### Official Conference Hotels List

<table>
<thead>
<tr>
<th>#</th>
<th>HOTEL NAME</th>
<th>HOTEL ADDRESS</th>
<th>RATES (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>SINGLE/DOUBLE</td>
</tr>
<tr>
<td>1</td>
<td>Omni</td>
<td>250 5th Ave. S., Nashville, TN 37203</td>
<td>$195-$239</td>
</tr>
<tr>
<td>2</td>
<td>Westin</td>
<td>807 Clark Place, Nashville, TN 37203</td>
<td>$259</td>
</tr>
<tr>
<td>3</td>
<td>Cambria Hotel</td>
<td>118 8th Ave. S., Nashville, TN 37203</td>
<td>$194</td>
</tr>
<tr>
<td>4</td>
<td>Residence Inn</td>
<td>410 5th Ave. S., Nashville, TN 37203</td>
<td>$249</td>
</tr>
<tr>
<td>5</td>
<td>SpringHill Suites</td>
<td>410 5th Ave. S., Nashville, TN 37203</td>
<td>$249</td>
</tr>
<tr>
<td>6</td>
<td>Hilton Nashville Downtown</td>
<td>121 4th Ave. S., Nashville, TN 37203</td>
<td>$269</td>
</tr>
<tr>
<td>7</td>
<td>Hampton Inn &amp; Suites</td>
<td>310 4th Ave. S., Nashville, TN 37203</td>
<td>$235</td>
</tr>
<tr>
<td>8</td>
<td>Hyatt Place Nashville Downtown</td>
<td>301 3rd Ave. S., Nashville, TN 37203</td>
<td>$235</td>
</tr>
<tr>
<td>9</td>
<td>Hilton Garden Inn Downtown</td>
<td>305 Korean Veterans Blvd., Nashville, TN 37203</td>
<td>$219</td>
</tr>
<tr>
<td>10</td>
<td>Holiday Inn &amp; Suites Nashville Downtown Convention Center</td>
<td>415 4th Ave. S., Nashville, TN 37203</td>
<td>$239</td>
</tr>
<tr>
<td>11</td>
<td>Renaissance Nashville</td>
<td>611 Commerce St., Nashville, TN 37203</td>
<td>$215-$235</td>
</tr>
<tr>
<td>12</td>
<td>Holiday Inn Express Nashville Downtown</td>
<td>920 Broadway, Nashville, TN 37203</td>
<td>$229</td>
</tr>
<tr>
<td>13</td>
<td>Courtyard by Marriott Nashville Downtown</td>
<td>170 4th Ave. N., Nashville, TN 37203</td>
<td>$206-$225</td>
</tr>
<tr>
<td>14</td>
<td>Sheraton Grand Nashville</td>
<td>623 Union St., Nashville, TN 37203</td>
<td>$229</td>
</tr>
<tr>
<td>15</td>
<td>DoubleTree Hotel</td>
<td>315 4th Ave. N., Nashville, TN 37203</td>
<td>$229</td>
</tr>
<tr>
<td>16</td>
<td>Hotel Indigo</td>
<td>301 Union St., Nashville, TN 37203</td>
<td>$209</td>
</tr>
</tbody>
</table>
Anti-Harassment Policy

NACE is committed to providing an environment free of sexual harassment (which includes harassment based on gender, pregnancy, childbirth, or related medical conditions), as well as harassment based on such factors as race, color, religion, national origin, ancestry, age, physical disability, mental disability, medical condition, marital status, sexual orientation, gender identity, gender expression, workers’ compensation leave, veteran status, or any other condition or characteristic protected by law.

We expect all participants at CORROSION to abide by this Anti-Harassment Policy in all venues at CORROSION, including ancillary events and official and unofficial social gatherings.

- Exercise consideration and respect in your speech and actions.
- Refrain from demeaning, discriminatory, or harassing behavior and speech.
- Be mindful of your surroundings and of your fellow participants.
- Alert NACE staff if you notice harassment.

If you are being harassed, notice that someone else is being harassed, or have any other concerns, please contact Lesley Martinez, Conferences Manager, at +1 832-651-7229 on-site immediately.
PROTAL™ 7900HT
A high temperature intermittent service temperature up to 300°F (150°C). High build (up to 40 mils / 1016 microns in one coat).

PROTAL™ 7125
Fast cure, low temperature pipeline coating. Will not freeze when applied to substrates below 32°F (0°C).

LEADERS IN CORROSION PREVENTION

www.densona.com
Call: +1 281-821-3355  E-mail: info@densona.com

Visit us at CORROSION 2019 Conference and Expo Booth 1824
What's New at CORROSION 2019

CORROSION Crew Social Brew
Saturday, March 23
6 to 10 p.m. | Nashville Underground

We’re putting an old favorite back on the schedule! Make plans to enjoy Nashville’s world-famous live music, cuisine, and spirits at the Nashville Underground, located on famous Broadway Street. Musicians (and brothers) Joey & Gavin DeGraw bring a lil’ southern hospitality to the party, where you can show off your rodeo skills by taking a mechanical bull for an 8-second spin. Admission price is $25 USD and includes dinner, drink ticket, and a rockin’ concert.

The Coatings Experience
Open during exhibit hours

Dive feet first into this hands-on set-up! Whether you’re new to the coatings industry or a tenured professional, you won’t be able to pass up (literally) this opportunity on the Exhibit Hall floor to explore the ins and outs of coating application, surface preparation, inspection plans, and other coatings best practices.

Bridging the Gap With Effective Leadership Forum
Monday, March 25 / 8 to 11:30 a.m.

Forum Chairmen: Laura Cardenas, Lloyd’s Register; John Todd, KTA Tator

Presentations by: Dynisha Klugh, Director of Learning Technologies and Curriculum Development, Nalco Champion; Cindy Hubert, Executive Director Client Solutions, APQC; Terry May, President, MESA; Justin Daarud, Americas Operations Director for Lloyd’s Register’s Asset Integrity and Maintenance Optimization; Bernardo Duran, Coating Performance Engineer, AZZ Metal Coatings; Anuar Shukri Khairil, Director Group Technical Solutions, Petronas, Kuala Lumpur.

Businesses have reported a significant gap between the technical talent exiting the workforce and skill sets of the new talent working to fill those voids. The mass exodus of institutional knowledge and experience retiring, or expecting to retire, has been recognized for years, yet little has been accomplished to effectively stop the loss. This begs the question; What can we do differently to achieve our desired results?

There is no single solution to bridging the gap of technical knowledge and experience, but any resolution will certainly require effective leadership from all those involved. Leadership is the skill of influencing people to work enthusiastically toward goals identified as being for the common good. Leadership is a journey requiring application of varying skills along the travels. This forum will provide information on leadership lifecycles and provide tools to help guide you through the leadership journey.

Leadership Luncheon
Monday, March 25 / 11:30 a.m. to 1 p.m.

Following the Bridging the Gap with Effective Leadership Forum, attendees are invited to participate in the Leadership Luncheon to continue learning how to become an effective leader. Hear from Cathy Leslie, Executive Director of Engineers Without Borders who has overseen growth of the organization from a single university chapter to 288 student and professional chapters. Attendees will hear about the 16,800+ passionate, highly skilled volunteers that comprise Engineers Without Borders. These volunteers work in more than 40 countries around the world to impact the lives of millions through the implementation of engineering projects to provide clean water, sanitation, access to market and health facilities, renewable energy and more. Cost is $50 to attend. Lunch is included in the price of the ticket.

Rockwool Networking Zone
March 24-28, 2019
Level 1, across from Rm. 101-102
(in front of Marty Dickens Terrace)

New this year to CORROSION, take a few moments to relax and recharge in the Rockwool Networking Zone. With plenty of comfortable seating and space to collaborate with other delegates, this lounge also features charging lockers for your mobile devices and a live screen displaying the latest social media buzz at CORROSION. (Use #CORROSION2019 to join the conversation!)

Sponsored by:

ROCKWOOL
Protective Coatings Workshop
March 26-27, 2019 | Exhibit Hall


Want to know what’s new in the marketplace for coatings contractors? Want to stay up-to-date on the latest technologies available to you? Want to network with your peers and meet new and reconnect with existing colleagues?

NACE International, CoatingsPro Magazine, and INSPECT This are excited to announce the first-ever Protective Coatings Workshop at CORROSION 2019. This interactive workshop, designed for those working in or interested in learning more about coatings, will feature presentations from coatings industry leaders, an introduction to new emerging technologies, and highlight the experience plus accomplishments of those currently involved in the coatings field. Network with other contractors, inspectors, suppliers, and instructors from NACE’s Coating Inspector Program.

Learn about best practices as well as the new techniques and technologies that are available.

Earn Continuing Education Units (CEUs) and/or Professional Development Hours (PDHs) for your participation.

Do you need to earn PDHs or CEUs for your job, certification, or professional license renewals? By attending this workshop, you can earn both PDHs and CEUs to help meet your needed requirements. PDHs can be obtained from the PDH Kiosk in the conference registration area or via the CORROSION 2019 web site. Those seeking CEUs can complete a short quiz at the completion of the workshop and receive those from NACE Education.

Mark your calendars now to attend!

Tuesday, March 26 | 10 a.m. to 5 p.m.
Learn About: Coating Specifications, Performance, Environments, and Failures - Surface Preparation - Commercial and Architectural - Scope Change

Wednesday, March 27 | 10 a.m. to noon
Learn about: Coatings on Bridge Structures - Concrete - Water/Wastewater Transmission - Robotics and the Future of Coatings

CoatingsPro Contractor Awards Program
Noon | Corrosive Chronicles Theater

Registration Information
Registration to the Protective Coatings Workshop includes:
- Access to the CORROSION 2019 Exhibit Hall on Tuesday and Wednesday
- Access to the Workshop
- Lunch on Tuesday

Learn more and register at nacecorrosion.org.

Registration Fees:
- NACE Member Price: $279 USD
- Nonmember Price: $329 USD

Admission into the event is included as a part of a paid Full Conference Registration.

Is IMPACT PLUS the Solution You Have Been Seeking?
Wednesday, March 27
9 to 10 a.m., 10 to 11 a.m., and 11 a.m. to noon

IMPACT PLUS is proving to be just what many companies are seeking to help them improve their corrosion management processes. Through a structured, navigated corrosion management maturity assessment, companies are finding the gaps in their corrosion management processes and more importantly, creating roadmaps to close those gaps. This forum will detail the IMPACT PLUS suite of tools and offer case studies of companies who have taken the IMPACT PLUS journey toward improved corrosion management within their organization.

NACE Honoree Night
Wednesday, March 27
6:15 to 10 p.m. | The Bell Tower

NACE welcomes you to an evening of networking, drinks, and presentation of the association awards! Association awards recognize members for their outstanding contributions to NACE, corrosion control methods, science, and engineering. Taking place at one of Nashville’s historic venues, The Bell Tower, the evening will begin with the recognition of board members, presentation of the 2019 awards, and the passing of the gavel to incoming 2019-2020 NACE President Terry Greenfield. The group will then be treated to heavy hors d’oeuvres and local entertainment along with a whiskey tasting. Please contact us about sponsorship opportunities. Tickets are available online or by contacting firstservice@nace.org. Space is limited, so it is recommended that you purchase your tickets in advance.
Symposia

Please note that the dates given for these symposia are tentative; if papers are retracted, the lengths of some symposia may be shortened. For the most up-to-date listing, visit www.nacecorrosion.org.

MONDAY, MARCH 25

Advanced Coatings and Corrosion Characterization at the Nanoscale • 8 a.m. to 3 p.m.

This symposium will include papers related to understanding corrosion effects on the atomic scale, as well as for solutions that help monitor and mitigate corrosion. The symposium will bring together researchers and engineers from academia and industry to build a bridge that facilitates technology transfer between fundamental research and industry applications. The aim of the symposium is to close the gap in basic understanding of coatings materials and provide the basis for new technologies—new materials and experimentation. The symposium will focus on the use of nanomaterials/particles/fillers/polymers in ceramic and metal coatings at or below the nanometer scale to influence/elucidate/detect corrosion and the factors that influence it.

Sponsoring Committee: TEG 474X
Chair: Igor Kosacki Vice Chair: Joao Tedim

CO₂/H₂S Corrosion in Wet Hydrocarbon-Containing Environments – Day 1 • 8 a.m. to 3:30 p.m.

This symposium will include technical papers on laboratory and/or field experience of CO₂/H₂S corrosion and mitigation in a hydrocarbon containing environment.

Sponsoring Committee: TEG 059X
Chair: Krista Heidersbach Vice Chair: Ziru Zhang

Coatings & Inhibitors—Research in Progress – Day 1
8 a.m. to 3:30 p.m.

This symposium will include presentations related to the development of new coatings or inhibitors, fundamental understanding of their protection and failure mechanisms, and innovative testing methods for performance evaluations. Topics of interest include sustainable coatings, smart coatings, functional coatings, powder coatings, high solids coatings, failure analysis of coatings, protection and degradation mechanisms of coating/inhibitors, accelerated testing methods, modeling and simulation, and performance prediction. The structure-property-performance relationships of coatings and inhibitors are encouraged.

Sponsoring Committee: Research Committee
Chair: Qixin Zhou Vice Chair: Dawei Zhang

Control of Corrosion in Oil and Gas with Inhibitors – Day 1
8 a.m. to 3:30 p.m.

This symposium will include technical papers on the study and application of corrosion inhibitors and/or scale/deposit inhibitors and their mechanisms of inhibition.

Sponsoring Committee: TEG 184X
Chair: Zhengwei Liu Vice Chair: Yang Yang

Corrosion Assessment and Modeling of Reinforced Concrete Structures – Day 1 • 8 a.m. to 3:30 p.m.

This symposium will include technical papers on the corrosion performance and service life of reinforced concrete (RC) structures. Papers on corrosion assessment of repaired or retrofitted systems are preferred and will include: RC repair case studies, service life assessment/modeling, development of repair techniques and materials, mechanisms of repair or corrosion control system degradation or damage, and maintenance plans.

Sponsoring Committee: STG 01
Chair: Kingsley Lau Vice Chair: Gina Crevello

Corrosion in Supercritical Systems • 8 a.m. to 3 p.m.

This symposium will include technical papers on the measurement or assessment of degradation in any supercritical system, including especially supercritical water and supercritical carbon dioxide. Papers can be of a research or industrial nature.

Sponsoring Committee: TEG 121X
Chair: Yong Hua Vice Chair: Yong Xiang

Corrosion Issues in the Pulp, Paper, and Biomass Conversion Industries • 8 to 10 a.m.

This symposium will include technical papers on corrosion issues relating to the pulp and paper industry or biomass conversion. Topics can include new materials for these applications, new failure trends, issues with wood products, case studies, or issues specific to equipment for the industry such as recovery boilers, digesters, and paper machines.

Sponsoring Committee: STG 38
Chair: Matthew Tunnicliffe Vice Chair: Catherine Noble

Environmentally Assisted Cracking—Research in Progress
8 to 11 a.m.

This symposium will include presentations that focus on all aspects of environment assisted cracking, with a specific focus on, but not limited to, cracking of stainless steels, magnesium, aluminum, and nickel alloys. Studies related to the resistance of materials to the initiation and growth of cracks during stress corrosion cracking and corrosion fatigue are included. In addition, studies related to the development of novel techniques to monitor crack initiation and growth, including pit-to-crack transition, testing protocols/environments, and life prediction models are featured. The focus is on the most current results and research in progress.

Sponsoring Committee: Research Committee
Chair: Brendy Rincon Vice Chair: Ramgopal Thodla

Inhibitors—Vapor Transported (VCI) and Surface-Coated Rust Preventive (RP) • 8 a.m. to 1:30 p.m.

This symposium will include technical papers on novel applications, technical advances, test methods, and materials that perform as vapor-transported corrosion inhibitors (VCI) and/or inhibitor coatings applied to metal surfaces to inhibit corrosion.

Sponsoring Committees: TEG 093X and TEG 145X
Chair: Behzad Bavarian Vice Chair: Cliff Cracauer

Materials and Integrity in Oil Sands • 1 to 3 p.m.

This symposium will include technical papers on oil sands from owner-operators, vendors, consultants, and researchers. Areas of interest include (but are not limited to) corrosion, failures, wear, process, material selection, asset integrity, and can be related to steam-assisted gravity drainage, downhole, or surface equipment/facilities.

Sponsoring Committee: TEG 341X
Chair: Tesfaalam (Tesfa) Haile Vice Chair: Duane Serate
Symposia

Oil and Gas Coating Technology – Day 1 • 8 a.m. to 3:30 p.m.
This symposium will include technical papers on polymeric coating and TSA papers in the following themes: 1. Residual stresses in coatings, 2. failure modes of pipeline coatings, 3. Edge delamination of 3LPO pipeline coatings, 4. blister mechanism, 5. long life (>25 years) offshore wind-mill coatings, 6. acid tank linings, 7. CUI coatings, 8. high temperature (>200 °C) coatings, 9. salt removal coatings, 10. offshore platform deck coatings.
Sponsoring Committees: TG 260 and TG 470
Chair: Benjamin T.A. Chang Vice Chair: Shaoguang Feng

Passivity & Localized Corrosion—Research in Progress
8 a.m. to 3:30 p.m.
This symposium will include presentations related to recent research involving passivity and localized corrosion in all forms (including mechanisms of passivation, breakdown, pitting, crevice corrosion, intergranular attack, and any applications thereof). Contributions highlighting alloys and treatments to improve passivity and resistance to localized corrosion as well as papers describing novel and innovative approaches for studying these areas will be discussed.
Sponsoring Committee: Research Committee
Chair: Jason Lee Vice Chair: Xihua He

Pipeline Integrity – Day 1 • 8 a.m. to 3:30 p.m.
This symposium will include technical papers on all aspects of pipeline integrity that can include pipeline integrity management, inspection, in-line inspection, assessment, mitigation, rehabilitation, operational aspects, regulatory issues, present and upcoming technologies, methods, experiences, case studies, etc.
Sponsoring Committee: TEG 267X
Chair: Tony Poulassichidis Vice Chair: Matthew Ellinger

Real-Time Corrosion Monitoring for Process Applications: Technology, Experiences, Case Studies • 8 a.m. to 1:30 p.m.
This symposium will include technical papers on new real time corrosion monitoring technologies for process applications including crude oil refining, petrochem and chemical plants, as well as other process plants. Technologies of interest include but are not limited to electrochemical techniques, high-res electrical resistance methods, as well as newer data and software-based analytical approaches. The symposium has a targeted interest in facilitating plant operators to share their real time corrosion monitoring implementation experiences and case studies.
Sponsoring Committee: TEG 100X
Chair: Kwei-Meng Yap Vice Chair: Sean Brossia

Recent Experiences with Nickel, Titanium, Zirconium, and Other Corrosion-Resistant Alloys – Day 1
8 a.m. to 3:30 p.m.
This symposium will include technical papers on the practical use and experience with corrosion-resistant alloys including nickel base, titanium, zirconium, and other corrosion-resistant alloys.
Sponsoring Committee: STG 39
Chair: Ralph Baessler Vice Chair: Ajit Mishra

The Digital Asset Transformation—Driving Value for Corrosion and Asset Integrity Management
8 a.m. to 3:30 p.m.
This symposium will include the benefits of recent developments and industry trends in digital technologies for corrosion and integrity management. Many industry sectors are seeking to increase efficiency and reduced costs through the application of digitalization and technologies such as 3D visualization and the Internet of Things (IoT). The transforming potential in "big data" capture, information management and analytics, and the possibilities for implementing AI (artificial intelligence), all of which can reduce risk and facilitate better decision making, are fully applicable to the management of corrosion and asset integrity regardless of industry type. The symposium will feature papers from different industries covering a broad range of topics on these new developments from both technology providers and end users/asset operators.
Sponsoring Committee: STG 08
Chair: Cecillie Haarseth Vice Chair: Christopher Houghton

TUESDAY, MARCH 26

Corrosion Control for Aboveground Storage Tanks
8 a.m. to 3:30 p.m.
This symposium will include technical papers on the inspection, monitoring, coating, cathodic protection, VCI, and other innovative methods of corrosion management for aboveground storage tanks.
Sponsoring Committee: TEG 132X
Chair: Calvin Pynn Vice Chair: Christopher Houghton

AC Interference, AC-Induced Corrosion, AC Risk Assessment, Monitoring, and Mitigation • 9 a.m. to 5 p.m.
This symposium will include papers on alternating current (AC) interference on buried pipelines, AC-induced corrosion, AC risk assessment, monitoring, and mitigation.
Sponsoring Committee: STG 05
Chair: Meng Lopez-Garrity Vice Chair: Casey Heinrich

Biomedical Materials—Research in Process • 9 a.m. to 6 p.m.
This symposium will include presentations that will examine all aspects of corrosion and degradation pertaining to implant alloys as well as device interaction with the surrounding biological environment. Topics of interest include mechanisms of corrosion or degradation of materials as a result of interaction of implants with the host tissue; surface treatment of materials to inhibit corrosion or enhance biocompatibility; in vitro, in vivo, and ex vivo testing methods; development of new alloys, devices and constructs; implantation procedures and lifetime predictions and material/device monitoring, etc. Presentations will focus on the latest results and accomplishments.
Sponsoring Committee: Research Committee
Chair: Travis Voorhees Vice Chair: Srinidhi Nagaraja

CO₂/H₂S Corrosion in Wet Hydrocarbon Containing Environments – Day 2 • 9 to 11:30 a.m.
This symposium will include technical papers on laboratory and/or field experience of CO₂/H₂S corrosion and mitigation in a hydrocarbon containing environment.
Sponsoring Committee: TEG 059X
Chair: Krista Heidersbach Vice Chair: Ziru Zhang
Symposia

Coatings & Inhibitors—Research in Progress – Day 2 9 a.m. to 4:30 p.m.
This symposium will include presentations related to the development of new coatings or inhibitors, fundamental understanding of their protection and failure mechanisms, and innovative testing methods for performance evaluations. Topics of interest include sustainable coatings, smart coatings, functional coatings, powder coatings, high solids coatings, failure analysis of coatings, protection and degradation mechanisms of coating/inhibitors, accelerated testing methods, modeling and simulation, and performance prediction.
Sponsoring Committee: Research Committee
Chair: Qixin Zhou  Vice Chair: Dawei Zhang

Control of Corrosion in Oil and Gas with Inhibitors – Day 2 9 a.m. to 5:30 p.m.
This symposium will include technical papers on the study and application of corrosion inhibitors and/or scale/deposit inhibitors and their mechanisms of inhibition.
Sponsoring Committee: TEG 184X
Chair: Zhengwei Liu  Vice Chair: Yang Yang

Corrosion Assessment and Modeling of Reinforced Concrete Structures – Day 2 9 a.m. to 2:30 p.m.
This symposium will include technical papers on the corrosion performance and service life of reinforced concrete (RC) structures. Papers on corrosion assessment of repaired or retrofitted systems will include: RC repair case studies, service life assessment/modeling, deterioration and repair techniques and materials, mechanisms of repair or corrosion control system degradation or damage, and maintenance plans.
Sponsoring Committee: STG 01
Chair: Kingsley Lau  Vice Chair: Gina Crevello

Emergent Materials—Research in Progress 9 a.m. to 6 p.m.
This symposium will include presentations that provide fundamental insight into the processing-structure-corrosion-performance relationships of emergent materials. Emergent materials of interest include nanocrystalline, amorphous, and high-entropy alloys; nanolaminates; nanostructured coatings; additively manufactured metals; and composites. Contributions highlighting materials-by-design concepts and approaches for corrosion resistance are included.
Sponsoring Committee: Research Committee
Chair: Eric Schindelholz  Vice Chair: Sebastian Thomas

Environmentally Assisted Cracking – Day 1 9 a.m. to 5 p.m.
This symposium will include technical papers on the understanding of all kinds of EAC mechanisms including but not limited to hydrogen embrittlement, stress corrosion cracking, corrosion fatigue, liquid metal embrittlement, and so on. The papers cover root cause failure analysis in service, laboratory testing methods, materials modeling, industry standards development, state-of-the-art EAC research reviews, and so on.
Sponsoring Committee: TEG 186X
Chair: Arshad Bajvani Gavanluei  Vice Chair: Fei Tang

Microbially Influenced Corrosion – Day 1 9 a.m. to 5 p.m.
This symposium will include technical papers on microbial corrosion research, case studies, control monitoring, and treatment.
Sponsoring Committee: TEG 187X
Chair: Amilcar Oberto  Vice Chair: Nora Elbergen

Modeling and Simulation—Research in Progress 9 a.m. to 5 p.m.
This symposium will include presentations related to the development of state-of-the-art modeling for different kinds of corrosion mechanisms. Contributions focus on the latest development of models considering the mechanistic interplay between mechanical, chemical, and electrochemical interactions and the ability to predict material performance or damage accumulation in aggressive environments. The publications make emphasis on validation, by either experimental or field-testing, as well on detailing the mathematical approaches considered for the modeling from a mechanistic perspective.
Sponsoring Committee: Research Committee
Chair: Raymundo Case  Vice Chair: Marc Singer

Offshore Cathodic Protection—Case Studies, New and Novel Designs or Inspection Techniques 9 a.m. to noon
This symposium includes papers on offshore cathodic protection case studies, new or novel cathodic protection designs or inspection techniques, for any offshore applications; oil and gas fixed or floating structures, wind, tidal energy etc. including any related applications combining the effect of coatings, marine growth, or TSA.
Sponsoring Committee: STG 30
Chair: Alex Delwiche  Vice Chair: Kehinde Ogun

Oil and Gas Coating Technology – Day 2 9 a.m. to 3:30 p.m.
This symposium will include technical papers on polymeric coating and TSA papers on the following themes: 1. residual stresses in coatings, 2. failure modes of pipeline coatings, 3. edge delamination of 3LPE pipeline coatings, 4. blister mechanism, 5. long life (>25 years) offshore wind-mill coatings, 6. acid tank linings, 7. CUI coatings, 8. high temperature (>200 °C) coatings, 9. salt removal coatings, 10. offshore platform deck coatings.
Sponsoring Committees: TG 260 and TG 470
Chair: Benjamin T. A. Chang  Vice Chair: Shaoguang Feng

Pipeline Integrity – Day 2 9 a.m. to 5 p.m.
This symposium will include technical papers on all aspects of pipeline integrity that can include pipeline integrity management, inspection, in-line inspection, assessment, mitigation, rehabilitation, operational aspects, regulatory issues, present and upcoming technologies, methods, experiences, case studies, etc.
Sponsoring Committee: TEG 267X
Chair: Tony Poullassichidis  Vice Chair: Matthew Ellinger

Recent Development of Advanced Materials and Coatings for Marine Applications 9 a.m. to 5 p.m.
This symposium will include technical papers on recent developments in advanced materials, alloys, and novel coatings for use in marine environments including seawater and marine atmospheres.
Sponsoring Committee: STG 44
Chair: Moavin Islam  Vice Chair: Abdul Hameed Al-Hashem
Symposia

Recent Experiences with Nickel, Titanium, Zirconium, and Other Corrosion-Resistant Alloys – Day 2 • 9 to 10 a.m.
This symposium will include technical papers on the practical use and experience with corrosion-resistant alloys including nickel base, titanium, zirconium, and other corrosion-resistant alloys.
Sponsoring Committee: STG 39
Chair: Ralph Baessler Vice Chair: Ajit Mishra

Steel & Concrete—Research in Progress • 9 a.m. to 2:30 p.m.
This symposium will include presentations that will deal with all aspects of corrosion of steel in concrete, including reinforced concrete structures, offshore onshore infrastructure, bridges, and concrete pipelines. Furthermore, different aspects of corrosion of steel in concrete will be covered, such as pitting corrosion, uniform corrosion, new cementitious materials, geopolymer concrete, fly ash concrete corrosion, stress corrosion cracking, fatigue corrosion, weld joints corrosion, electrochemical chloride removal, and electrochemical realkalinization. Experimental results, modeling, and simulation are emphasized, including electrochemical and surface characterization techniques.
Sponsoring Committee: Research Committee
Chair: David Bastidas Vice Chair: Burkan Isgor

WEDNESDAY, MARCH 27

Advances in Coatings Under Insulation Technologies
8 to 10 a.m.
This symposium will include papers that cover coating technology and insulation technology for industrial facilities.
Sponsoring Committee: TEG 351X
Chair: Michael Yee Vice Chair: Michael Surkein

Advances in Materials for Oil and Gas Production – Day 1
8 a.m. to 5 p.m.
This symposium will include technical papers on advances in materials technology and research for oil and gas production environments. The focus is on new and improved metallic materials and applications including consideration and measurement of the material's performance in the envisaged exposure environment. Papers on field experiences, failure analysis, and mitigation through metallurgical aspects will also be presented.
Sponsoring Committee: STG 32
Chair: Hisashi Amaya Vice Chair: Hernan Rincon

Corrosion in Nuclear Systems • 8 a.m. to 4:30 p.m.
This symposium will include technical papers on materials-related issues encountered in the generation of nuclear power energy in light, heavy, and advanced nuclear power reactors and plants. This can include degradation mechanisms of structural materials and materials reliability issues encountered in nuclear power applications, including degradation mechanism and degradation management. Papers can also include areas such as advance materials design and manufacturing for current and future advanced reactor components and additive manufacturing.
Sponsoring Committees: TEG 224X and TEG 465X
Chair: Jared Smith Vice Chair: Ziqing Zhai

Corrosion of Copper and Copper Alloys • 1 to 5 p.m.
This symposium will include technical papers on seawater corrosion of copper and copper alloys to include: shipboard piping and heat exchangers, other shipboard uses and experiences, desalination units/plants on and near the coastline, ships propellers, seacoast and offshore applications of copper alloys in architectural applications, and any and all other experiences presented.
Sponsoring Committee: TEG 523X
Chair: Jim Michel Vice Chair: Ruben Muro

Direct Assessment • 8 a.m. to 2 p.m.
This symposium will include technical papers covering new technologies and methods, as well as case studies and histories in the area of external corrosion, internal corrosion, and stress corrosion cracking by way of direct assessments.
Sponsoring Committee: STG 35
Chair: Rodrigo J. Himiob Vice Chair: Jorge Vasquez

Environmentally Assisted Cracking – Day 2 • 8 to 10:30 a.m.
This symposium will include technical papers on the understanding of all kinds of EAC mechanisms including but not limited to hydrogen embrittlement, stress corrosion cracking, corrosion fatigue, liquid metal embrittlement, and so on. The papers cover root cause failure analysis in service, laboratory testing methods, materials modeling, industry standards development, state-of-the-art EAC research reviews, and so on.
Sponsoring Committee: TEG 186X
Chair: Arshad Bajvani Gavanluei Vice Chair: Fei Tang

Geothermal Scaling and Corrosion • 8 a.m. to 5 p.m.
This symposium will include technical papers on geothermal corrosion and scaling in wells and surface equipment, materials selection, inhibitors, and other strategies to combat corrosion and scaling in conventional and enhanced geothermal wells. Synergies with oil and gas applications will be included.
Sponsoring Committee: TEG 182X
Chair: Bill MacDonald Vice Chair: Keith Lichti

Hydrogen Embrittlement of Bolting and Metallic Materials Exposed to Seawater with Cathodic Protection—Research Topical Symposium • 8 a.m. to 5 p.m.
This research topical symposium will include presentations that bring to light recent studies and investigations in progress that highlight the role of material selection, metallurgical processing, cathodic protection system design and operation, and/or subsea conditions in environmentally assisted cracking, as well as studies that shed light on improvements in techniques for evaluation, selection, design, and specification to reduce failure risk and possibility of failure.
Sponsoring Committee: Research Committee
Chair: John Farraro Vice Chair: Russell Kane

Microbially Influenced Corrosion – Day 2 • 8 to 10:30 a.m.
This symposium will include technical papers on microbial corrosion research, case studies, control monitoring, and treatment.
Sponsoring Committee: TEG 187X
Chair: Amilcar Oberto Vice Chair: Nora Elbergen

Nonmetallic Materials for Oil and Gas Production Environments • 8 a.m. to 4:30 p.m.
This symposium will include technical papers on the performance of non-metallic materials used in relation to the production of oil and gas in onshore and offshore environments. These materials...
Symposia

can include elastomers, composites, organic coatings, linings (for tubular structures for example), and polymeric materials for structural products.

Sponsoring Committee: STG 33
Chair: Peter L. Huesmann  Vice Chair: Carlos Fernandez

Recent Experiences with Austenitic and Duplex Stainless Steels – Day 1  * 8 a.m. to 5 p.m.
This symposium will include technical papers on recent experiences with stainless steels. The focus is on end user experiences from the process industries such as chemical processing, pulp and paper, oil and gas, desalination, pharmaceutical, and power generation. Topics include successes, failures, material selection, fabrication, and new developments.
Sponsoring Committees: TEG 114X and TEG 116X
Chair: Nicole Kinsman  Vice Chair: Lena Wegrelius

Recent Findings on Localized Corrosion and Electrochemical Techniques  * 8 a.m. to 2 p.m.
This symposium will include technical papers on recent findings on mechanisms of localized corrosion as well as electrochemical methods used to study and elucidate corrosion mechanisms.
Sponsoring Committee: TEG 407X
Chair: Martin A. Rodriguez  Vice Chair: Helmuth Sarmiento Klapper

Refining Industry Corrosion  * 8 a.m. to 4 p.m.
This symposium will include technical papers on corrosion and material issues within the refining industry. Topics will explore case histories, materials performance, corrosion mechanics, and failure analysis.
Sponsoring Committee: STG 34
Chair: Jon Allen  Vice Chair: Ivan Morales

Scale/Deposit Mitigation in Industrial Water Systems: Current Technologies, New Technologies, or Future Evolutions – Day 1  8 a.m. to 5 p.m.
This symposium will include technical papers associated with the following areas of interest: mitigation of mineral scale, deposit, and corrosion in industrial water systems including boiler, cooling, desalination, geothermal, oil and gas production and wastewater treatment. Topics include current technologies, new technologies, or future evolutions.
Sponsoring Committee: STG 11
Chair: Zahid Amjad  Vice Chair: Daniel Meier

Sour Corrosion  * 8 a.m. to 4:30 p.m.
This symposium will include technical papers on advances in sour corrosion in oil and gas production. The focus is on sour corrosion mechanisms, mitigation strategies, case histories, and best practices on corrosion management.
Sponsoring Committee: TEG 282X
Chair: Sajid Tanwir  Vice Chair: Mohsen Achour

Understanding and Controlling Atmospheric Corrosion in Infrastructure, Transportation, and Utilities  * 8 a.m. to 5 p.m.
This symposium will include technical papers on methodologies to improve the service life of materials and structures in infrastructure, transportation, and utilities industries. As an example, how do we achieve a 100-year service life from steel bridge superstructures?

As a second example, how do we achieve a 20-year service life for aerospace structures? The development of improved mitigation strategies requires 1) an understanding of atmospheric corrosion phenomenon and mechanisms by which mitigation technologies work and 2) the ability to measure atmospheric corrosion. Therefore, technical papers related to the understanding and control of atmospheric corrosion of steel (including standard, low alloy, and stainless), aluminum (including structural and cosmetic), and other relevant alloys will be discussed.
Sponsoring Committee: TEG 189X
Chair: Richard Granata  Vice Chair: Kristen Williams

Water Treatment Systems  * 1 to 3:30 p.m.
This symposium will include technical papers on corrosion issues seen in water treatment systems for industrial, commercial, and institutional facilities.
Sponsoring Committee: STG 11
Chair: Matthew Schnepf  Vice Chair: Michael Todd

High-Temperature Materials and Corrosion for the Process Industry  * 8 a.m. to 2:30 p.m.
This symposium will include technical papers related to exposure of material at temperatures >500 °C and used in the process industry. This symposium also features papers related to new materials that have the potential for applications at elevated temperatures. Papers specifically dealing with oxidation resistance, creep resistance, carburization resistance, as well as alloy development for such properties, may be presented.
Sponsoring Committee: TEG 077X
Chair: Mazdak Parsi  Vice Chair: Hadi Arabnejad Khanouki

Pipeline Crossings: Steel Cased, Thrust-Bored, and HDD 8 a.m. to 2 p.m.
This symposium will include technical papers on road, railroad, river, wetland, etc., crossings by directional drilling, thrust boring, casing, and HDD type methods. Case study presentations, technology developments, and findings are included. Modified techniques,
Sponsoring Committee: TEG 208X
Chair: Cay Strother    Vice Chair: Michael Snow

Power Industry Corrosion * 8 a.m. to noon
This symposium will include technical papers on corrosion causes, issues, studies, experiences, and/or management practices, including coatings on steel structures and their related components in the power industry. Exposures include below grade, transition zone, and atmospheric corrosion of weathering, galvanized, and other coated steel structures.
Sponsoring Committee: TEG 368X
Chair: Jon H. Brasher    Vice Chair: Graig Cilluffo

Progress in Laboratory Testing of Corrosion Inhibitors for Oil Field Applications * 8 to 10 a.m.
This symposium will include technical papers on the following issues: novel techniques and methodologies for evaluation of corrosion inhibitors in the lab, and lessons learned—practical aspects and challenges encountered when using established evaluation methods and techniques, factors affecting the quality of laboratory data, challenges associated with quantitative evaluation of localized corrosion, development of formulations for high-temperature corrosion and challenges and gaps in lab-field transference will be presented.
Sponsoring Committee: TEG 253X
Chair: Tracey Jackson    Vice Chair: Alla Crabtree

Recent Experiences with Austenitic and Duplex Stainless Steels – Day 2 * 8 to 9:30 a.m.
This symposium will include technical papers on recent experiences with stainless steels. The focus is on end user experiences from the process industries such as chemical processing, pulp and paper, oil and gas, desalination, pharmaceutical, and power generation. Topics include successes, failures, material selection, fabrication, and new developments.
Sponsoring Committees: TEG 114X and TEG 116X
Chair: Nicole Kinsman    Vice Chair: Lena Wegrelius

8 a.m. to 1:30 p.m.
This symposium will include technical papers associated with the following areas of interest: mitigation of mineral scale, deposit, and corrosion in industrial water systems including boiler, cooling, desalination, geothermal, oil and gas production, and wastewater treatment. Topics include current technologies, new technologies, or future evolutions.
Sponsoring Committee: STG 11
Chair: Zahid Amjad    Vice Chair: Daniel Meier

Attending CORROSION 2019 doesn’t have to be all business.
Come work on your golf game - all without leaving the exhibit hall!

Monday 5pm-7pm
Closest to the Pin
Win an Under Armour Golf Bag

Tuesday 10am-1pm
Longest Drive Challenge (Men’s & Women’s)
Win a TaylorMade or Odyssey Putter

Tuesday 2pm-5pm
Par 3 Challenge
Win a Callaway Driver

Wednesday 10am-1pm
Straightest Drive
Win a Dairyland Gift Pack
All participants entered in a drawing for a Visa Gift Card

Wednesday 2pm-5pm
Chipping Contest
Win a Dairyland Gift Pack
All participants entered in a drawing for a Visa Gift Card

Thursday 9am-12pm
Closest to the Pin
Win an Under Armour Golf Bag

Putting Contest – All Show. Win a Dairyland Golf Cow (While Supplies Last)

Visit Dairyland at booth 2236 for details.
Forums

Please note that the dates given for these forums are tentative. The lengths of some forums may be shortened. For the most up-to-date listing, visit www.nacecorrosion.org.

MONDAY, MARCH 25

Bridging the Gap with Effective Leadership • 8 to 11:30 a.m.
Full list of speakers will be available on the web site.

Businesses have reported a significant gap between the technical talent exiting the workforce and skill sets of the new talent working to fill those voids. The mass exodus of institutional knowledge and experience retiring, or expecting to retire, has been recognized for years, yet little has been accomplished to effectively stop the loss. This begs the question; What can we do differently to achieve our desired results?

There is no single solution to bridging the gap of technical knowledge and experience, but any resolution will certainly require effective leadership from all those involved. Leadership is the skill of influencing people to work enthusiastically toward goals identified as being for the common good. Leadership is a journey requiring application of varying skills along the travels. This forum will provide information on leadership lifecycles and provide tools to help guide you through the leadership journey.

Opening Remarks • 8 to 8:15 a.m.
Forum Chairs: Laura Cardenas, Lloyd's Register; John Todd, KTA Tator

First Forum Session • 8:15 to 9:15 a.m.
"Letting Your Experts Retire, But Not Their Expertise"
Speakers: Dynisha Klugh, director of Learning Technologies and Curriculum Development, Nalco Champion; Cindy Hubert, executive director, Client Solutions, APQC

Second Forum Session • 9:15 to 10:15 a.m.
"Cultivating Seeds for SUCCESSion"
Terry May, president, MESA

Break • 10:15 to 10:30 a.m.

Third Forum Session • 10:30 to 11:30 a.m.
"Lifecycles of Leadership"
Justin Daarud, Americas Operations Director for Lloyd's Register's Asset Integrity and Maintenance Optimization; Bernardo Duran, Coating Performance Engineer, AZZ Metal Coatings; Anuar Shukri Khaiori, Director Group Technical Solutions, Petronas, Kuala Lumpur

Following this forum will be a special Leadership Luncheon. Please see p. 62 for details.

Coating Failures—Common and Uncommon Causes with Various Coating Types on Different Substrates • 8 a.m. to noon
Presented by: Michael O'Brien, Mark 10 Resource Group, and Bill Jenkins, International Paint

Coating failures continue to cost contractors, facility owners, paint manufacturers, shipbuilders, and fabricators substantial unbudgeted money every year. To find out how to avoid common and uncommon causes of coating failures, plan to attend this informative, practical, and lively presentation. This tutorial is based on hundreds of real-life coating failures investigated by the presenters during their many years in the coating industry. It contains numerous NEW examples, from over 20 different failure investigations involving various coating types on steel, ductile iron, hot-dip galvanizing, and concrete substrates.

In addition, this year's session will include a NEW section entitled "Principles of Sample Collection for Failure Analysis." Many mistakes made during the sample collection process make it difficult to perform proper laboratory analysis. Attendees will learn how to collect samples properly when coating failures occur to ensure the integrity of the samples and to facilitate proper laboratory analysis. This tutorial is extremely practical and it identifies principles and practices required to avoid the mistakes commonly made by others involved in the coating industry. This year's presentation includes many NEW case histories of failures, not previously shown, as well as a special practical section on the principles of sample collection for failure analysis.

An Update of MIC Research and Developments for the Onshore and Offshore Oil and Gas Industry • 9 a.m. to noon
Presented by: Dr. Torben Lund Skovhus, VIA University College; Dr. Lisa Gieg, University of Calgary; Dr. John Wolodko, University of Alberta; and Rick Eckert, DNV GL

This forum will present practical examples of microbiologically influenced corrosion (MIC) management in a variety of systems found in the oil and gas industry. Case studies will demonstrate how operators are addressing the threat of MIC as part of a corrosion management system. The latest developments in MIC assessment, mitigation, and monitoring will be presented. Also, the most recent MIC models will be presented and demonstrated.

Corrosion Under Insulation Management: Accelerated Testing and Practical Solutions • 1 to 3 p.m.
Presented by: David Hunter, Pond & Co., and Dikran Betzig, PPG

At present there is no single ASTM or ISO test method for qualifying coatings for corrosion under insulation (CUI) service that is universally accepted, yet the problem remains. This forum will describe one accelerated testing regimen for qualifying a coating system, as well as real world CUI investigation, with practical solutions. Methods of identification will be discussed, as well as using risk-based methods for dealing with large areas where visual inspection becomes cost prohibitive.

The 7 Habits of Highly Effective Knowledge Leaders
1:30 to 3:30 p.m.
Presented by: Cindy Hubert, Executive Director Client Solutions, APQC

In this workshop, attendees will learn:
• The benefits of transferring and retaining valuable knowledge
• How knowledge management strategies can close gaps in knowledge and support transfer/retention
• How collaboration and good communications can improve valuable knowledge transfer and retention
• Processes and methods for transferring and retaining critical organizational knowledge

TUESDAY, MARCH 26

Battle Against Corrosion in Latin America • 1 to 3 p.m.
Presented by: Leonard Uller, Surplus; Ricardo Estella, BME Andina; and Jorge Canto, Corrosion y Protection

The industrial development in Latin America in general has been driven by the oil and gas industry, as well as by mining of minerals, mainly iron ore, aluminum, and copper sulfides that were extracted...
from metals such as iron, aluminum, and copper. In these industries, corrosion issues at the industrial scale became more apparent, as well as the need to tackle the problem. In the refineries and gas transportation industries, corrosion failures were more frequent, generating the need for failure investigations that were one of the first actions taken. The universities and research institutes also dedicated their attention to the corrosion issues, creating research programs in various countries.

The Latin American professional was presented with challenges for which new knowledge was needed. In general, NACE was the source of this knowledge through many of the annual events and papers presented. Problems identified were similar as in other areas in the world such as carbon dioxide (CO₂) corrosion, hydrogen sulfide (H₂S) corrosion, stress corrosion cracking, pitting, high-temperature corrosion, aging, etc.

With the development of deep well fields, high-temperature challenges appear in the production facilities, especially for coatings selection for protection of buried lines. The offshore industry also participated in these efforts. The development of more stringent conditions, the rapid development of the practices demanded a more proactive approach to prevent corrosion beyond the traditional measures. It took leadership in all countries that develop corrosion institutes, corrosion programs, corrosion departments, and corrosion experts to take on the challenges in materials selection and design, inspection practices, training, and development. The quest is still alive.

PHMSA Pipeline Safety Forum • 1:30 to 4 p.m.
Presented by: Kevin Garrity, MEARS and Alan Mayberry, PHMSA

NACE members play a critical role in protecting the public from potential catastrophic failures of liquid/gas pipelines. The PHMSA will present challenges not present onshore. New materials were developed for tougher conditions. The rapid development of the industries demanded a more proactive approach to prevent corrosion beyond the traditional measures. It took leadership in all countries that develop corrosion institutes, corrosion programs, corrosion departments, and corrosion experts to take on the challenges in materials selection and design, inspection practices, training, and development. The quest is still alive.

WEDNESDAY, MARCH 27

PHMSA Pipeline Safety Forum • 1:30 to 4 p.m.
Presented by: Kevin Garrity, MEARS and Alan Mayberry, PHMSA

This forum will go over the PHMSA (Pipeline Hazardous Materials Safety Administration) program audit process. This discussion will highlight the standard requirements for attaining a PHMSA accreditation, including:

• Case study
• Hear from our auditors
• Forecast of PHMSA program growth in the future

Is IMPACT PLUS the Solution You Have Been Seeking?
Three sessions: 9 to 10 a.m., 10 to 11 a.m., 11 a.m. to noon

IMPACT PLUS is proving to be just what many companies are seeking to help them improve their corrosion management processes. Through a structured, navigated corrosion management maturity assessment, companies are finding the gaps in their corrosion management processes and more importantly, creating roadmaps to close those gaps. This forum will detail the IMPACT PLUS suite of tools and offer case studies of companies who have taken the IMPACT PLUS journey toward improved corrosion management within their organization.

Music Revolution: The Harmony of Corrosion Control and Mega Projects in the Middle East and Africa • 1 to 5 p.m.
Presented by: Gaseem Fallatah, NACE International

The Middle East and Africa region is exposed to a very harsh environment, such as extremely high temperatures, high salinity, and high humidity—factors that greatly affect corrosion and make its control more challenging. These challenges increase the tempo of research studies on corrosion control that apply to different project opportunities for companies. The Middle East and Africa have become a hub for infrastructure development and mega projects that lead to potential investments. This forum aims to present real case studies, the specific solutions developed, and their practical applications. Corrosion experts from the Middle East and Africa will showcase the developments in corrosion research and their innovative ways of controlling it. In addition, industry leaders will present the mega projects in the region that open opportunities for investment. As a little break from the technical information, the forum will showcase the music and cultures of the Middle East and Africa. With the potential for future investment, it is better to know the rhythm of the area on both technical and social aspects. Listen to the music of corrosion control and mega projects in the Middle East and Africa!

Thermal and Cold Spray Coatings—Processes, Applications, and Challenges • 1 to 5 p.m.
Presented by: James Weber, James K. Weber Consulting LLC; Frank Prenger, Grillo-Werke Aktiengesellschaft; Dr. Shiladitya Paul and Dave Harvey, TWI

This session will cover discussions on thermal and cold spray coatings for mitigation of corrosion and wear with a specific focus on (but not limited to) surface preparation, coating consumable selection, spray method selection, spray parameter development, in-line quality inspection, testing and qualification, operational experience, cost reduction, maintenance, and repair. The subjects to be covered include the latest research and field experience on thermal spray coatings, materials, processes, and strategies for corrosion control. The group will also discuss conventional and novel thermal and cold spray coating systems used to prevent corrosion and wear in offshore, onshore, oil and gas, subsea, marine, construction, chemical processing, refinery, construction, automotive, power, aerospace, and other industries.

Routine Inspection Training for Aboveground Storage Tanks (ASTs) • 1:30 to 2:30 p.m.
Presented by: Pat Keo, TTI Environmental, Inc.

This forum will enhance the understanding of tank owner responsibilities, proper record keeping procedures, and common areas of concern with AST systems in relation to routine periodic tank inspections. The information in this forum will benefit EH&S compliance professionals, professional engineers who prepare Spill Prevention, Control, and Countermeasure (SPCC) plans, facility personnel, and industry consultants. Training relevant to ASTs in any regulatory setting will include industry, energy sector, pharmaceutical, government installation, etc. The contents are relevant to all states and local entities. The information shall apply to routine inspections of the following equipment: ASTs, pressure vessels, and process tanks. The presentation was developed in accordance with and reference to state regulations, inspection standards, recommended practices, fire codes, and best management practices. Inspection standards referenced in the training include: STI SP001, API 653, API 510, and API 570. Topics covered are applicable to complying with the SPCC Regulation (40 CFR 112) and various state AST regulations.
Corrosive Chronicles

These theaters will feature experienced corrosion professionals and NACE staff who will present interactive forums on a variety of corrosion-related topics on the Exhibit Hall floor. Conference attendees will learn unique lessons and solutions to corrosion issues that are relatable to their own field of expertise. Topics of discussion include the following:

**TUESDAY, MARCH 26**

**Corrosion Management in the Maritime Industry**
10:30 to 11 a.m. • Exhibit Hall/Blue Theater (Booth 2108)  
Presented by: Buddy Reams, NACE chief maritime officer

The maritime industry often views corrosion as a cost of doing business, but NACE wants to provide companies with the resources to manage that risk. Hear from Chief Maritime Officer Buddy Reams as he explains the risks of corrosion in maritime environments, NACE’s current presence in the industry, and what you can do to get involved as the association works to broaden awareness surrounding corrosion mitigation strategies in the industry.

**How to be an Author**
10:30 a.m. to noon • Exhibit Hall/Red Theater (Booth 1114)  
Presented by: NACE International Publications representatives Stephanie Chizik, Ben DuBose, Sammy Miles, and Jean Broge

NACE is looking for paper, book, and magazine article authors! Learn what it takes to get your work published and distributed to the entire corrosion control/coatings community through NACE’s respected publishing channels: Materials Performance, CoatingsPro Magazine, CORROSION journal, and NACE books. Staff representatives will provide insight into content needs, proposal writing, author guidelines, and submission processes in an informal, open-house format.

**Preparing for Your Audit: A Technical Discussion with the NACE International Institute Contractor Accreditation Program's Chief Auditor**
11:15 a.m. to 12:15 p.m. • Exhibit Hall/Blue Theater (Booth 2108)  
Presented by: TJ Mead, NIICAP Chief Auditor

Launched in 2015, the NACE International Institute Contractor Accreditation Program (NIICAP) is an industry-driven and industry-managed accreditation program that verifies a contractor’s quality-assurance program, support practices, production processes, and personnel management and training program. At this informal session, NIICAP Chief Auditor TJ Mead will present a high-level overview of the NIICAP program, answer questions, and discuss real-world case studies of NIICAP-accredited contractors.

**Corrosion Prediction and Testing for Aerospace and Defense**
10:30 a.m. to 11:30 a.m. • Exhibit Hall/Red Theater (Booth 1114)  
Presented by: Alan Rose, Corrdesa LLC; Jim Dante, Southwest Research Group

The ASTM B117 salt fog corrosion test and its variants have been the mainstay of corrosion testing for decades, but it has never been satisfactory because it is a poor predictor of actual performance and it was built around unrealistic corrosion conditions and chemistries no longer relevant to modern aerospace materials and coatings. In recent years a great deal of work has been done to understand material interactions and corrosion mechanisms. At the same time computer modeling of corrosion and fluid dynamics of electrolytes have improved our ability to understand and predict corrosion in complex assemblies. There are several current programs aimed at developing better quantitative science-based prediction and testing methods, in particular for the aerospace and defense industries.

The purpose of this forum is to provide an update on aerospace and defense corrosion prediction and testing, and opportunity for input and discussion. Some of the new methods under development for testing and modeling will be presented and discussed in an informal manner to allow for learning and discussion with the broader corrosion community. The ultimate aim is to leverage these new technologies and frame more comprehensive, relevant, and objectively based accelerated test methods for other industries.

**Understanding and Mitigating AC Interference for Co-Located Pipelines**
10:30 to 11:30 a.m. • Exhibit Hall/Blue Theater (Booth 2108)  
Presented by: Clay Brelsford, Bass Engineering, and Andy Florence, American Innovations

You will learn how to recognize alternating current (AC) Interference on your pipelines, as well as your regulatory responsibilities. We’ll cover AC fault damage, personnel safety, and finally, provide solutions for AC interference mitigation.

Subjects will include:
- What is AC Interference?  
- Understanding AC Mitigation Options  
- Commissioning and Monitoring AC Mitigation Effectiveness  
- Launching your ACI Program: ACI Threat Assessment Model Case Study

**WEDNESDAY, MARCH 27**

**Challenging Application to High-Temperature Surface Structures and Pipe Supports**
10:30 to 11:30 a.m. • Exhibit Hall/Red Theater (Booth 1114)  
Presented by: Sean Browning, Pond & Co and Jon Belcher, Thermal Engineering Group

This case study has multiple previous and future projects, from 15 to 40-ft underground pipelines with challenging high-temperature application to surface structures and pipe supports in underground volts and tunnels beneath Nashville, Tennessee in the downtown area. The structures and supports are used to secure the steam and some chill pipe that are used to heat and run equipment to 40 downtown high rises and the Bridgestone Area. This case studies include specification revisions, materials selection, permitting due to the busy street areas above, application methods, and inspections.

**Social Media for Scientists: How to Use Kudos to Boost the Impact of your Research**
10:30 to 11 a.m.  
Exhibit Hall/Blue Theater (Booth 2108)  
Presented by: Janna Schulze, NACE social media specialist

Learn how to use tools available through Kudos to reach a wider audience and increase your paper’s Altmetrics score. This session is geared toward scientists and researchers who publish their work in CORROSION journal or other scientific publications. Learn how to build your Kudos author profile, write a plain language description of your research, and collaborate with the wider scientific community through social media.
Corrosive Chronicles

Contractor Awards Program
11:30 a.m. to 1 p.m. • Exhibit Hall/Blue Theater (Booth 2108)

CoatingsPro Magazine will again recognize industry excellence in the application of commercial and industrial high-performance coatings with the third annual Contractor Awards Program.

Join us as we announce the accomplishments of the 2019 winners in these six categories: Commercial Concrete, Commercial Roof, Industrial Concrete, Industrial Steel, Specialty Project, and Contractor/Crew MVP. For more information, visit www.coatingspromag.com/contractor-awards-2019.

Practical Solutions to Real World Corrosion Issues: A Joint Seminar Sponsored by the Coatings and Water/Wastewater Councils
1 to 5 p.m. • Exhibit Hall/Red Theater (Booth 1114)
Presented by: Rae Marie Mattis and Robert Boswell

The NACE International Coatings and Water Councils will hold a shared forum covering corrosion issues and solutions in their respective industries. The presentations will cover best practices, regional projects, lessons learned, and emerging technologies from the following leading organizations and industry experts:

Bob Dahlstrom, Apellix—Utilizing Robotics and Drones for Inspection
Allison Stroeble, Pure Technologies, Ltd.—Condition Assessment Technologies for Water and Wastewater Metallic Pipes
Kent Weisenberg, SIPP Tech—Design and Development of a Robotically Applied, Fully Structural (Class IV), Lining System for Large Diameter Water Infrastructure Linear Assets

Dr. Rebekah Wilson, R&D lead for USACE Paint Technology Center—The USACE Paint Technology Center (PTC) is recognized as a Center of Expertise for the U.S. Army Corps in the area of paints and coatings. The PTC offers a wide array of services including quality assurance testing, field technical support, educational classes and training, community outreach, and a multimillion dollar research and development center. The PTC has a large focus on corrosion mitigation through paints and coatings with an expertise in the water-based infrastructure such as locks and dams. An overview of these services will be presented along with conventional mitigation practices and newer technologies under R&D.

James Baumstark, Sherwin Williams Resinous Flooring and Containment specialist—Coating system design for Metro Nashville Biosolids Digester Roof Structure, interior and exterior.

The presentation will include:
• Job site mobilization requirements
• Surface prep requirements and inspection, and equipment utilized
• Coating application requirements, and equipment utilized
• Completion inspection

How Coatings and Welding Overlap
1:30 to 3 p.m. • Exhibit Hall/Blue Theater (Booth 2108)
Presented by: John Pariseau, American Institute of Nondestructive Testing

The coating, welding, and nondestructive testing quality professions commonly overlay within industries. Because of the separation and different operating methods of the societies, it is often difficult for inspectors of one profession to expeditiously learn about another.

The presentation will cover:
1. An overview of the AWS Certified Welding Inspector (CWI) Program and its associated endorsements consisting of an explanation of the exam structure and general knowledge and experience to achieve the title of Certified Welding Inspector.
2. An overview of what duties a CWI is typically tasked with.
3. A discussion of the overlap from welding fabrication/construction inspection into industrial coating inspection and items between the two that may cause some confliction.

In partnership with:

Increasing the Availability of U.S. Navy Assets: A Corrosion Control Panel presented by ASNE's MegaRust
3:30 to 5 p.m. • Exhibit Hall/Blue Theater (Booth 2108)
Presented by: Felicia Johnson, Corrosion Prevention & Control technical warrant holder, Space and Naval Warfare Systems Command (SPAWAR); Jay Ong, Corrosion and Coatings Engineering branch head, Naval Surface Warfare Center Carderock Division (NSWCCD), Naval Sea Systems Command (NAVSEA); Dane Hanson, Naval Aviation Enterprise Corrosion Prevention Team lead, Naval Air Warfare Center Aircraft Division (NAWCAD), Naval Air Systems Command (NAVAIR)

Representatives of three of the U.S. Navy’s systems commands will discuss their roles in the importance of maintaining our military assets. This forum will provide for collaboration with industry to discuss the emerging needs of the Navy corrosion control community.

In partnership with:
Technical Committee Information

Welcome to NACE International Technical Committees!

NACE invites you to participate in the CORROSION 2019 Technical Coordination Committee Task Groups. There has never been a better time to have your voice heard at NACE, and all full conference registrants are welcome to participate! If you’re new to technical committees at NACE, do not miss Technical Committees 101 on Sunday, March 24 and Monday, March 25 from 9 to 10 a.m. Learn the ropes, see what the technical committees are all about, and become invigorated in the decision-making process.

General NACE International Technical Committees Information

NACE technical committees scheduled to meet during CORROSION 2019 are listed on the following pages. For the most up-to-date technical committee meeting listing with the exact meeting times, visit the CORROSION 2019 conference web site at www.nacecorrosion.org.

All technical committee meetings are open to members and nonmembers at CORROSION 2019. Persons interested in joining a technical committee may contact the Technical Activities Division at NACE headquarters for additional information (+1 281-228-6264).

IMPORTANT NOTICE

Committees are organized by Specific Technology Groups (STGs) and listed numerically by Technology Exchange Group (TEG), Task Group (TG), and Work Group (WG). The number in parentheses are additional sponsor STGs, if any.

- Following each TEG and TG title is a three-digit number (e.g., 049). This is the committee designation. Note that TEG designations are always followed by an X.
- The day of the week each committee is meeting is shown following the committee designation.
- The matrix structure of NACE technical committees is designed to bring together experts from various industries who are concerned with a specific technology and want to give input.

For more information, visit www.nace.org/jointcc.
## Technical Committee Meetings

### REINFORCED CONCRETE - STG 01

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICCP of Reinforcing Steel in Atmospherically Exposed Concrete Structures</td>
<td>TG 044 (05)</td>
<td>Sunday</td>
<td>9 to 10 a.m.</td>
</tr>
<tr>
<td>Reinforced Concrete: Anode Test Procedures</td>
<td>TG 045 (05)</td>
<td>Sunday</td>
<td>10 to 11 a.m.</td>
</tr>
<tr>
<td>Cathodic Protection for Masonry Buildings Incorporating Steel Frames—A State-of-the-Art Report</td>
<td>TG 329 (05)</td>
<td>Sunday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Electrochemical Realalkalization of Steel-Reinforced Concrete—A State-of-the-Art Report</td>
<td>TG 556</td>
<td>Sunday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>Reinforced Concrete: Maintenance and Rehabilitation Considerations for Existing Structures</td>
<td>TG 324</td>
<td>Sunday</td>
<td>2 to 3 p.m.</td>
</tr>
<tr>
<td>Sacrificial Cathodic Protection of Reinforced Concrete Elements</td>
<td>TG 557 (05)</td>
<td>Sunday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>Cathodic Protection of Reinforcing Steel in Buried or Submerged Concrete Structures</td>
<td>TG 048 (05)</td>
<td>Sunday</td>
<td>4 to 5 p.m.</td>
</tr>
<tr>
<td>Reinforced Concrete: Cathodic Protection</td>
<td>TEG 043X</td>
<td>Wednesday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>State-of-the-Art Report: Criteria for Corrosion Control of Steel in Concrete</td>
<td>TG 545</td>
<td>Wednesday</td>
<td>10 to 11 a.m.</td>
</tr>
<tr>
<td>Inspection Methods for Corrosion Evaluation of Prestressed Concrete Structures</td>
<td>TG 504</td>
<td>Wednesday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Stray Current Corrosion in Reinforced and Prestressed Concrete Structures—A State-of-the-Art Report</td>
<td>TG 572 (05)</td>
<td>Wednesday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>STG 01</td>
<td>Wednesday</td>
<td>2 to 3 p.m.</td>
</tr>
<tr>
<td>Reinforced Concrete</td>
<td>STG 01</td>
<td>Wednesday</td>
<td>3 to 5 p.m.</td>
</tr>
</tbody>
</table>

### COATINGS AND LININGS, PROTECTIVE: ATMOSPHERIC - STG 02

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonvisible, Nonwater-Soluble Contaminants Affecting Corrosion Protection</td>
<td>TEG 423X</td>
<td>Monday</td>
<td>1 to 2:30 p.m.</td>
</tr>
<tr>
<td>Threaded Fasteners: Coatings and Methods of Protection for Threaded Fasteners Used with Structural Steel, Piping, and Equipment</td>
<td>TEG 311X</td>
<td>Tuesday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Hot-Dip Galvanizing for Steel Corrosion Protection</td>
<td>TEG 428X (03, 04)</td>
<td>Tuesday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>NACE Standard TM0404, Offshore Platforms: Coatings for Atmospheric and Splash Zone New Construction</td>
<td>TG 312</td>
<td>Tuesday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>NACE SP0108-2008, Offshore Platforms: Coatings for Corrosion Control of Steel</td>
<td>TG 313</td>
<td>Tuesday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>NACE Standard TM0304, Offshore Platform Atmospheric and Splash Zone Maintenance Coating System Evaluation</td>
<td>TG 260 (33)</td>
<td>Tuesday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>New Standard Practice for Application and Inspection of Intumescent Fireproofing</td>
<td>TG 568 (03)</td>
<td>Wednesday</td>
<td>8 to 9 a.m.</td>
</tr>
<tr>
<td>Application and Inspection of Intumescent Fireproofing</td>
<td>TEG 560X</td>
<td>Wednesday</td>
<td>9 to 11 a.m.</td>
</tr>
<tr>
<td>Determining True Insulative Value of Liquid Insulative Materials Applied on Steel Surfaces</td>
<td>TG 525</td>
<td>Wednesday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Offshore Coatings: Laboratory Testing Criteria; High Temperature, High Pressure, Corrosive, Service</td>
<td>TEG 346X (03, 44)</td>
<td>Wednesday</td>
<td>1 to 2:30 p.m.</td>
</tr>
<tr>
<td>Coatings and Linings, Protective Atmospheric</td>
<td>STG 02</td>
<td>Thursday</td>
<td>9 to 9:30 a.m.</td>
</tr>
</tbody>
</table>

### COATINGS AND LININGS, PROTECTIVE: IMMERSION AND BURIED SERVICE - STG 03

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review ISO 21809-3, Petroleum and Natural Gas Industries—External Coatings for Buried or Submerged Pipelines Used in Pipeline Transportation Systems—Part 3: Field Joint Coatings</td>
<td>TG 479 (02, 04, 35)</td>
<td>Sunday</td>
<td>1 to 4 p.m.</td>
</tr>
<tr>
<td>NACE Standard RP0402, Field-Applied Fusion-Bonded Epoxy (FBE) Pipe Coating Systems for Girth Weld Joints: Application, Performance, and Quality Control</td>
<td>TG 249 (04, 35)</td>
<td>Monday</td>
<td>8 to 9 a.m.</td>
</tr>
<tr>
<td>Prequalification of Flow Efficiency Pipeline Coatings</td>
<td>TG 490 (35)</td>
<td>Monday</td>
<td>9 to 11 a.m.</td>
</tr>
<tr>
<td>Coating Systems (External) for Pipeline Directional Drill Applications</td>
<td>TG 352 (04, 35)</td>
<td>Monday</td>
<td>11 a.m. to noon</td>
</tr>
</tbody>
</table>
## Technical Committee Meetings

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>NACE Standard RP0303, Coatings, Heat-Shrink Sleeves for External Repair, Rehabilitations, and Weld Joints on Pipelines</td>
<td>TG 248 (04, 35)</td>
<td>Monday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>State of the Art in CUI Coating Systems</td>
<td>TG 425 (02, 04, 34, 36)</td>
<td>Monday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Standard Practice for Evaluating Protective Coatings for Use Under Insulation</td>
<td>TG 516 (02, 04, 43)</td>
<td>Tuesday</td>
<td>9 to 10 a.m.</td>
</tr>
<tr>
<td>NACE SP0298, Sheet Rubber Linings for Abrasion and Corrosion Service</td>
<td>TG 540</td>
<td>Tuesday</td>
<td>9 to 10 a.m.</td>
</tr>
<tr>
<td>Coatings, Polyurethane for Field Repair, Rehabilitation, and Girth Weld Joints on Pipelines</td>
<td>TG 281 (04, 35)</td>
<td>Tuesday</td>
<td>10 to 11:30 a.m.</td>
</tr>
<tr>
<td>Consequences of Coating Failures as Related to Interaction with Cathodic Protection</td>
<td>TG 523</td>
<td>Tuesday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>NACE Standard SP0185, Coating, Polyolefin Resin Systems</td>
<td>TG 265 (04, 05, 35)</td>
<td>Tuesday</td>
<td>2 to 3 p.m.</td>
</tr>
<tr>
<td>NACE Standard TM0104, Offshore Platform Ballast Water Tank Coating System Evaluation</td>
<td>TG 263 (33)</td>
<td>Tuesday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>NACE Standard TM0204, Offshore Platform Exterior Submerged Coatings: Standard Test Method</td>
<td>TG 264 (33)</td>
<td>Tuesday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>NACE TM0115, Cathodic Disbondment Test for Coated Steel Structures Under Cathodic Protection</td>
<td>TG 470</td>
<td>Tuesday</td>
<td>4 to 5 p.m.</td>
</tr>
<tr>
<td>Advances in Corrosion Under Insulation (CUI) Technologies</td>
<td>TEG 351X (04)</td>
<td>Wednesday</td>
<td>8 a.m. to noon</td>
</tr>
<tr>
<td>Plural Component Spray Standard Method</td>
<td>TG 565 (02)</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Offshore Coatings: Laboratory Testing Criteria; High Temperature, High Pressure, Corrosive, Service</td>
<td>TEG 526X (33)</td>
<td>Wednesday</td>
<td>2:30 to 4:30 p.m.</td>
</tr>
<tr>
<td>Coating Bending Test Method</td>
<td>TG 555 (02)</td>
<td>Wednesday</td>
<td>3 to 5 p.m.</td>
</tr>
<tr>
<td>Coatings and Linings, Protective Immersion and Buried Service</td>
<td>STG 03</td>
<td>Thursday</td>
<td>9:30 to 10 a.m.</td>
</tr>
</tbody>
</table>

### COATINGS AND LININGS, PROTECTIVE: SURFACE PREPARATION - STG 04

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonvisible, Nonwater-Soluble Contaminants Affecting Corrosion Protection</td>
<td>TEG 423X (02, 03)</td>
<td>Monday</td>
<td>1 to 2:30 p.m.</td>
</tr>
<tr>
<td>Soluble Salt Limits Based on Service Environment</td>
<td>TG 546</td>
<td>Tuesday</td>
<td>9:30 to 11 a.m.</td>
</tr>
<tr>
<td>Surface Preparation Issues</td>
<td>TEG 469X (02, 03)</td>
<td>Tuesday</td>
<td>2 to 3:30 p.m.</td>
</tr>
<tr>
<td>Coatings and Linings, Protective: Surface</td>
<td>STG 04</td>
<td>Thursday</td>
<td>10 to 10:30 a.m.</td>
</tr>
</tbody>
</table>

### CATHODIC/ANODIC PROTECTION - STG 05

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathodic Protection of Metallic Structures Submerged in Fresh Water</td>
<td>TG 526</td>
<td>Sunday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Cathodic Protection: Pipe-Type Cable</td>
<td>TEG 197X</td>
<td>Sunday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Cathodic Protection and Corrosion Control Research Development</td>
<td>TEG 016X (30, 31, 32, 35)</td>
<td>Sunday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Cathodic Protection</td>
<td>TEG 179X</td>
<td>Sunday</td>
<td>3 to 5 p.m.</td>
</tr>
<tr>
<td>Cathodic Protection Monitoring: Use of Coupons</td>
<td>TEG 338X (35)</td>
<td>Monday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Cathodic Protection Coupon Technology</td>
<td>TG 210 (35)</td>
<td>Monday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Alternating Current (AC) Power Systems, Adjacent: Corrosion Control and Related Safety Procedures</td>
<td>TG 025 (03, 35)</td>
<td>Monday</td>
<td>1 to 2:30 p.m.</td>
</tr>
<tr>
<td>AC Corrosion on Cathodically Protected Pipelines: Risk Assessment, Mitigation, and Monitoring</td>
<td>TG 430 (35)</td>
<td>Monday</td>
<td>2:30 to 4 p.m.</td>
</tr>
<tr>
<td>Corrosion Control Coordinating Committee</td>
<td>TEG 022X (01)</td>
<td>Tuesday</td>
<td>9 to 10 a.m.</td>
</tr>
<tr>
<td>Steel, Structural: Corrosion Control of Pileings in Nonmarine Applications</td>
<td>TG 018 (01, 03)</td>
<td>Tuesday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>ICCP of Internal Submerged Surfaces of Steel Water Storage Tanks</td>
<td>TG 167</td>
<td>Wednesday</td>
<td>9 to 10 a.m.</td>
</tr>
<tr>
<td>Galvanic Anode CP of Internal Submerged Surfaces of Steel Water Storage Tanks</td>
<td>TG 284 (11, 35)</td>
<td>Wednesday</td>
<td>9 to 10 a.m.</td>
</tr>
</tbody>
</table>
## Technical Committee Meetings

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathodic Protection Rectifier Safety</td>
<td>TG 388 (01, 30, 35)</td>
<td>Wednesday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Direct Current (DC) Operated Rail Transit and Mine Railroad Stray Current Mitigation—Review 10B189</td>
<td>TG 297 (03, 35)</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>DC and AC Transit Stray Current Problems</td>
<td>TEG 024X (03)</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Interference Problems</td>
<td>TEG 262X (35)</td>
<td>Wednesday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>Pipelines: Cathodic Protection of Concrete Pressure and Mortar-Coated Steel</td>
<td>TG 019 (01, 10, 35)</td>
<td>Wednesday</td>
<td>4 to 5 p.m.</td>
</tr>
<tr>
<td>Cathodic/Anodic Protection</td>
<td>STG 05</td>
<td>Thursday</td>
<td>1 to 3 p.m.</td>
</tr>
</tbody>
</table>

### CLEANING, CHEMICAL AND MECHANICAL - STG 06

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning: Chemical and Mechanical Cleaning Technical Information Exchange</td>
<td>TEG 188X</td>
<td>Tuesday</td>
<td>9 a.m. to noon</td>
</tr>
<tr>
<td>Cleaning, Chemical and Mechanical</td>
<td>STG 06</td>
<td>Tuesday</td>
<td>1 to 3 p.m.</td>
</tr>
</tbody>
</table>

### CORROSION MANAGEMENT - STG 08

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Role of Corrosion in Materials Stewardship and Sustainability</td>
<td>TEG 531X</td>
<td>Sunday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Economics of Corrosion: Standard</td>
<td>TG 200</td>
<td>Sunday</td>
<td>3 to 5 p.m.</td>
</tr>
<tr>
<td>Standard Framework for Establishing Corrosion Management Systems</td>
<td>TG 564</td>
<td>Wednesday</td>
<td>8 to 11 a.m.</td>
</tr>
<tr>
<td>Corrosion Prevention and Control Planning Standard</td>
<td>TG 527 (40)</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Corrosion Management</td>
<td>STG 08</td>
<td>Wednesday</td>
<td>3 to 5 p.m.</td>
</tr>
</tbody>
</table>

### NONMETALLIC MATERIALS OF CONSTRUCTION - STG 10

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Integrity Management</td>
<td>TEG 529X</td>
<td>Monday</td>
<td>8 a.m. to 3:30 p.m.</td>
</tr>
<tr>
<td>Corrosion Solutions for the Chemical Process Industry with Polymer-Based Materials</td>
<td>TEG 191X (39)</td>
<td>Tuesday</td>
<td>9 a.m. to 5 p.m.</td>
</tr>
<tr>
<td>Nonmetallic Materials of Construction: Expert Panel Discussion</td>
<td>TEG 239X (39)</td>
<td>Wednesday</td>
<td>8 a.m. to noon</td>
</tr>
<tr>
<td>Nonmetallic Materials of Construction</td>
<td>STG 10</td>
<td>Wednesday</td>
<td>1 to 5 p.m.</td>
</tr>
</tbody>
</table>

### WATER TREATMENT SYSTEMS - STG 11

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Practice for Monitoring Cooling Water Systems</td>
<td>TG 235 (62)</td>
<td>Sunday</td>
<td>9 to 10 a.m.</td>
</tr>
<tr>
<td>Cooling Water Equipment, Initial Conditioning</td>
<td>TG 234</td>
<td>Sunday</td>
<td>10 to 11 a.m.</td>
</tr>
<tr>
<td>Steam Generating Systems: Shut-Down/Lay-Up/Start-Up</td>
<td>TG 160</td>
<td>Sunday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Practical Applications of Water Treatment in Industrial and Commercial Systems</td>
<td>TEG 503X</td>
<td>Sunday</td>
<td>2 to 5 p.m.</td>
</tr>
<tr>
<td>Control of Corrosion, Deposition, and Microbiological Growth in Recirculating Water Systems in Buildings</td>
<td>TG 157 (61)</td>
<td>Monday</td>
<td>8 to 9:30 a.m.</td>
</tr>
<tr>
<td>Recovery and Repassivation After Low pH Excursions in Open Recirculating Cooling Water Systems</td>
<td>TG 375</td>
<td>Monday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Building Fire Protection Systems: Corrosion and Deposit Control</td>
<td>TEG 159X</td>
<td>Monday</td>
<td>1 to 2:30 p.m.</td>
</tr>
<tr>
<td>Fire Protection Systems</td>
<td>TG 381</td>
<td>Monday</td>
<td>2:30 to 3:30 p.m.</td>
</tr>
<tr>
<td>Biocide Application/Misapplication</td>
<td>TEG 149X</td>
<td>Tuesday</td>
<td>9 a.m. to noon</td>
</tr>
<tr>
<td>Boiler Waterside Failure Analysis</td>
<td>TEG 163X (62)</td>
<td>Tuesday</td>
<td>1 to 4 p.m.</td>
</tr>
<tr>
<td>Water Treatment Systems</td>
<td>STG 11</td>
<td>Tuesday</td>
<td>4 to 5:30 p.m.</td>
</tr>
</tbody>
</table>
### Technical Committee Meetings

#### OIL AND GAS PRODUCTION—CATHODIC PROTECTION - STG 30

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cathodic Protection in Seawater—Discussion of Current Topics</td>
<td>TEG 166X</td>
<td>Monday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Metallurgical and Inspection Requirements for Cast Galvanic Anodes for Offshore Applications</td>
<td>TG 454</td>
<td>Monday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Corrosion Control of Submerged Areas of Offshore Steel Structures</td>
<td>TG 170 (05)</td>
<td>Monday</td>
<td>1 to 3:30 p.m.</td>
</tr>
<tr>
<td>Petroleum, Petrochemical, and Natural Gas Industries—Cathodic Protection of Pipeline Transportation</td>
<td>TG 169 (05, 35)</td>
<td>Monday</td>
<td>2:30 to 3:30 p.m.</td>
</tr>
<tr>
<td>Oil and Gas Production—Cathodic Protection</td>
<td>STG 30</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
</tbody>
</table>

#### OIL AND GAS PRODUCTION—CORROSION AND SCALE INHIBITION - STG 31

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil and Gas Production, Sour Corrosion: Information Exchange</td>
<td>TEG 282X (60, 61, 62)</td>
<td>Sunday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Flow Assurance in Oil and Gas Production: Information Exchange</td>
<td>TEG 202X (61, 62)</td>
<td>Sunday</td>
<td>1 to 5 p.m.</td>
</tr>
<tr>
<td>Black Powder in Gas Pipelines</td>
<td>TEG 413X (35, 60, 61)</td>
<td>Monday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Downhole Corrosion and Scale Inhibitor Application via Capillary Tubing</td>
<td>TG 512 (60, 61)</td>
<td>Monday</td>
<td>9 to 11 a.m.</td>
</tr>
<tr>
<td>Oil and Gas Exploration Corrosion: Information Exchange</td>
<td>TEG 514X (32, 60)</td>
<td>Monday</td>
<td>9 a.m. to noon</td>
</tr>
<tr>
<td>Oil and Gas Production, Corrosion Inhibitors—Laboratory Evaluations: Information Exchange</td>
<td>TEG 253X (62)</td>
<td>Monday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Underdeposit Corrosion</td>
<td>TEG 092X (11, 38, 60, 61)</td>
<td>Monday</td>
<td>1 to 2:30 p.m.</td>
</tr>
<tr>
<td>Oil and Gas Production, Erosion Management</td>
<td>TG 245</td>
<td>Monday</td>
<td>1 to 3:30 p.m.</td>
</tr>
<tr>
<td>Bacterial Growth in Oilfield Systems—Field Monitoring: Review of NACE Standard TM0194-2014</td>
<td>TG 214 (60)</td>
<td>Monday</td>
<td>2:30 to 4 p.m.</td>
</tr>
<tr>
<td>Oil and Gas Production, Corrosion Prediction: Information Exchange</td>
<td>TEG 201X (60)</td>
<td>Tuesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Oil and Gas Production, CO₂ Corrosion: Information Exchange</td>
<td>TEG 059X (60, 61)</td>
<td>Tuesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Oil and Gas Production, Oil Sands: Information Exchange</td>
<td>TEG 341X (11, 33, 34)</td>
<td>Tuesday</td>
<td>2 to 4:30 p.m.</td>
</tr>
<tr>
<td>Technology Roadmap—Corrosion in Oil and Gas Production</td>
<td>TEG 513X</td>
<td>Tuesday</td>
<td>3 to 5 p.m.</td>
</tr>
<tr>
<td>Corrosion Inhibitor Program Management for Oil and Gas Fields</td>
<td>TG 550 (08, 61)</td>
<td>Wednesday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Internal Corrosion Monitoring of Subsea Production and Injection Systems</td>
<td>TG 445 (62)</td>
<td>Wednesday</td>
<td>2 to 4 p.m.</td>
</tr>
<tr>
<td>Oil and Gas Production—Corrosion and Scale Inhibition</td>
<td>STG 31</td>
<td>Thursday</td>
<td>9 to 11 a.m.</td>
</tr>
</tbody>
</table>

#### OIL AND GAS PRODUCTION—METALLURGY - STG 32

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum, Petrochemical, and Natural Gas Industries—Materials for Use in H₂S-Containing Environment</td>
<td>TG 299</td>
<td>Sunday</td>
<td>1 to 4:30 p.m.</td>
</tr>
<tr>
<td>Slow Strain Rate Test Method for Screening Corrosion-Resistant Alloys for SCC in Sour Oilfield</td>
<td>TG 133</td>
<td>Monday</td>
<td>7:30 to 9 a.m.</td>
</tr>
<tr>
<td>Computerized Environmental Cracking Database</td>
<td>TG 257 (34, 62)</td>
<td>Monday</td>
<td>8 to 9 a.m.</td>
</tr>
<tr>
<td>Test Method for Resistance to Environmentally Induced Hydrogen Stress Cracking in Welds</td>
<td>TG 554 (30, 34)</td>
<td>Monday</td>
<td>9 to 10:30 a.m.</td>
</tr>
<tr>
<td>Four-Point Bend Test Method</td>
<td>TG 494 (62)</td>
<td>Monday</td>
<td>10:30 a.m. to noon</td>
</tr>
<tr>
<td>Oil and Gas Production Materials Information Exchange</td>
<td>TEG 374X (33)</td>
<td>Monday</td>
<td>1 to 3:30 p.m.</td>
</tr>
<tr>
<td>Double-Cantilever-Beam (DCB) Test</td>
<td>WG 085c (62)</td>
<td>Tuesday</td>
<td>9 to 10:30 a.m.</td>
</tr>
</tbody>
</table>
# Technical Committee Meetings

## Metallic Materials for Sucker-Rod Pumps for Corrosive Oilfield Environments
- **TG 084**
- **Tuesday**
- **9 to 10:30 a.m.**

## Cracking, Stepwise: Pipeline Steels
- **TG 082 (34, 62)**
- **Tuesday**
- **10:30 a.m. to noon**

## Environmental Prediction for Material Selection in Oil and Gas Production
- **TG 571 (31)**
- **Tuesday**
- **1 to 2 p.m.**

## Sulfide Corrosion Cracking: Metallic Materials Testing Techniques
- **TG 085 (62)**
- **Tuesday**
- **2 to 4:30 p.m.**

## Officers Meeting
- **STG 32**
- **Tuesday**
- **4:30 to 6 p.m.**

## Oil and Gas Production—Metallurgy
- **STG 32**
- **Thursday**
- **3 to 5 p.m.**

## OIL AND GAS PRODUCTION—NONMETALLICS AND WEAR COATINGS (METALLIC) - STG 33

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonmetallic Materials for Onshore and Offshore Facilities</td>
<td>TEG 500X</td>
<td>Sunday</td>
<td>8 a.m. to 5 p.m.</td>
</tr>
<tr>
<td>Insulation for Upstream and Downstream Oil and Gas Operations</td>
<td>TEG 086X</td>
<td>Monday</td>
<td>8 a.m. to noon</td>
</tr>
<tr>
<td>Liquid-Applied Internal Protective Coatings for Oilfield Production Equipment</td>
<td>TG 506</td>
<td>Monday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>Evaluating Elastomeric Materials in Carbon Dioxide Decompression Environments</td>
<td>TG 913</td>
<td>Monday</td>
<td>2 to 3:30 p.m.</td>
</tr>
<tr>
<td>Accelerated Testing of Nonmetallic Materials</td>
<td>TEG 501X</td>
<td>Tuesday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Coating and Lining Technology for Oil and Gas</td>
<td>TEG 524X</td>
<td>Tuesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Oil and Gas Production—Nonmetals and Wear Coatings (Metallic)</td>
<td>STG 33</td>
<td>Tuesday</td>
<td>3 to 5 p.m.</td>
</tr>
</tbody>
</table>

## PETROLEUM REFINING AND GAS PROCESSING - STG 34

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materials and Fabrication Practices for New Pressure Vessels Used in Wet H₂S Refinery Service</td>
<td>TG 301 (32)</td>
<td>Monday</td>
<td>8 to 9:30 a.m.</td>
</tr>
<tr>
<td>Refinery Injection and Process Mixing Points</td>
<td>TG 174</td>
<td>Monday</td>
<td>9:30 to 10:30 a.m.</td>
</tr>
<tr>
<td>Petroleum Refining Sulfide Stress Cracking (SSC): Review of NACE Standard MR0103</td>
<td>TG 231 (60)</td>
<td>Monday</td>
<td>10:30 to 11 a.m.</td>
</tr>
<tr>
<td>Crude Unit Distillation Column Overhead Corrosion</td>
<td>TG 342</td>
<td>Monday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Carbonate Stress Corrosion Cracking in Refinery Alkaline Sour Waters</td>
<td>TG 347 (60)</td>
<td>Monday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>Joint API/NACE Advisory Committee—API 751 Safe Operation of HF Alkylation Units—Corrosion and Materials Sections</td>
<td>TG 510</td>
<td>Monday</td>
<td>2 to 3 p.m.</td>
</tr>
<tr>
<td>Petroleum Refinery Corrosion Specialist Certification and Oversight of Refining Industry Corrosion Control Course Content</td>
<td>TG 393</td>
<td>Monday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>Refining Industry Information Exchange: Session I</td>
<td>TEG 205X</td>
<td>Tuesday</td>
<td>9 a.m. to noon</td>
</tr>
<tr>
<td>Gas Treating Control Systems Corrosion Minimization</td>
<td>TEG 113X</td>
<td>Tuesday</td>
<td>10:30 a.m. to noon</td>
</tr>
<tr>
<td>Refining Industry Information Exchange: Session II</td>
<td>TEG 205X</td>
<td>Tuesday</td>
<td>1 to 5 p.m.</td>
</tr>
<tr>
<td>Petroleum Refining and Gas Processing</td>
<td>STG 34</td>
<td>Thursday</td>
<td>8 to 10 a.m.</td>
</tr>
</tbody>
</table>

## PIPELINES, TANKS, AND WELL CASINGS - STG 35

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipeline Direct Assessment Methodology</td>
<td>TG 041</td>
<td>Sunday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Pipeline External Corrosion Confirmatory Direct Assessment</td>
<td>TG 377 (05)</td>
<td>Sunday</td>
<td>10 to 11:30 a.m.</td>
</tr>
<tr>
<td>External Cathodic Protection of On-Grade Carbon Steel Storage Tank Bottoms</td>
<td>TG 013 (05)</td>
<td>Sunday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Pipeline Coating: Aboveground Techniques for the Underground Evaluation of Condition</td>
<td>TG 294 (03, 05)</td>
<td>Sunday</td>
<td>1 to 5 p.m.</td>
</tr>
<tr>
<td>Standard for External Corrosion Control of On-Grade Carbon Steel Storage Tank Bottoms</td>
<td>TG 543 (05)</td>
<td>Sunday</td>
<td>3 to 5 p.m.</td>
</tr>
<tr>
<td>Well Casings, Corrosion Control: Information Exchange</td>
<td>TEG 080X</td>
<td>Monday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Application of Cathodic Protection for External Surfaces of Steel Well Casings</td>
<td>TG 446 (05)</td>
<td>Monday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>3D Laser and Structured Light</td>
<td>TG 502 (05)</td>
<td>Monday</td>
<td>1 to 3:30 p.m.</td>
</tr>
</tbody>
</table>
### Technical Committee Meetings

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Guidance for Using Self-Propelled In-Line Inspection Devices in the Direct Examination Phase of External Corrosion Direct Assessment</td>
<td>TG 522 (31, 41)</td>
<td>Monday</td>
<td>1:30 to 3:30 p.m.</td>
</tr>
<tr>
<td>Pipelines, Steel-Cased</td>
<td>TG 012 (05)</td>
<td>Tuesday</td>
<td>9 to 11 a.m.</td>
</tr>
<tr>
<td>Monitoring of Pipeline Casing Using CP Coupons, ER Probes, Permanent Reference Electrodes, etc. Within the Annular Space of the Casing</td>
<td>TG 547 (05)</td>
<td>Tuesday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Pipeline Crossings: Steel-Cased, Thrust-Bored, and HDD</td>
<td>TEG 208X (05)</td>
<td>Tuesday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>Mitigation and Prioritization Strategies for Casings</td>
<td>TG 567</td>
<td>Tuesday</td>
<td>2 to 3:30 p.m.</td>
</tr>
<tr>
<td>Molecular Microbiological Methods—Sample Handling and Laboratory Processing</td>
<td>TG 561 (60)</td>
<td>Wednesday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Pipeline Corrosion Management</td>
<td>TG 370 (02, 03, 05)</td>
<td>Wednesday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Steel Pipelines and Piping Systems: Internal Corrosion Control</td>
<td>TG 038</td>
<td>Wednesday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>Pipelines: In-Line Inspection</td>
<td>TEG 267X</td>
<td>Wednesday</td>
<td>2 to 4 p.m.</td>
</tr>
<tr>
<td>Pipelines, Tanks, and Well Casings</td>
<td>STG 35</td>
<td>Thursday</td>
<td>1 to 3 p.m.</td>
</tr>
</tbody>
</table>

### PROCESS INDUSTRY—MATERIALS PERFORMANCE IN CHEMICALS - STG 36

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Failure Prevention Case Histories</td>
<td>TEG 118X (39)</td>
<td>Monday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Hydrochloric Acid and Chlorine: Materials and Experiences</td>
<td>TEG 398X (10)</td>
<td>Monday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Sulfuric Acid—Material and Experiences</td>
<td>TEG 115X</td>
<td>Wednesday</td>
<td>8 to 10:30 a.m.</td>
</tr>
<tr>
<td>Design, Fabrication, and Inspection of Tanks for Storage of Concentrated H₂SO₄ and Oleum</td>
<td>TG 217 (34)</td>
<td>Wednesday</td>
<td>10:30 a.m. to noon</td>
</tr>
<tr>
<td>Supercritical and Other High-Temperature/High-Pressure Liquid Environments: Corrosion of Materials</td>
<td>TEG 121X</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Control of Corrosion Under Thermal Insulation and Fireproofing Materials—A Systems Approach</td>
<td>TG 325 (03, 04)</td>
<td>Wednesday</td>
<td>3 to 5 p.m.</td>
</tr>
<tr>
<td>Field Corrosion Evaluation Using Metallic Test Specimens</td>
<td>TG 531</td>
<td>Thursday</td>
<td>8:30 to 10 a.m.</td>
</tr>
<tr>
<td>Stress Corrosion Cracking of Carbon and Low-Alloy Steels in Anhydrous Ammonia Service</td>
<td>TG 433</td>
<td>Thursday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Hydrofluoric Acid: Materials for Receiving, Handling, and Storing</td>
<td>TEG 119X (34)</td>
<td>Thursday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>Hydrofluoric Acid and Hydrogen Fluoride: Review of NACE Publication 5A171</td>
<td>TG 358 (34)</td>
<td>Thursday</td>
<td>2 to 3 p.m.</td>
</tr>
</tbody>
</table>

### PROCESS INDUSTRY—HIGH TEMPERATURE - STG 37

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reformer Components: Materials Issues</td>
<td>TEG 270X (34, 39)</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Materials, High-Temperature: Current Issues</td>
<td>TEG 126X (39)</td>
<td>Wednesday</td>
<td>3:30 to 5 p.m.</td>
</tr>
<tr>
<td>Process Industry—High Temperature</td>
<td>STG 37</td>
<td>Wednesday</td>
<td>5 to 6 p.m.</td>
</tr>
</tbody>
</table>

### PROCESS INDUSTRY—PULP, PAPER, AND BIOMASS CONVERSION - STG 38

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Industry—Pulp, Paper, and Biomass Conversion</td>
<td>STG 38</td>
<td>Tuesday</td>
<td>9 to 11 a.m.</td>
</tr>
</tbody>
</table>

### PROCESS INDUSTRIES—MATERIALS APPLICATIONS AND EXPERIENCES - STG 39

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metals: Reactive</td>
<td>TEG 120X</td>
<td>Tuesday</td>
<td>9 a.m. to noon</td>
</tr>
<tr>
<td>Stainless Steels, Duplex and Ferritic: Application</td>
<td>TEG 114X</td>
<td>Tuesday</td>
<td>1 to 2:30 p.m.</td>
</tr>
<tr>
<td>Stainless Steels: Austenitic and Nickel Alloys</td>
<td>TEG 116X</td>
<td>Tuesday</td>
<td>2:30 to 4 p.m.</td>
</tr>
</tbody>
</table>
## Technical Committee Meetings

### ELECTRIC UTILITY GENERATION, TRANSMISSION, AND DISTRIBUTION - STG 41

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Cathodic Protection for Nuclear Power Plant Piping Systems</td>
<td>TG 491 (05, 35)</td>
<td>Sunday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Nuclear Buried and Underground Piping</td>
<td>TEG 465X (03, 05, 35)</td>
<td>Sunday</td>
<td>10 to 11 a.m.</td>
</tr>
<tr>
<td>Nuclear Buried Piping</td>
<td>TG 404 (03, 05, 35)</td>
<td>Sunday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Geothermal System Corrosion</td>
<td>TEG 182X</td>
<td>Sunday</td>
<td>1 to 2:30 p.m.</td>
</tr>
<tr>
<td>Power Generation and Delivery Education Roadmap</td>
<td>TEG 473X</td>
<td>Sunday</td>
<td>2:30 to 3 p.m.</td>
</tr>
<tr>
<td>Nuclear System Corrosion</td>
<td>TEG 224X</td>
<td>Sunday</td>
<td>3 to 5 p.m.</td>
</tr>
<tr>
<td>Renewable Energy Facilities Design, Construction, and Commissioning</td>
<td>TEG 530X</td>
<td>Wednesday</td>
<td>8 a.m. to noon</td>
</tr>
<tr>
<td>Electric Utility Transmission and Distribution Corrosion and Grounding: Discussion of Issues</td>
<td>TEG 368X</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Atmospheric Above Grade Inspection and Assessment of Corrosion on Steel Electrical Transmission,</td>
<td>TG 529 (02)</td>
<td>Wednesday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>Electric Utility Generation, Transmission, and Distribution</td>
<td>STG 41</td>
<td>Wednesday</td>
<td>4 to 5:30 p.m.</td>
</tr>
</tbody>
</table>

### TRANSPORTATION, LAND - STG 43

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation, Land: Session I</td>
<td>STG 43</td>
<td>Tuesday</td>
<td>9 a.m. to noon</td>
</tr>
<tr>
<td>Transportation, Land: Session II</td>
<td>STG 43</td>
<td>Wednesday</td>
<td>9 a.m. to noon</td>
</tr>
</tbody>
</table>

### MARINE CORROSION: SHIPS AND STRUCTURES - STG 44

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citric Acid-Based Stainless Steel Passivation of Tankers and Storage Tanks</td>
<td>TG 570</td>
<td>Monday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Discussion on Ecological Risks of BioFouling</td>
<td>TEG 532X</td>
<td>Monday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Marine Vessel Corrosion</td>
<td>TEG181X</td>
<td>Monday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>Standard for Underwater Evaluation of Degree of Fouling on Ship Hulls</td>
<td>TG 475</td>
<td>Monday</td>
<td>2 to 3 p.m.</td>
</tr>
<tr>
<td>Splash Zone Site—Applied Corrosion Protection System</td>
<td>TG 542 (02, 03)</td>
<td>Thursday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Marine Corrosion of Copper Alloys</td>
<td>TEG 523X</td>
<td>Thursday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Marine Corrosion: Ships and Structures</td>
<td>STG 44</td>
<td>Thursday</td>
<td>1 to 2:30 p.m.</td>
</tr>
</tbody>
</table>

### POLLUTION CONTROL, WASTE INCINERATION, AND PROCESS WASTE - STG 45

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welding: Flue Gas Desulfurization (FGD) Techniques</td>
<td>TG 129 (39)</td>
<td>Sunday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>Stainless Cr-Ni Steel and Ni-Alloy Roll- and Explosion-Bonded Clad Plate for Air Pollution Control Equipment</td>
<td>TG 199 (36)</td>
<td>Sunday</td>
<td>3 to 4 p.m.</td>
</tr>
<tr>
<td>White Paper: Corrosion Prevention and Control for Marine Scrubbers</td>
<td>TG 575 (44)</td>
<td>Sunday</td>
<td>3 to 4 p.m.</td>
</tr>
</tbody>
</table>

### CORROSION IN MINING AND MINERAL PROCESSING - STG 47

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Mitigation of Internal Corrosion in Non-Lined, Non-Coated Pipelines Carrying Seawater for the Mining Industry</td>
<td>TG 563 (35)</td>
<td>Sunday</td>
<td>1 to 5 p.m.</td>
</tr>
<tr>
<td>Corrosion in Mining and Mineral Processing</td>
<td>STG 47</td>
<td>Sunday</td>
<td>1 to 5 p.m.</td>
</tr>
<tr>
<td>Concrete and Structural Steel in Mining</td>
<td>TEG 929X</td>
<td>Sunday</td>
<td>1 to 5 p.m.</td>
</tr>
<tr>
<td>Slurry Pipeline Corrosion Management</td>
<td>TG 559 (31)</td>
<td>Monday</td>
<td>2:30 to 4 p.m.</td>
</tr>
<tr>
<td>Materials Selection and Corrosion Control in the Mineral Processing Industries</td>
<td>TEG 509X</td>
<td>Tuesday</td>
<td>9 a.m. to noon</td>
</tr>
</tbody>
</table>
## Technical Committee Meetings

### Corrosion Mechanisms - STG 60

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized Corrosion</td>
<td>TEG 407X (31)</td>
<td>Sunday</td>
<td>8 to 9 a.m.</td>
</tr>
<tr>
<td>Nanotechnology and Corrosion</td>
<td>TEG 474X</td>
<td>Sunday</td>
<td>9 to 11 a.m.</td>
</tr>
<tr>
<td>Environmentally Assisted Cracking</td>
<td>TEG 186X</td>
<td>Sunday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Atmospheric Corrosion</td>
<td>TEG 189X (02, 40, 62)</td>
<td>Sunday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Microbiologically Influenced Corrosion</td>
<td>TEG 187X (11)</td>
<td>Sunday</td>
<td>3 to 5 p.m.</td>
</tr>
<tr>
<td>Biomedical Implant Device Corrosion</td>
<td>TEG 331X</td>
<td>Wednesday</td>
<td>8 to 11 a.m.</td>
</tr>
<tr>
<td>Biodegradable Magnesium Alloys</td>
<td>TG 495</td>
<td>Wednesday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Additive Manufacturing Corrosion Issues: Session I</td>
<td>TEG 569X (32)</td>
<td>Wednesday</td>
<td>1 to 4 p.m.</td>
</tr>
<tr>
<td>Additive Manufacturing Corrosion Issues: Session II</td>
<td>TEG 569X (32)</td>
<td>Thursday</td>
<td>8 a.m. to noon</td>
</tr>
<tr>
<td>Corrosion Mechanisms</td>
<td>STG 60</td>
<td>Thursday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Flow Corrosion in Oil and Gas Production</td>
<td>TEG 213X</td>
<td>Thursday</td>
<td>3 to 5 p.m.</td>
</tr>
</tbody>
</table>

### Inhibition—Corrosion and Scaling - STG 61

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top-of-Line Corrosion</td>
<td>TEG 515X</td>
<td>Sunday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>State-of-the-Art Research on Corrosion Inhibitors</td>
<td>TEG 094X</td>
<td>Sunday</td>
<td>1 to 5 p.m.</td>
</tr>
<tr>
<td>Inhibitors, Corrosion and Scale/Deposit</td>
<td>TEG 184X (31)</td>
<td>Sunday</td>
<td>8 to 11 a.m.</td>
</tr>
<tr>
<td>Vapor Corrosion Inhibitors and Rust Preventives for Interim (Temporary) Corrosion Protection</td>
<td>TG 261 (02)</td>
<td>Wednesday</td>
<td>11 a.m. to noon</td>
</tr>
<tr>
<td>Vapor-Transported Corrosion Inhibitors &amp; Rust Preventives for Interim (Temporary) Corrosion Protection</td>
<td>TEG 093X (11)</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Inhibition—Corrosion and Scaling</td>
<td>STG 61</td>
<td>Wednesday</td>
<td>3 to 5 p.m.</td>
</tr>
</tbody>
</table>

### Corrosion Monitoring and Measurement—Science and Engineering Applications - STG 62

<table>
<thead>
<tr>
<th>Name</th>
<th>Committee(s)</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrochemical Measurements—Information Exchange</td>
<td>TEG 097X (41)</td>
<td>Sunday</td>
<td>9 a.m. to 5 p.m.</td>
</tr>
<tr>
<td>Electrochemical Measurements</td>
<td>TEG 097X (41)</td>
<td>Sunday</td>
<td>2 to 3 p.m.</td>
</tr>
<tr>
<td>Acoustic Emission Testing and Measurement</td>
<td>TEG 098X</td>
<td>Sunday</td>
<td>3 to 5 p.m.</td>
</tr>
<tr>
<td>Sensors: Corrosion and Corrosiveness Sensor Technology</td>
<td>TEG 100X (41)</td>
<td>Wednesday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Hydrogen Permeation Technology—Online</td>
<td>TEG 108X (31, 34)</td>
<td>Wednesday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Techniques for Monitoring Corrosion—Field Experience</td>
<td>TEG 391X (31)</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Corrosion Monitoring and Measurement—Science and Engineering Applications</td>
<td>STG 62</td>
<td>Wednesday</td>
<td>3 to 5 p.m.</td>
</tr>
</tbody>
</table>
### Administrative Committee Meetings

<table>
<thead>
<tr>
<th>Name</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>NACE Foundation Board of Directors</td>
<td>Friday</td>
<td>8 a.m. to 5 p.m.</td>
</tr>
<tr>
<td>NACE Board of Directors</td>
<td>Saturday</td>
<td>7:30 a.m. to 5:30 p.m.</td>
</tr>
<tr>
<td>Area Coordination Committee</td>
<td>Sunday</td>
<td>8 to 11 a.m.</td>
</tr>
<tr>
<td>Annual Conference Program Committee (ACPC) Session I</td>
<td>Sunday</td>
<td>9 to 11 a.m.</td>
</tr>
<tr>
<td>MP Editorial Advisory Board</td>
<td>Sunday</td>
<td>10 a.m. to noon</td>
</tr>
<tr>
<td>Publications Activities Committee</td>
<td>Sunday</td>
<td>1 to 4:30 p.m.</td>
</tr>
<tr>
<td>Technical Coordination Committee (TCC) Session I</td>
<td>Sunday</td>
<td>1:30 to 4:30 p.m.</td>
</tr>
<tr>
<td>Planning Committee</td>
<td>Monday</td>
<td>9 a.m. to 1 p.m.</td>
</tr>
<tr>
<td>Past Presidents Council</td>
<td>Monday</td>
<td>10 a.m. to 1 p.m.</td>
</tr>
<tr>
<td>TCC Advisory Committee on Operations</td>
<td>Monday</td>
<td>1 to 5 p.m.</td>
</tr>
<tr>
<td>Education Committee Strategic Planning Meeting</td>
<td>Monday</td>
<td>1:30 to 4 p.m.</td>
</tr>
<tr>
<td>Policy Committee</td>
<td>Monday</td>
<td>1:30 to 5 p.m.</td>
</tr>
<tr>
<td>ACPC Officer Training</td>
<td>Tuesday</td>
<td>11:30 a.m. to 1 p.m.</td>
</tr>
<tr>
<td>Coating Inspector Program Committee</td>
<td>Wednesday</td>
<td>9 to 10:30 a.m.</td>
</tr>
<tr>
<td>ACPC Session II</td>
<td>Wednesday</td>
<td>9 to 11 a.m.</td>
</tr>
<tr>
<td>Internal Corrosion Meeting</td>
<td>Wednesday</td>
<td>10:30 a.m. to noon</td>
</tr>
<tr>
<td>Public Policy &amp; Outreach (PPOC)</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Cathodic Protection Committee</td>
<td>Wednesday</td>
<td>1:30 to 3 p.m.</td>
</tr>
<tr>
<td>TCC Reference Publications Committee</td>
<td>Wednesday</td>
<td>2 to 4 p.m.</td>
</tr>
<tr>
<td>Research Committee</td>
<td>Thursday</td>
<td>7:30 to 11:30 a.m.</td>
</tr>
<tr>
<td>Expositions Committee</td>
<td>Thursday</td>
<td>8 to 10 a.m.</td>
</tr>
<tr>
<td>Conferences and Exhibits Activities Committee</td>
<td>Thursday</td>
<td>10 to 11:30 a.m.</td>
</tr>
<tr>
<td>TCC Session II</td>
<td>Thursday</td>
<td>11:30 a.m. to 2:30 p.m.</td>
</tr>
<tr>
<td>Technical and Research Activities Committee</td>
<td>Thursday</td>
<td>3 to 4:30 p.m.</td>
</tr>
</tbody>
</table>

### ISO Meetings

<table>
<thead>
<tr>
<th>Name</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>MR0175/ISO 15156 Maintenance Panel</td>
<td>Sunday</td>
<td>8 a.m. to noon</td>
</tr>
<tr>
<td>ISO TC 156 TAG Corrosion of Metals and Alloys</td>
<td>Wednesday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>ISO TC 35 TAG Paints and Varnishes</td>
<td>Wednesday</td>
<td>3 to 5 p.m.</td>
</tr>
</tbody>
</table>
### OTHER MEETINGS

<table>
<thead>
<tr>
<th>Name</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Train the Trainer Session I</td>
<td>Friday</td>
<td>11 a.m. to 6 p.m.</td>
</tr>
<tr>
<td>Train the Trainer Session II</td>
<td>Saturday</td>
<td>8:30 a.m. to 5 p.m.</td>
</tr>
<tr>
<td>NACE Institute Board of Directors Session I</td>
<td>Sunday</td>
<td>8:30 to 11:30 a.m.</td>
</tr>
<tr>
<td>TCC 101 Session I</td>
<td>Sunday</td>
<td>9 to 10 a.m.</td>
</tr>
<tr>
<td>Western Area Board of Trustees</td>
<td>Sunday</td>
<td>11 a.m. to 4 p.m.</td>
</tr>
<tr>
<td>Latin American Area Board of Trustees</td>
<td>Sunday</td>
<td>noon to 5 p.m.</td>
</tr>
<tr>
<td>East Asia &amp; Pacific Area Board of Trustees</td>
<td>Sunday</td>
<td>1 to 4 p.m.</td>
</tr>
<tr>
<td>NACE International Institute (NII)—Specialty Board for Pipeline Certifications</td>
<td>Sunday</td>
<td>2:30 to 5 p.m.</td>
</tr>
<tr>
<td>General Membership Meeting</td>
<td>Sunday</td>
<td>4:30 to 5 p.m.</td>
</tr>
<tr>
<td>Opening Reception</td>
<td>Sunday</td>
<td>5:30 to 7:30 p.m.</td>
</tr>
<tr>
<td>Speaker’s Breakfast</td>
<td>Monday</td>
<td>7 to 8 a.m.</td>
</tr>
<tr>
<td>Central Area Board of Trustees</td>
<td>Monday</td>
<td>8 to noon</td>
</tr>
<tr>
<td>Student Poster Orientation</td>
<td>Monday</td>
<td>9 to 10:30 a.m.</td>
</tr>
<tr>
<td>TCC 101 Session II</td>
<td>Monday</td>
<td>9 to 10:00 a.m.</td>
</tr>
<tr>
<td>Awards Committee</td>
<td>Monday</td>
<td>9 a.m. to noon</td>
</tr>
<tr>
<td>CORROSION Editorial Board</td>
<td>Monday</td>
<td>11:30 a.m. to 1:30 p.m.</td>
</tr>
<tr>
<td>Eastern Area Board of Trustees</td>
<td>Monday</td>
<td>1 to 5 p.m.</td>
</tr>
<tr>
<td>NACE U Student Meeting</td>
<td>Monday</td>
<td>1 to 2 p.m.</td>
</tr>
<tr>
<td>NiICAP Contractor Subcommittee</td>
<td>Monday</td>
<td>1 to 3 p.m.</td>
</tr>
<tr>
<td>Keynote</td>
<td>Monday</td>
<td>3:30 to 4:30 p.m.</td>
</tr>
<tr>
<td>MP Corrosion Innovation of the Year Awards Ceremony</td>
<td>Monday</td>
<td>4:45 to 5 p.m.</td>
</tr>
<tr>
<td>Exhibit Hall Grand Opening</td>
<td>Monday</td>
<td>5 to 7 p.m.</td>
</tr>
<tr>
<td>Speaker’s Breakfast</td>
<td>Tuesday</td>
<td>7 to 8 a.m.</td>
</tr>
<tr>
<td>Fellows Breakfast</td>
<td>Tuesday</td>
<td>7 to 9 a.m.</td>
</tr>
<tr>
<td>Plenary Lecture</td>
<td>Tuesday</td>
<td>8 to 9 a.m.</td>
</tr>
<tr>
<td>Northern Area Board of Trustees</td>
<td>Tuesday</td>
<td>8 to 9:30 a.m.</td>
</tr>
<tr>
<td>World Corrosion Organization Board of Directors</td>
<td>Tuesday</td>
<td>8 a.m. to noon</td>
</tr>
<tr>
<td>Headshot Station</td>
<td>Tuesday</td>
<td>8 a.m. to 5 p.m.</td>
</tr>
<tr>
<td>International Education Partner Meeting</td>
<td>Tuesday</td>
<td>9 to 11 a.m.</td>
</tr>
<tr>
<td>Protective Coating Workshop</td>
<td>Tuesday</td>
<td>10 a.m. to 5 p.m.</td>
</tr>
<tr>
<td>NII Certification Exam Development—Open Forum Session I</td>
<td>Tuesday</td>
<td>10:30 a.m. to noon</td>
</tr>
<tr>
<td>NII Specialty Board for Oil &amp; Gas and Process Facility Certifications</td>
<td>Tuesday</td>
<td>10:30 a.m. to 12:30 p.m.</td>
</tr>
<tr>
<td>Whitney Lecture</td>
<td>Tuesday</td>
<td>11:15 to 11:45 a.m.</td>
</tr>
<tr>
<td>European Area Board of Trustees</td>
<td>Tuesday</td>
<td>12:30 to 3 p.m.</td>
</tr>
<tr>
<td>Chinese Society for Corrosion and Protection Seminar</td>
<td>Tuesday</td>
<td>1 to 5 p.m.</td>
</tr>
<tr>
<td>NII—Specialty Board for Protective Coatings</td>
<td>Tuesday</td>
<td>1:30 to 4 p.m.</td>
</tr>
<tr>
<td>Pipeline Subcommittee Meeting</td>
<td>Tuesday</td>
<td>2 to 3:30 p.m.</td>
</tr>
<tr>
<td>West Asia &amp; Africa Board of Trustees</td>
<td>Tuesday</td>
<td>2 to 4 p.m.</td>
</tr>
<tr>
<td>Speaker’s Breakfast</td>
<td>Wednesday</td>
<td>7 to 8 a.m.</td>
</tr>
</tbody>
</table>
### Other Meetings

#### OTHER MEETINGS (continued from previous page)

<table>
<thead>
<tr>
<th>Name</th>
<th>Day</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>NII—Certification Commission</td>
<td>Wednesday</td>
<td>8:30 a.m. to noon</td>
</tr>
<tr>
<td>CORROSION: Opportunities Realized Mini-Camp</td>
<td>Wednesday</td>
<td>9:30 a.m. to 5 p.m.</td>
</tr>
<tr>
<td>Section Officer Meeting on Elections</td>
<td>Wednesday</td>
<td>10 to 11 a.m.</td>
</tr>
<tr>
<td>NACE Birmingham Section</td>
<td>Wednesday</td>
<td>11 a.m. to 1 p.m.</td>
</tr>
<tr>
<td>CoatingsPro Contractor Awards</td>
<td>Wednesday</td>
<td>11 a.m. to 1 p.m.</td>
</tr>
<tr>
<td>Speller Lecture</td>
<td>Wednesday</td>
<td>11:15 to 11:45 a.m.</td>
</tr>
<tr>
<td>TCC Officer Training</td>
<td>Wednesday</td>
<td>noon to 1:30 p.m.</td>
</tr>
<tr>
<td>NIICAP Oversight Board</td>
<td>Wednesday</td>
<td>1 to 4 p.m.</td>
</tr>
<tr>
<td>NII Certification Exam Development—Open Forum Session II</td>
<td>Wednesday</td>
<td>3:30 to 5 p.m.</td>
</tr>
<tr>
<td>Speaker's Breakfast</td>
<td>Thursday</td>
<td>7 to 8 a.m.</td>
</tr>
<tr>
<td>NII Board of Directors Session II</td>
<td>Thursday</td>
<td>9 a.m. to noon</td>
</tr>
<tr>
<td>African Corrosion Professionals</td>
<td>Thursday</td>
<td>1 to 5 p.m.</td>
</tr>
</tbody>
</table>

---

### Managing Corrosion with Polymers

**CORROSION Conference & Expo 2019**

March 24-28 • Nashville, Tennessee

**Managing Corrosion with Polymers**

- **Monday, March 25**
  - **8AM - 3:30PM**  **Introduction to Composites for Chemical Handling**
    - TEG 529X — Basic Education Session
- **Tuesday, March 26**
  - **9AM - 5PM**  **Managing Corrosion in Chemical Process and Oil & Gas Industries**
    - TEG 191X — Informal Presentations
- **Wednesday, March 27**
  - **8AM - 12PM**  **Extending the Service Life of Your Non-Metallic Equipment**
    - TEG 239X — Expert Panel Discussion
  - **1PM - 5PM**  **Non-Metallic Materials of Construction**
    - STG-10 Committee meeting
Concentration on Coatings at CORROSION 2019

NACE International’s annual conference will feature new insights and interactive events for the protective coatings industry

At this year’s CORROSION conference delegates from all sectors of the industrial paint and coatings industry will get an in-depth look at the latest trends in coating technology, as well as insights from contractors, inspectors, and suppliers.

Experts from the NACE International Institute’s Contractor Accreditation Program (NIICAP) will be on-site to share information and answer questions from contractors looking to grow their business.

Preparing for your Audit: A Technical Discussion on the Contractor Accreditation Program from a Chief NIICAP Auditor

Launched in 2015, the NACE International Institute Contractor Accreditation Program (NIICAP) is an industry-driven and industry-managed accreditation program that verifies a contractor’s quality-assurance program, support practices, production processes, and personnel management and training program. At this informal session, NIICAP Chief Auditor TJ Mead will present a high-level overview of the NIICAP program, answer questions, and discuss real-world case studies of NIICAP-accredited contractors.

Tuesday, March 26 | 11:15 AM - 12:15 PM | Corrosive Chronicles Blue Theater, Exhibit Hall

NIICAP Forum: Technical Discussion of the NIICAP Audit Process

The NIICAP process is transparent, industry-driven and customer-focused, resulting in a robust accreditation program that endorses only those coating contractors that have been audited and have a documented record of capabilities and competencies necessary to meet owner requirements. This forum will discuss the complexities and challenges of the NIICAP audit process, from application to on-site audit. NIICAP team members, including Chief Auditor TJ Mead and Chairman, NIICAP Oversight Board, Connor McManus, will share case studies and present a forecast of the program’s future growth.

Wednesday, March 27 | 9:00 AM - 11:30 AM | Forums, Room 204

Register at nacecorrosion.org
Special Lectures

PLENARY LECTURE  Digby D. Macdonald  |  Tuesday, March 26  |  8 to 9 a.m.

Born in Thames, New Zealand, December 7, 1943, Professor Digby D. Macdonald gained his B.Sc. and M.Sc. degrees in chemistry at the University of Auckland, New Zealand, and his Ph.D. degree in chemistry from the University of Calgary in Canada. He has served as assistant research officer at Atomic Energy of Canada, Ltd.; lecturer in chemistry at Victoria University of Wellington, New Zealand; senior research associate at Alberta Sulfur Research; honorary associate professor at the Chemistry Department of the University of Calgary; director and professor of the Fontana Corrosion Center, Ohio State University; vice president, Physical Sciences Division, SRI International, Menlo Park, California; and professor and later distinguished professor of Materials Science and Engineering at Pennsylvania State University from 1991 to the end of 2012. He is currently a professor in residence with the Departments of Materials Science and Engineering and Nuclear Engineering at the University of California at Berkeley.

Dr. Macdonald has published about 1,000 papers in peer-reviewed scientific journals, books, and conference proceedings, plus four books, one of which (Transient Techniques in Electrochemistry) established an important area of electrochemical research, and has 10 patents and numerous invention disclosures credited to his name. His professional competence lies in the fields of electrochemistry, corrosion science, battery science and technology, thermodynamics, chemical kinetics, high-temperature aqueous chemistry, nuclear power technology, energy conversion technology, and physical chemistry. Finally, under his tutelage, more than 150 students have graduated with advanced degrees in chemistry and materials science and engineering over the past four decades. Of particular importance is that Dr. Macdonald is the originator of the modern theory of passivity in the form of the Point Defect Model and has been a pioneer of electrochemical impedance spectroscopy, particularly for corrosion reaction mechanistic analysis.

Abstract: How Well Can We Predict Localized Corrosion?

Various forms of localized corrosion, including pitting corrosion, crevice corrosion, stress corrosion cracking (SCC), and corrosion fatigue (CF), are responsible for the majority of corrosion-related failures in industrial, military, and infrastructural systems. These forms of corrosion are often referred to as being “insidious,” because they often result in failures with little forewarning and until recently have been difficult to predict. However, all localized corrosion processes comprise three distinct stages: initiation, propagation, and death and each of these stages in the life of a single event are now amenable to deterministic prediction. Although these three stages occur sequentially for a single event, the events tend to occur in parallel for a population in a “progressive nucleation, growth, death (PNGD)” scenario that is reminiscent of the demographics of a population of living entities (e.g., human beings). The evolution of such damage is best described by a “Damage Function (DF)” in a protocol termed “Damage Function Analysis (DFA).” The DF is a histogram of the number of events vs. event depth and each DF contains information on each stage of a single event and on the PNGD of the population, such that the depth of the deepest event can be predicted. During this plenary lecture, I will review that basis of DFA with emphasis on the scientific basis of each stage and I will identify the overarching principles at play. I will then illustrate the application of DFA to a number of practical problems, such as pitting in oil and gas pipelines, SCC of stainless steels in the coolant circuits of nuclear power reactors, and CF in aerospace aluminum alloys.

WILLIS RODNEY WHITNEY AWARD LECTURE

Tuesday, March 26  |  11:15 a.m.
The Whitney Award recognizes public contributions to the science of corrosion.
2019 Recipient: Xiaogang Li

FRANK NEWMAN SPELLER AWARD LECTURE

Wednesday, March 27  |  11:15 a.m.
The Speller Award Lecture recognizes contributions to the practice of corrosion engineering.
2019 Recipient: U. Kamachi Mudali

For a complete list of award winners, please see pp. 96-97 or visit www.nace.org.
Special Lectures

KEYNOTE SESSION

Jack Uldrich  |  Monday, March 25  |  3:30 to 4:30 p.m.

Corrosion's Crystal Ball: The future will arrive sooner than you think. What are the Uber-type ideas impacting our field?

Seventy-five years ago, in a small room in Houston, Texas, 11 pipeline engineers recognized a threat society wasn't prepared for—unmitigated corrosion. Those engineers had the foresight to create NACE, an organization dedicated to sharing knowledge and expertise with the mission of addressing the threat of corrosion. Never could they have envisioned the community and body of knowledge that is today’s NACE International.

What advancements will revolutionize our industry over the next 75 years? Virtual reality? Artificial intelligence? Autonomous systems? Join NACE for an exclusive keynote session with best-selling author and renowned futurist, Jack Uldrich. During this interactive discussion of the changing technological landscape, Uldrich will apply his expertise and share insight into how technology will impact the corrosion industry’s mission and profession.

Uldrich is a globally influential futurist, speaker, and award-winning author of 11 books and bestsellers. He is a frequent speaker on technology, change management, and leadership and has addressed hundreds of corporations, associations, and not-for-profit organizations worldwide. He regularly makes television appearances on the Science Channel and the Discovery Channel, and is a frequent guest of several major media outlets, including CNN, CNBC, and National Public Radio.

Uldrich is also an ongoing contributor on emerging technologies and future trends for a number of publications, including The Wall Street Journal, Forbes, Wired Magazine, and BusinessWeek.

Uldrich is a former naval intelligence officer and Department of Defense official. He served as the director of the Minnesota Office of Strategic and Long-Range Planning under Minnesota Governor Jesse Ventura. His most recent book is Foresight 20/20: A Futurist Explores the Trends Transforming Tomorrow and his forthcoming book is Business as Unusual: How to Future-Proof Yourself Against Tomorrow's Transformational Trends, Today.

Don’t miss this fascinating keynote session. Your future self will thank you!

HIGH ROLLIN’ FOR A HARLEY

How the contest works:

1. Attendees will have to visit your booth and all other High Rollin’ for a Harley sponsors.
2. Once they have collected all of the cards from all of the sponsors, they will submit the entry form to the location of the Harley on the show floor.
3. The drawing will be held on Thursday at 10:30 a.m.

Interested in sponsoring? sales@nace.org

Sponsored by:
Networking Activities

Saturday, March 23

CORROSION Crew Social Brew
6 to 10 p.m. • Nashville Underground

Back by popular demand! It’s your favorite Saturday night kickoff party at CORROSION! Join us for a night of live music, fun, and southern hospitality with your CORROSION crew at the Nashville Underground located on Nashville’s famous Broadway Street. Owned by brothers Joey & Gavin DeGraw, Nashville Underground showcases Nashville’s world-famous music, cuisine, and spirits. Show off your rodeo skills and see if you can last 8 seconds on a mechanical bull. Admission price is $25 USD and includes dinner, a drink ticket, and a concert. See you there!

Sunday, March 24

24th Annual NACE Race
8 a.m. • Shelby Park • Nashville, TN

Join us for this year’s NACE Race and run for a reason at CORROSION 2019. This noncompetitive 5K run/walk is a tradition for conference attendees and their guests, and a great way to stretch your legs before the NACE conference begins. The $20 USD entry fee includes an official race shirt and post-race celebration, including refreshments and medal presentation for 1st, 2nd, and 3rd place finishers in the men’s and women’s divisions. Bus transportation is provided to and from the convention center.

Sign up when you register for CORROSION 2019 or visit www.nace-foundation.org. Sponsorships are also available starting at $150 USD! NACE staff contact: Brandy Adams, +1 281-228-6478, brandy.adams@nace.org.

NACECares Volunteer Day: Bicycle Build Off
Sunday and Monday • 8 a.m. to 5 p.m. • Nashville Music City Center

Come participate in a bicycle build off! We will be donating all bikes to a local organization for the youth in Nashville, Tennessee! Limited spots available.

Darrel D. Byerley Memorial Golf Tournament
8 a.m. • Nashville, TN • Hermitage Golf Course

Start your week at CORROSION 2019 with a relaxing round of golf on 300 acres of natural Tennessee wetlands along the banks of the Cumberland River. Recognized by Golf Digest as one of the top 10 golf courses in Tennessee, the President’s Reserve course can offer any golfer a pleasurable golfing experience.

Teams or individual players can sign up when registering for CORROSION 2019 or at www.nace-foundation.org. Sponsorships are also available! NACE staff contact: Heather Lowry, +1 281-228-6205, heather.lowry@nace.org.

Signature Sponsor: Tinker & Rasor
Hole In One Sponsor: Sherwin Williams

Guest Reception
2 to 5 p.m. • Omni Nashville Hotel, Bass Room

On Sunday, March 24, guests will enjoy an afternoon to relax and unwind. The reception will last from 2 to 5 p.m., and will feature a presentation of “Arts in Our Hearts.” First Lady Jenny Didas will have a presentation on designing jewelry with natural stones, minerals, and fossils; and former First Ladies Aida Garrity and Janice Feather will present on oil painting and the history of quilts, respectively.

Opening Reception
5:30 to 7 p.m. • Nashville Music City Center

The 2019 Opening Night Reception opens CORROSION 2019 in Nashville, as attendees and exhibitors interact over drinks and hors d’oeuvres. Drink tickets will be provided at registration. This reception is cosponsored by Carboline and NACE International. The two organizations are bound together by a common vision of corrosion prevention, environmental preservation, and education.

Sponsors:
Networking Activities

Monday, March 25

14th Annual Silent Auction
Monday, March 25 to Wednesday, March 27
Exhibit Hall ■ Nashville Music City Center

Take a break from the action in the CORROSION 2019 Exhibit Hall and browse the wide variety of items and collectibles available at the silent auction! Items will be on display and open for bidding during conference hours through 4 p.m. on Wednesday, March 27.

Proceeds will benefit the NACE Foundation in our efforts to inspire the future workforce to pursue careers in science, technology, engineering, and math (STEM).

MP Corrosion Innovation of the Year Awards
4:45 p.m.

The 2019 MP Corrosion Innovation of the Year Awards will be presented just prior to the Expo Grand Opening. Nominations were judged by a distinguished panel of corrosion experts. For more information, please visit www.nace.org/mpinnovationawards.

NACE U Student Meeting
Today’s Students, Tomorrow’s Solutions
1 to 2 p.m.

Are you a student or a professional with five or fewer years of industry experience? Learn how current technology and the economy will affect today’s young professionals.

Exhibit Hall Grand Opening
5 to 7 p.m. ■ Nashville Music City Center

The grand opening of the Exhibit Hall is one of the most popular events each year. CORROSION 2019 attendees will get their first opportunity to meet with more than 400 exhibiting companies. A complimentary drink ticket redeemable only at the Expo Grand Opening will be included in your registration packet. All attendees must wear their badges for admittance.

Leadership Luncheon
11:30 a.m. to 1 p.m.

Keynote presentation by Cathy Leslie, Executive Director, Engineers Without Borders

Following the Bridging the Gap with Effective Leadership Forum, attendees are invited to participate in the Leadership Luncheon to continue learning how to become an effective leader. Attendees will hear about the 16,800+ passionate, highly skilled volunteers that comprise Engineers Without Borders. These volunteers work in more than 40 countries around the world to impact the lives of millions through the implementation of engineering projects to provide clean water, sanitation, access to market and health facilities, renewable energy and more. Cost is $50 to attend. Lunch is included in the price of the ticket.

Tuesday, March 26

Headshot Station
8 a.m. to 5 p.m.

Need to upgrade your professional headshot? Stop by the Headshot Station to update your look and professional profile.

Sponsor:

Career Fair
1 to 5 p.m.

Whether you are a student, new to the industry, or a corrosion expert, take advantage of the Career Fair. Our goal is to assist you with your career and recruitment needs.

Job Seekers—find your dream job and connect with registered employers.

Employers—register for an exhibit booth today to recruit your dream candidate.

For more information, contact Cindy Tracy at cindy.tracy@nace.org.
Networking Activities

GenNEXT Bash
Wildhorse Saloon
Nashville, TN

7 to 8 p.m. Scholarship Awards Ceremony
8 to 11 p.m. The Downtown Band/Dancing

Come for the awards…stay for the party!

Join us as we honor our outstanding 2019 students and scholarship recipients and celebrate the future of our industry. Individual tickets are $65 and can be purchased with your online conference registration or at CORROSION 2019 Registration during operating hours. Please note that tickets will not be sold at the door on the evening of this NACE Foundation event. Sponsorships are also available! NACE staff contact: Heather Lowry, +1 281-228-6205, heather.lowry@nace.org.

To attend the Scholarship Awards Ceremony you must have a GenNEXT Bash ticket. Student registrants for CORROSION 2019 will receive a complimentary event ticket with their conference registration. Conference shuttles will be available for guests’ transportation needs. Limited hosted bar.

Scholarship Awards Ceremony Sponsor: bp

Titanium Sponsor: Sherwin-Williams

Wednesday, March 27

Section Officer Meeting on Elections
10 to 11 a.m.

This training session provides a detailed introduction to the procedures for section nominations and elections.

CORROSION: Opportunities Realized
10 a.m. to 4 p.m.
Nashville Music City Center

To educate the next generation on the destructiveness of corrosion, the NACE Foundation is hosting a day-long mini-camp for local high school students in conjunction with CORROSION 2019. Students from Nashville area high schools will participate in hands-on, corrosion-related activities, using the NACE Foundation’s cKit™ (Corrosion Toolkit). They will learn basic scientific principles of corrosion in topics such as oxidation, thermodynamics, and electrochemistry. Students will also have the opportunity to learn about research and career opportunities from industry professionals and university students while touring the CORROSION 2019 show floor.

Volunteers are needed. For information on how you can get involved, contact Brandy Adams, +1 281-228-6478, brandy.adams@nace.org.

Signature Sponsor:

NACE Honoree Night
6:15 to 10 p.m. • The Bell Tower

NACE welcomes you to an evening of networking, drinks, and presentation of the association awards! Association awards recognize members for their outstanding contributions to NACE, corrosion control methods, science, and engineering. Taking place at one of Nashville’s historic venues, The Bell Tower, the evening will feature the recognition of board members, presentation of the 2019 NACE awards, and the passing of the gavel to incoming 2019-2020 NACE President Terry Greenfield. The group will then be treated to heavy hors d’oeuvres and local entertainment along with a whiskey tasting. Please contact us about sponsorship opportunities. Tickets are available online or by contacting firstservice@nace.org. Space is limited, so it is recommended that you purchase your tickets in advance.
Trenton offers three Wax-Tape® brand anticorrosion wrap systems.

High-quality, easy-to-apply wraps that protect irregularly shaped fittings and require minimal surface preparation.

Wax-Tape® #1
Anticorrosion Wrap:
A very durable wrap that uses a thick, non-stitch bonded synthetic fabric and has no clay fillers, so it stays conformed to irregular profiles. The wrap requires no abrasion blasting, can be backfilled immediately and is compatible with cathodic protection.

Wax-Tape® #2
Self-Firming Anticorrosion Wrap:
A unique, microcrystalline-wax-saturated wrap that slowly firms up to provide excellent aboveground and belowground protection. Comes in a variety of colors and usually requires no outerwrap.

Wax-Tape® HT-3000
High-Temperature Anticorrosion Wrap:
Designed for operating temperatures up to 230°F (110°C), Wax-Tape® HT-3000 wrap can be used on high-temperature oil and gas piping, on compressor status discharge piping, beneath thermal insulation and in high ambient temperature conditions.

Only Trenton offers Wax-Tape® brand anticorrosion wrap systems, with primers, fillers, wraps and outerwraps.
Guest Program

The Guest Program is a social program designed for the enjoyment of the guests of conference registrants. Guest program registration does not give attendees access to any technical symposia or committee meetings. Program details and locations are listed below.

Guest Reception
Omni Nashville Hotel, Bass Room
On Sunday, March 24, guests will enjoy an afternoon to relax and unwind. The reception will last from 2 to 5 p.m., and will feature a presentation of “Arts in Our Hearts.” First Lady Jenny Didas will have a presentation on designing jewelry with natural stones, minerals, and fossils; and former First Ladies Aida Garrity and Janice Feather will present on oil painting and the history of quilts, respectively.

Opening Reception
Nashville Music City Center
Kick off CORROSION 2019 at the Nashville Music City Center on Sunday evening from 5:30 to 7 p.m. with conference attendees and exhibitors. Drinks and hors d’oeuvres will be provided.

Continental Breakfast
Omni Nashville Hotel, Bass Room
All Guest Program registrants are invited to enjoy an expanded continental breakfast at the Omni Nashville Hotel on Monday through Wednesday, served from 8 to 9:30 a.m. Breakfast is only available to those who have registered for the Guest Program. No other registrations for the conference will be permitted to partake in the breakfast.

Guest Program Registration
Guest Program registrants may pick up their badges at the CORROSION 2019 registration desk located in Exhibit Hall A in the Nashville Music City Center. On-site registration for the Guest Program will be conducted during regular conference registration times. The Guest Program badge is your “ticket” to the Guest Program activities and the CORROSION 2019 Expo Grand Opening.

Note: Only guests who wish to attend the Guest Program activities or the Expo Grand Opening are required to register for the Guest Program.

Guest Tours
Tour buses will depart from and return to the Omni Nashville Hotel. (Space limited on each tour. Tickets must be purchased in advance. If a minimum is not met, a tour is subject to cancellation.)

Saturday March 23
Lookout Mountain
8 a.m. to 6 p.m.
Just minutes from downtown Chattanooga, Tennessee, Lookout Mountain is the perfect destination for out of the ordinary experiences and amazing natural beauty. The Lookout Mountain attractions include three top-rated, world-famous natural attractions that showcase the natural beauty of Lookout Mountain and views of the Chattanooga Valley. Create memories you’ll treasure! Visit Lookout Mountain, and join in on the “Lookout Mountains of Fun!” Trek through Rock City’s natural wonders and “See Seven States” views; tour Ruby Falls, America’s deepest cave and largest underground waterfall accessible to the public; and ride the Incline Railway, the world’s steepest passenger railway.

Your visit to Rock City will include a stroll through the 4,100-ft (1,250-m) Enchanted Trail, where you’ll encounter incredible rock formations, caves, and beautiful flowers, along with a few other surprises. At Lover’s Leap, you can also experience Rock City’s legendary views of the seven states. Ruby Falls is named one of the Ten Most Incredible Cave Waterfalls on Earth. Enjoy a guided tour through the fascinating cavern with its unique rock formations. The Incline Railway up historic Lookout Mountain is the world’s steepest passenger railway. In operation since 1895, the Incline is a National Historic site and Mechanical Engineering put into motion. Lunch will be on your own.

Price: $165 USD per person, 20-person minimum
Price includes: admissions to Rock City, Ruby Falls, Incline Railway, and driver/guide.

Sunday, March 24
Discover Nashville Tour
8:30 a.m. to 12:30 p.m.
A visit to Nashville just wouldn’t be complete without experiencing the best sights Music City has to offer on our finest city tour with an experienced guide. Enjoy Nashville’s most famous landmarks, including the Historic Downtown District and “Honky Tonk Row,” Riverfront Park, Fort Nashborough, the Tennessee State Capitol, Bicentennial Capitol Mall State Park, the Parthenon, Vanderbilt University, and Music Row, where historic Studio B is located.

Enjoy a self-guided walk through the Ryman Auditorium, known as the “Mother Church of Country Music,” and an abbreviated self-guided tour of the Country Music Hall of Fame and Museum! This $37 million interactive musical journey is a beautiful tribute to country music and to the city of Nashville. This will be an experience your group will not forget. This tour includes admission into the Ryman Auditorium “Soul of Nashville Film” and Country Music Hall of Fame.

Price: $95 USD per person, 20-person minimum
Price includes: roundtrip transportation, driver/guide, and admissions into the Ryman Auditorium and Country Music Hall of Fame.
Guest Program

Monday, March 25

Historic Tennessee Tour
9 a.m. to 4 p.m.

The group will take a journey back in time as they visit two of the most historic mansions in the Southeast—The Hermitage and Belle Meade Plantations.

Ride in comfort to The Hermitage, the home of President Andrew Jackson. Preservationists continue to use a number of scientific techniques to preserve, restore, and repair the mansion and other buildings on this 1,050-acre cotton plantation. Historians consider this the best-preserved early U.S. presidential home, and it is ready for the group to explore just as it would have been in 1836.

Next, on rolling land that in the 1800s made up an estate of more than 2,500 acres in size, you will find Belle Meade Plantation. Once located at a world-renowned thoroughbred farm, the mansion is a beautiful example of Greek Revival Antebellum architecture. Enjoy a narrated tour through the mansion by a guide in period clothing, and explore other buildings on the grounds on your own. Complete the tour and the day with a wine tasting at The Winery at Belle Meade.

Price: $115 USD per person, 20-person minimum
Price includes: roundtrip transportation, tour director, admission into The Hermitage and Belle Meade Plantation, and gratuity. Lunch included at the Hermitage House Smorgasbord.

Tuesday, March 26

Visual Arts Tour
9 a.m. to 2 p.m.

The group will experience a fully narrated tour of the Nashville Arts and landmarks. First we will visit the Parthenon, which stands proudly as the centerpiece of the Centennial Park, Nashville’s Premier urban park. The recreation of the 42-ft (13-m) statue of Athena is the focus of the Parthenon just as it was in ancient Greece. The building and the Athena statue are both full-scale replicas of the Athenian originals. Originally built for Tennessee’s 1897 Centennial Exposition, this replica of the Parthenon in Athens, Greece serves as a monument to what is considered the pinnacle of classical architecture. Nashville is also known as the “Athens of the South.”

Then we will visit the First Center of the Visual Arts. This is a nonprofit art-exhibition center, with approximately 24,000 ft² (2,230 m²) of gallery space dedicated to presenting the finest visual art from local, state, and regional artists, as well as major U.S. and international exhibitors.

Price: $104 USD per person, 20-person minimum
Price includes: roundtrip transportation, driver/guide, admissions, and gratuity. Lunch is on your own.

Wednesday, March 27

Franklin’s Civil War
9 a.m. to 4 p.m.

Explore historic sites of The Battle of Franklin, the five bloodiest hours of the Civil War. This quaint town of Franklin, Tennessee, harkens back to a time before the harrowing fight between the Union and Confederate armies. Hearing the unique stories of heroism at the Carter House, Carnton Plantation, and Lotz House, you will soon appreciate the efforts of everyone who lived here in 1864, elite society or immigrant.

Understand what it took to survive the fighting, attend to the 9,500 casualties, and reconstruct citizens’ homes and some semblance of their lives before the battle. Admissions to Lotz House, Carnton Plantation, and Carter House are included. Lunch is on your own in downtown Franklin.

Price: $99 USD per person, 20-person minimum
Price includes: roundtrip transportation, driver/guide, admissions into the Lotz House, Carnton Plantation, and Carter House, and gratuity.
2019 NACE International Association Awards

R.A. Brannon Award
The R.A. Brannon Award is the signature award of the association. It recognizes a current member of NACE International whose outstanding service has contributed to the development and improvement of the association that resulted in promotion of the objectives of NACE.

The 2019 R.A. Brannon Award recipient is Steve Poncio. Poncio previously spent over 34 years at Houston Lighting and Power/Reliant Energy. There he developed a coatings program for nine power plants with annual budgets of $5-8 million dollars, conducted surveys to assess physical asset condition, developed specifications, wrote technical requirements for painting contractors, and supervised project management of coatings projects. He has published articles on maintenance coatings and linings, project management, and lead-based coating removal in *Materials Performance* and *JPCL—The Journal of Protective Coatings & Linings*. He chaired the Workforce Development Committee, Houston Business Roundtable, 1996-1999. He obtained his B.S. degree in civil engineering technology from the University of Houston.

Poncio currently owns Poncio Coating Consulting in Montgomery, Texas.

A.B. Campbell Award
The A.B. Campbell Award is given in recognition of the most outstanding paper by a young author published in *Materials Performance* or *CORROSION* each year.


CORROSION Best Paper Award
The *CORROSION* Best Paper Award is given in recognition of the most outstanding manuscript published in *CORROSION* for the preceding calendar year.


T.J. Hull Award
The T.J. Hull Award is given in recognition of the outstanding contribution to NACE in the field of publications.

The 2019 T.J. Hull award recipient is Richard B. Eckert.

F.N. Speller Award
The F.N. Speller Award is given in recognition of significant contributions in the field of corrosion engineering.

The 2019 F.N. Speller Award recipient is U. Kamachi Mudali.

H.H. Uhlig Award
The H.H. Uhlig Award is given in recognition of outstanding effectiveness in post-secondary corrosion education as exhibited by an educator who excites their students through outstanding and innovative teaching in corrosion.

The 2019 H.H. Uhlig Award recipient is Joey Kish.

W.R. Whitney Award
The W.R. Whitney Award is given in recognition of significant contributions to corrosion science.

The 2019 W.R. Whitney Award recipient is Xiaogang Li.
R. Baboian Award
This award is given in recognition of achievement in the field of application of corrosion technology.
The 2019 R. Baboian Award recipient is Len Krissa.

Distinguished Organization Award
The Distinguished Organization Award is given in recognition of outstanding contributions by an organization to the field of corrosion science or engineering.
The 2019 Distinguished Organization Award recipients are Cathodic Technology, Ltd. and Centro de Estudios de Corrosion.

Distinguished Service Award
The Distinguished Service Award is given in recognition of distinguished service to NACE by an elected or appointed member, or by a group.
The 2019 Distinguished Service Award recipients are Abdulhameed Al-Hashem, Abdul Razzaq Al-Shamri, Bill Hedges, Brent Harle, Ed Ondak, Sunder Ramachandran, Fred Saenz, and Matt Waldrop.

Technical Achievement Award
The Technical Achievement Award is given in recognition of technical achievement in corrosion engineering that had significant impact on the practice of corrosion control, or on the enhancement of the profession of corrosion engineering. Recognized achievements can be in the areas of research, engineering, or education.
The 2019 Technical Achievement Award recipients are Alyn Jenkins, Baorong Hou, Hejian Sun, Hira Ahluwalia, and Lee Smith.

NACE Fellow Honor
The honor of NACE Fellow is given in recognition of distinguished contributions in the fields of corrosion and its prevention. It was also established to develop a broadly based forum for technical and professional leaders to serve as advisors to the association.
The 2019 NACE Fellow honorees are Benjamin Chang, Carlos A. Palacios, David Kolman, Douglas Hansen, Hira Ahluwalia, Homero Castaneda Lopez, Nallaiyan Rajendran, Patrick Teevens, Richard J. Kessler, and Robert Peter Badrak.

NACE Foundation Founders Award
The Founders Award recognizes exceptional contributions and meritorious work by an individual on behalf of the NACE Foundation. To be meritorious, the work chosen must significantly influence the education of students and educators in corrosion science and engineering.
The 2019 Founders Award recipient is Samir Degan.

About the recipients:
For more information on the 2019 awards and award winners, as well as nomination procedures for the 2020 awards, please visit the Awards section of the NACE web site: www.nace.org/awards.

Nominate a NACE leader today!
The deadline for 2020 award nominations is June 30, 2019.
Thank You to Our Sponsors

Visit nacecorrosion.org/sponsorships or contact sales@nace.org for sponsorship opportunities.
Join us in supporting the future of our industry.

**NACE INTERNATIONAL FOUNDATION**

**DARRELL D. BYERLEY MEMORIAL GOLF TOURNAMENT**

SPONSORED BY TINKER & RASOR

March 24, 2019 | Hermitage Golf Course | Nashville, TN

Join us at Hermitage Golf Course and don’t miss your opportunity to win a **2019 Chevrolet Camaro SS Convertible** with a Hole in One!

Graciously sponsored by Sherwin-Williams.

For complete event information, including details on sponsorships, visit [nace-foundation.org](http://nace-foundation.org).

---

**CORROSION 2019**

**GEN NEXT BASH**

2019 NASH BASH

March 26, 2019

Wildhorse Saloon | Nashville, TN

Come for the awards...stay for the party!

7-8 p.m. | NACE Foundation Scholarship Awards Ceremony
8-11 p.m. | The Downtown Band/Dancing

NOTE: A GenNEXT Bash ticket is needed to attend the Awards Ceremony; tickets will not be sold at the door.

Benefitting the

**NACE INTERNATIONAL FOUNDATION**

**Join us as we celebrate the future of our industry.**

Individual tickets are $65 and can be purchased with your online conference registration or at the CORROSION 2019 registration booth during operating hours.

Sponsorships are also available!

Full event details at [nace-foundation.org](http://nace-foundation.org).
The Exhibition

Expo Schedule
Monday, March 25 .................................................................................................................. 5 to 7 p.m.
Tuesday, March 26 .................................................................................................................. 10 a.m. to 5 p.m.
Wednesday, March 27 ........................................................................................................... 10 a.m. to 5 p.m.
Thursday, March 28 .............................................................................................................. 9 a.m. to noon

Expo Events
Monday, March 25
MP Corrosion Innovation of the Year Awards ................................................................. 4:45 p.m.
Cathodic Protection (CP Field) ...................................................................................... 5 to 7 p.m.
Coatings Experience ........................................................................................................ 5 to 7 p.m.
Expo Grand Opening* ..................................................................................................... 5 to 7 p.m.
NACE Foundation Silent Auction Bidding ................................................................. 5 to 7 p.m.
Student Poster Session .................................................................................................. 5 to 7 p.m.

Tuesday, March 26
CP Field .................................................................................................................................. 10 a.m. to 5 p.m.
Coatings Experience ........................................................................................................ 10 a.m. to 5 p.m.
Complimentary Lunch (full conference attendees only) ........................................ 11:45 a.m. to 1 p.m.
Corrosive Chronicles (Red Theater/Booth 1114) .............................................. 10:30 a.m. to 5 p.m.
Corrosive Chronicles (Blue Theater/Booth 2108) .............................................. 10:30 a.m. to 5 p.m.
NACE Foundation Silent Auction Bidding ................................................................. 10 a.m. to 5 p.m.
Protective Coatings Workshop .................................................................................... 10 a.m. to 5 p.m.
Student Poster Session .................................................................................................. noon to 1 p.m.

Wednesday, March 27
CP Field .................................................................................................................................. 10 a.m. to 5 p.m.
Coatings Experience ........................................................................................................ 10 a.m. to 5 p.m.
CORROSION: Opportunities Realized Mini-Camp ............................................. 10 a.m. to 4 p.m.
Corrosive Chronicles (Red Theater/Booth 1114) .............................................. 10:30 a.m. to 5 p.m.
Corrosive Chronicles (Blue Theater/Booth 2108) .............................................. 10:30 a.m. to 5 p.m.
NACE Foundation Silent Auction Bidding ................................................................. 10 a.m. to 4 p.m.
Protective Coatings Workshop .................................................................................... 10 a.m. to noon
Student Poster Session Winners Announced ......................................................... 12:30 p.m.

Thursday, March 28
CP Field .................................................................................................................................. 9 a.m. to noon
Coatings Experience ........................................................................................................ 9 a.m. to noon
Harley Giveaway ................................................................................................................ 10:30 a.m.

*Please note: Due to laws/liabilities, no one under the age of 18 will be given access to the Exhibit Hall during the Expo Grand Opening on Monday, March 25.

Student Poster Display
To encourage student involvement in the field of corrosion technology, the NACE Research Committee sponsors a Student Poster Session at CORROSION 2019. Posters will be on display in the Exhibit Hall on Monday evening through Thursday, and the display will be staffed by students on Monday from 5 to 7 p.m. and Tuesday from noon to 1 p.m. Winners will be announced on Wednesday at 12:30 p.m.

Sponsored by: bp

Corrosive Chronicles
The popular and expanded Corrosive Chronicles Theater will feature experienced corrosion professionals and NACE staff who will present interactive forums on a variety of corrosion-related topics on the Exhibit Hall floor. Conference attendees will learn unique lessons and solutions to corrosion issues that are relatable to their own field of expertise. The Corrosive Chronicles will be split into the Red and Blue Theaters and will be open to conference attendees on Tuesday, March 26 and Wednesday, March 27. Please see the CORROSION 2019 Final Program for more information and for theater assignments.
2019 Expo Hall

MP Corrosion Innovation of the Year Awards
The 2019 MP Corrosion Innovation of the Year Awards will be presented just prior to the Expo Grand Opening. Nominations were judged by a distinguished panel of corrosion experts. For more information, please visit www.nace.org/mpinnovationawards.

Cathodic Protection Field—Open during exhibit hours
Check out the field testing exhibit on the show floor—an actual representation of a cathodic protection (CP) field with the opportunity for hands-on activities. Perform several CP-related tests at the field testing exhibit and learn from industry experts who will be available to answer questions or discuss CP problems you may have. This is your opportunity to gain hands-on experience by performing tasks such as:

- CP interference
- Alternating current voltage mitigation
- Electrical isolation testing and short locating
- Testing of an impressed current CP system
- Galvanic CP system testing
- Obtaining soil resistivity measurements

The Coatings Experience—Open during exhibit hours
NEW for 2019. Join us on the Exhibit Hall floor for The Coatings Experience. This new area will introduce those interested in coatings to the ins and outs of application, surface preparation, inspection plans, and coatings in a fun and interactive way!

Harley Giveaway
This is YOUR chance to ride away on a Harley Davidson in Nashville! Simply visit each High Rollin’ for a Harley sponsor at CORROSION 2019 and collect a playing card at each sponsoring booth. Once playing cards have been collected from all sponsors, hightail it over to the Harley on the Exhibit Hall floor, and complete the submission card to enter to win. Return to the Exhibit Hall on Thursday at 10:30 a.m. to see if you’ve won!

Sponsored by:

Product Showcase
The Product Showcase is a dedicated area to increase awareness and interest in CORROSION 2019 exhibitors’ products. Each product will have a description of its purpose and booth number of the exhibiting company. The product showcase will be located at the entrance to the Exhibit Hall. If you’re interested, contact Roberta Arnold by phone at +1 281-228-6286 or email roberta.arnold@nace.org.

Dairyland Golf Lounge
Come relax and work on your golf game this year—all without leaving the Exhibit Hall. Open to all attendees during Exhibit Hall hours, Dairyland’s Golf Lounge features a golf simulator and a putting green. Stop by for a chance to win cool prizes!

Sponsored by:

International Pavilion
The International Pavilion is your chance to network and do business with corrosion-related companies from all over the world including the U.K., China, Colombia, U.A.E., and many more. The International Pavilion also benefits visitors looking to navigate the show floor.

Protective Coatings Workshop
NACE International, CoatingsPro Magazine, and INSPECT This are excited to announce the first-ever Protective Coatings Workshop at CORROSION 2019. This interactive workshop, designed for those working in or interested in learning more about coatings, will feature presentations from coatings industry leaders, an introduction to new emerging technologies, and highlight the experience plus accomplishments of those currently involved in the coatings field. See p. 63 for more information.
Thank You to Our Diamond Corporate Members

*As of December 10, 2018*
Asset Protection Through Corrosion Management

IMPACT PLUS is an integrated platform for corrosion management professionals who desire to move their companies to higher levels of corrosion management performance. This online network of tools includes:
• A customized corrosion management process classification framework
• A corrosion management maturity model
• And an extensive reference library.

Discover which level of IMPACT PLUS is right for you at nace-impact.org/MP
**Exhibitors**

- **3M**
  - Austin, TX
  - 1 800-722-6721
  - Web site: www.3m.com/corrosion
  - Booth Number: 1601

- **4Z Elektronik Otom. Ve Kaynak Sist. San, Ltd. Sti.**
  - Ankara, Turkey
  - +90 312 386 04 04
  - Web site: www.4zelektronik.com
  - Booth Number: 1759

- **Abrasives, Inc.**
  - Glen Ullin, ND
  - 1 800-584-7524
  - Web site: www.abrasivesinc.com
  - Booth Number: 1302

- **Abriox, Inc.**
  - Amelia, OH
  - +1 513-474-0565
  - Web site: www.abriox.com
  - Booth Number: 2230

- **Access Plug Flange, Inc. (APF)**
  - Houston, TX
  - +1 713-691-0897
  - Web site: www.inspectionplug.com
  - Booth Number: 1908

- **Accurate Corrosion Control, Inc.**
  - Glendale, AZ
  - +1 623-486-7800
  - Web site: www.accuratecorrosion.com
  - Booth Number: 2244

- **Acuren Inspection**
  - Conroe, TX
  - 1 800-513-8770
  - Web site: www.acuren.com
  - Booth Number: 1045

- **Admiral Instruments**
  - Phoenix, AZ
  - +1 480-256-8706
  - Web site: www.admiralinstruments.com
  - Booth Number: 2522

- **Advanced Polymer Coatings**
  - Avon, OH
  - +1 440-937-6218
  - Web site: www.adv-polymer.com
  - Booth Number: 2019

- **Advanced Polymerics, Inc.**
  - Salem, NH
  - +1 603-328-8177
  - Web site: www.api-smartcoat.com
  - Booth Number: 2733

- **Advance Products & Systems, Inc.**
  - Lafayette, LA
  - +1 337-233-6116
  - Web site: www.apsonline.com
  - Booth Number: 1401

- **Advantic, LLC**
  - Dayton, OH
  - +1 937-490-4712
  - Web site: www.advanticllc.com
  - Booth Number: 1029

- **Aegion Coating Services, LLC**
  - Conroe, TX
  - 1 800-432-5914
  - Web site: www.aegioncoatingservices.com
  - Booth Number: 1744

- **A.E.P.S.**
  - Lafayette, LA
  - +1 337-233-2887
  - Web site: www.aepsupports.com
  - Booth Number: 1225

- **Agru America, Inc.**
  - Georgetown, SC
  - 1 800-373-2478
  - Web site: www.agruamerica.com
  - Booth Number: 1030

- **AlMaps**
  - College Station, TX
  - +1 979-204-6055
  - Web site: www.aimaps.com
  - Booth Number: 2303

- **Alabama Laser**
  - Munford, AL
  - +1 256-358-9055
  - Web site: www.alabamalaser.com
  - Booth Number: 1634

- **Allied Corrosion Industries, Inc.**
  - Marietta, GA
  - +1 770-425-1355
  - Web site: www.alliedcorrosion.com
  - Booth Number: 1244

- **Alpha Pipeline Integrity Services**
  - Kemah, TX
  - +1 281-334-5865
  - Web site: www.alphaleak.com
  - Booth Number: 1455

- **Amcorr Products & Services/VISCOTAQ**
  - San Antonio, TX
  - +1 210-514-1091
  - Web site: www.amcorrusa.com
  - Booth Number: 2350

- **Amerapex Corp.**
  - Houston, TX
  - +1 713-363-0900
  - Web site: www.amerapex.com
  - Booth Number: 2457

- **American Innovations**
  - Austin, TX
  - +1 512-249-3400
  - Web site: www.aiworldwide.com
  - Booth Number: 1515

- **American Society for Nondestructive Testing, Inc./The**
  - Columbus, OH
  - +1 614-274-6003
  - Web site: www.asnt.org
  - Booth Number: 1231

- **Anko Group**
  - Beijing, China
  - +86 10 82884166
  - Web site: www.ankopipe.com
  - Booth Number: 2010

- **Anode Systems**
  - Grand Junction, CO
  - +1 970-243-4149
  - Web sites: www.anodesystems.com or www.anodesalesco.com
  - Booth Number: 354

- **Anotec Industries, Ltd.**
  - Langley, BC, Canada
  - +1 604-514-1544
  - Web site: www.anotec.com
  - Booth Number: 1725

- **AOC Aliancys**
  - Collierville, TN
  - +1 901-854-2800
  - Web site: www.aoc-resins.com
  - Booth Number: 1014

- **Applied Graphen Materials UK, Ltd.**
  - Redcar, U.K.
  - +44 (0) 1642 438214
  - Web site: www.appliedgraphenematerials.com
  - Booth Number: 2524

- **Aptus**
  - Charlotte, NC
  - +1 704-598-5684
  - Web site: www.goaptus.com
  - Booth Number: 914 & 1028

- **Aquatec Group, Ltd.**
  - Basingstoke, Hampshire, U.K.
  - +44 1256416010
  - Web site: www.aquatecgroup.com
  - Booth Number: 1362
As affiliate companies we rely on each other for industry expertise. We collaborate in creating innovative products and services tailored to cathodic protection and other corrosion control needs. We help operators manage assets safely and efficiently, and make better business decisions.

Stop by Booths 1515 and 1523 at NACE CORROSION 2019. We love to talk shop and about how we can help you.
Exhibitors

Arkema, Inc.
King of Prussia, PA
1 800-596-2750
Web site: www.extremematerials.com
Booth Number: 1157

ARK Engineering
Braintree, MA
+1 781-849-3800
Web site: www.arkengineering.com
Booth Number: 1338

Armacell Engineered Systems, Ltd.
Hammersmith, London, U.K.
+44 330 880 4040
Web site: www.armacell.com/oilandgas
Booth Number: 2054

Armor Plate, Inc.
Pasadena, TX
+1 281-487-2023
Web site: www.armorplateinc.com
Booth Number: 1550

● Asbury Carbons
Asbury, NJ
+1 908-537-2155
Web site: www.asbury.com
Booth Number: 1501

Ashland, Inc.
Dublin, OH
1 800-274-5263
Web site: www.derakane.com
Booth Number: 1136

● Asoe Hose Manufacturing, Inc.
Taizhou, Jiangsu, China
+86 523 8960012
Web site: www.asoehose.com
Booth Number: 2526

● Aspen Aerogels
Northborough, MA
+1 508-691-1111
Web site: www.aerogel.com
Booth Number: 950

Atrex Energy
Walpole, MA
+1 781-461-8251
Web site: atrexenergy.com
Booth Number: 1000

Augusta Fiberglass
Blackville, SC
1 800-527-1572
Web site: www.augustafiberglass.com
Booth Number: 1323

● Australasian Corrosion Association (ACA)
Melbourne, Victoria, Australia
+61 3 9890 4833
Web site: www.corrosion.com.au
Booth Number: 906

A.W. Chesterton Co., ARC Efficiency & Protective Coatings
Groveland, MA
+1 781-481-7000
Web site: www.arc-epc.com
Booth Number: 2745

Axalta Coating Systems
Houston, TX
+1 855-629-2582
Web site: www.axalta.us/industrial
Booth Number: 1250

BAC Corrosion Control, Ltd.
Telford, Shropshire, U.K.
+44 1952 290321
Web site: www.bacgroup.com
Booth Number: 2260

● Baker Hughes, a GE Co.
Houston, TX
+1 713-438-8600
Web site: www.bhge.com
Booth Number: 1644

BASF
Wyandotte, MI
+1 713-383-4553
Web site: www.performance-materials.basf.us
Booth Number: 2529

BASi
West Lafayette, IN
1 800-845-4246
Web site: www.BASinc.com
Booth Number: 2510

Bedford Reinforced Plastics
Bedford, PA
+1 814-623-8125
Web site: www.bedfordreinforced.com
Booth Number: 2517

● Beijing BSS Corrosion Protection Industry Co., Ltd.
Beijing, China
+86 10 84898700
Web site: www.bss.com.cn
Booth Number: 1952

Berkeley Springs Instruments, LLC
Cumberland, MD
+1 301-722-2260
Web site: www.bsisentry.com
Booth Number: 2463

● BGH Edelstahlwerke GmbH
Siegen, Germany
+49 271 701-342
Web site: www.bgh.de
Booth Number: 1312

Bio-Logic USA, LLC
Knoxville, TN
+1 865-769-3800
Web site: www.bio-logic.net
Booth Number: 2611

● Biosan Laboratories, Inc.
Warren, MI
+1 586-755-8970
Web site: www.biosan.com
Booth Number: 1405

Biotechnology Solutions
Houston, TX
+1 281-531-5319
Web site: www.biotechnologysolutions.com
Booth Number: 1354

● BK Corrosion, LLC
Houston, TX
+1 713-225-6661
Web site: www.bkcorrosion.com
Booth Number: 1906

THE Reliable Name In Cathodic Protection

● Bass Engineering
Longview, TX
+1 903-759-1633
Web site: www.bass-eng.com
Booth Number: 1523

Battelle
Columbus, OH
+1 614-519-2318
Web site: www.battelle.org
Booth Number: 2518

Bayou Companies/The
New Iberia, LA
+1 337-296-4612
Web site: www.bayoucompanies.com
Booth Number: 1251

BEASY
Billerica, MA
+1 978-667-5841
Web site: www.beasy.com
Booth Number: 1330

N—New Exhibitors
I—International Pavilion Exhibitors

Read MP Online
NACE International members have free access to MP Online, with back issues to 2005.

Access the digital issues of MP at www.materialsperformance.com/magazine.
We are the leader in silicon iron anodes.

**Longer Lasting**
Anotec anodes are the most durable high silicon iron anodes on the market. This is due to the superior grain structure achieved from our static mold chill casting process, resulting in more life and cost savings for your CP system.

**Consistent & Reliable**
Anotec anodes have many unique design features that all result in a ground bed that will out-perform the competition. Since 1987, our consistent and reliable processes ensure the highest-quality product every time. You can count on Anotec’s top quality and service.

**North American Made**
Anotec is the only North American silicon iron anode foundry. We always carry a substantial inventory, covering our entire product line. This allows our extensive distributor network to service your needs faster than anyone else. Order what you need, when you need it.

1.604.514.1544  
https://www.anotec.com/buy/

Visit us at CORROSION 2019 Conference and Expo Booth 1725
Blair Rubber/MRC
Seville, OH
+1 330-769-5583
Web site: www.blairrubber.com
Booth Number: 1516

Borin Manufacturing, Inc.
Culver City, CA
+1 310-622-1000
Web site: www.borin.com
Booth Number: 2422

Bridgeport Chemical
Sikeston, MO
Tel: +1 573-472-9700
Web site: www.bridgeportchemical.com
Booth Number: 2301

Broadens Corp.
Milpitas, CA
+1 925-998-8255
Web site: www.broadens.com
Booth Number: 928

Brown Corrosion Services, Inc.
Houston, TX
+1 832-327-0965
Web site: www.brown corrosion.com
Booth Number: 2031

BSS Technologies
Dubai, U.A.E.
+971 48867015
Web site: www.bssotechnologies.com
Booth Number: 1758

Buderus Edelstahl
Wetzlar, Germany
+49 6441 374-0
Web site: www.buderus-steel.com
Booth Number: 1454

Bullard
Cynthiana, KY
+1 859-234-6611
Web site: www.bullard.com
Booth Number: 1101

Caproco (1987), Ltd.
Edmonton, AB, Canada
+1 780-465-1187
Web site: www.caproco.com
Booth Number: 1609

Carboline Company
St. Louis, MO
+1 314-644-1000
Web site: www.carboline.com
Booth Number: 1800

Cathodic Protection Co., Ltd.
Grantham, Lincolnshire, U.K.
+44 1476 590666
Web site: www.cathodic.co.uk
Booth Number: 1439

Cathodic Technology, Ltd.
Bolton, ON, Canada
+1 905-857-1050
Web site: www.cath-tech.com
Booth Number: 1627

CCI Pipeline Systems
Breaux Bridge, LA
1 800-667-5808
Web site: www.ccipipeline.com
Booth Number: 1322

CECO Pipeline Services Co.
Houston, TX
+1 281-732-8238
Web site: www.tryceco.com
Booth Number: 1111

Cerakote Ceramic Coatings
White City, OR
+1 541-826-1922
Web site: www.cerakote.com
Booth Number: 2619

Exhibitors

New Exhibitors
International Pavilion Exhibitors

ACM Instruments
Corrosion Monitoring Instrumentation

The Weld tester is a unique instrument. Not only does it include all the features of our Gill 12 and Gill AC, but also multiple ZRAs for couple monitoring. Typically five ZRAs are used for monitoring segmented welds, with two ZRAs for the parent metals, two for the heat affected zone and one for the filler metal.

Weld Tester

2 Amp
2-12 Channels
Potentiostat
Galvanostat
Sweep Generator
Integrated Frequency Response Analyser

Weld Tester includes a wide range of both DC and AC techniques, such as LPR, EIS, Current & Voltage, Cyclic sweep and IR compensation, to name a few. Options include the LCM™ technique, Bubble Test, higher current output, voltage inputs, CPT, temperature monitoring, RDE/RCE speed controller and Femto Amp.

www.acminstruments.com
Email: nick@acminstruments.com Phone: +44 15395 59185
LASTING DEFENSE AGAINST CORROSION AND ABRASION

Blair Rubber Co.’s linings are used for the toughest jobs in the energy producing and chemical industries – extending the life of your vessels and equipment.


Booth #1516
For a searchable index of MP article titles and authors going back to the magazine’s inception in 1962, go to www.materialsperformance.com and click on “MP Index.”

Wet Blast FLEX

and

Wetblast Injector

High-Performance Dust Suppression for Abrasive Blasting

Wetblast FLEX
All-in-one, portable system. Wetblast anywhere, any wetblast application—now!

Wetblast Injector
Add-on conversion kit. Economically adds wetblast capability to most dry blast machines.

CLEMCO
www.clemcoindustries.com • 636.239.4300
Clemco Industries Corp.
Washington, MO
+1 636-239-0300
Web site: www.clemcoindustries.com
Booth Number: 922

Clock Spring Co., Inc.
Houston, TX
+1 281-590-8491
Web site: www.clockspring.com
Booth Number: 2322

Coastal Corrosion Control, Inc.
Baton Rouge, LA
+1 225-275-6131
Web site: www.coastalcorrosion.com
Booth Number: 1511

Cold Jet
Loveland, OH
+1 513-831-3211
Web site: www.coldjet.com
Booth Number: 1524

Continental Industries/thermOweld
Tulsa, OK
+1 918-627-5210
Web site: www.thermoweld.com
Booth Number: 2030

Copper Development Association, Inc.
McLean, VA
+1 212-251-7210
Web site: www.copper.org
Booth Number: 2015

CORE Linepipe, Inc.
Calgary, AB, Canada
+1 587-333-6685
Web site: www.corelinepipe.com
Booth Number: 1954

Corrdesa, LLC
Tyrone, GA
+1 770-683-3960
Web site: www.corrdesa.com
Booth Number: 2648

Corr Instruments, LLC
Carson City, NV
+1 775-241-9388
Web site: www.corrinstruments.com
Booth Number: 1350

Corroco International Industrial Co., Ltd.
Changsha Hunan, China
+86 731 84166277
Web site: www.corrocogroup.com
Booth Number: 1016

Air / Hydrovac Division
COMPACT TO HIGH CAPACITY UNITS AVAILABLE

- Coupon Installations
- Installing conventional/surface ground beds inside plants and compressor stations
- Safely exposes pipelines for coating inspections
- Installing test leads
- Safe trenching for cables & conduits in congested areas
- Potholing & Daylighting

www.coastalcorrosion.com • 225-275-6131
Exhibitors

- **Corrosion Materials**
  Baker, LA
  +1 225-778-6400
  Web site: www.corrosionmaterials.com
  **Booth Number: 2001**

- **Corrosion Service Co., Ltd.**
  Markham, ON, Canada
  +1 416-630-2600
  Web site: www.corrosionservice.com
  **Booth Number: 2134**

- **Corrpro Companies, Inc.**
  Houston, TX
  1 866-CORRPRO
  Web site: www.corrpro.com
  **Booth Number: 1744**

- **Cortec Corp.**
  St. Paul, MN
  +1 651-429-1100
  Web site: www.cortecvci.com
  **Booth Number: 1500**

- **Cortest, Inc.**
  Willoughby, OH
  +1 440-942-1235
  Web site: www.cortest.com
  **Booth Number: 1928**

- **Cosascco**
  Santa Fe Springs, CA
  +1 562-949-0123
  Web site: www.cosascco.com
  **Booth Number: 1544**

- **Crane ChemPharma & Energy**
  Spring, TX
  +1 647-282-4767
  Web site: www.cranecpe.com
  **Booth Number: 2451**

- **Creaform**
  Levis, QC, Canada
  +1 418-833-4446
  Web site: www.creaform3d.com
  **Booth Number: 1425**

- **CTI Industries, Inc.**
  Orange, CT
  +1 203-795-0070
  Web site: www.cti-ind.com
  **Booth Number: 1200**

- **Curran International, Inc.**
  Dickinson, TX
  +1 281-339-9993
  Web site: www.curranintl.com
  **Booth Number: 2319**

- **Custom Coatings International**
  Leduc, AB, Canada
  +1 780-900-5722
  Web site: www.ccintl.ca
  **Booth Number: 2500**

- **Cygnum Instruments, Inc.**
  Jacksonville, FL
  +1 410-267-9771
  Web site: www.cygnuminstruments.com
  **Booth Number: 1522**

- **Dairyland Electrical Industries, Inc.**
  Stoughton, WI
  +1 608-213-8723
  Web site: www.dairyland.com
  **Booth Number: 2236**

- **Dakota Ultrasonics Corp.**
  Scotts Valley, CA
  +1 831-431-9722
  Web site: www.dakotaultrasonics.com
  **Booth Number: 2101**

---

**Cortec® VpCI®-Series**

**Protect Your Assets with Cortec® Coatings**

- Cost Effective
- Innovative
- Environmentally Friendly

**www.cortecoatings.com**
SERVICE IS AT OUR CORE
THE DRIVING FORCE THAT GUIDES EVERYTHING WE DO

+ Expert Witness
+ Anodic Protection
+ Cathodic Protection
+ Integrity Assessment
+ Internal Corrosion Monitoring
+ Potential Adjustment Protection®
+ Electrical Interference Mitigation

Visit us at CORROSION 2019 Conference and Expo Booth 2134

+1 (800) 676-4984
corrosionservice.com
## Exhibitors

**Dale Fastener Supply**
Houston, TX  
+1 713-928-3437  
Web site: www.dalecompany.com  
*Booth Number: 1126*

**Dampney Co., Inc.**
Everett, MA  
1 800-537-7023 or +1 617-389-2805  
Web site: www.dampney.com  
*Booth Number: 2539*

**Danatronics Corp.**
Danvers, MA  
+1 978-777-0081  
Web site: www.danatronics.com  
*Booth Number: 1132*

**DC Voltage Gradient Technology & Supply, Ltd. (DCVG, Ltd.)**
Swan Lane, Hindley Green, Wigan, U.K.  
+44 1942 522 180  
Web site: www.dcvoltagegradient.com/copyalert.html  
*Booth Number: 944*

**Deepwater Corrosion Services**
Houston, TX  
+1 713-983-7117  
Web site: www.stoprust.com  
*Booth Number: 1162*

**DeFelsko Corp.**
Ogdensburg, NY  
+1 315-393-4450  
Web site: www.defelsko.com  
*Booth Number: 1812*

**Dehumidification Technologies, L.P.**
Houston, TX  
+1 713-939-1166  
Web site: www.rentdh.com  
*Booth Number: 1414*

**De Nora**
Concord, OH  
+1 440-710-5300  
Web site: www.denora.com  
*Booth Number: 1631*

**Denso North America**
Houston, TX  
+1 281-821-3355  
Web site: www.densona.com  
*Booth Number: 1824*

---

**Comin’ home to Lida**

means comin’ home to...  
... dependability  
... familiarity  
... a name you can trust

A connection that has stood the test of time for more than 30 years.

**It’s time to specify Lida® for your groundbed.**

For more information visit www.DeNoraTech.com or email LIDA.info@denora.com

---

**Booth 1631 Corrosion 2019**
**Exhibitors**

- **Elcometer**
  Warren, MI
  +1 248-650-0500
  Web site: www.elcometerusa.com
  Booth Number: 2436

- **Elecys Corp.**
  Olathe, KS
  +1 913-888-5222
  Web site: www.elecyscorp.com
  Booth Number: 1301

- **Electralloy, a G.O. Carlson, Inc. Co.**
  Oil City, PA
  +1 814-678-4000
  Web site: www.electralloy.com
  Booth Number: 2638

- **Element Materials Technology**
  Houston, TX
  +1 281-848-0270
  Web site: www.element.com
  Booth Number: 1316

- **Elemko S.A.**
  Metamorphosis, Attiki, Greece
  +30 6944 304731
  Web site: www.elemko.gr
  Booth Number: 2356

- **Elsyca NV**
  Wijgmaal, Belgium
  +32 16474960
  Web site: www.elsyca.com
  Booth Number: 2156

- **Emerson**
  Houston, TX
  +1 713-827-4328
  Web site: www.emerson.com
  Booth Number: 2116

- **EN Engineering**
  Warrenville, IL
  +1 630-353-4000
  Web site: www.enengineering.com
  Booth Number: 1551

- **EnerClear Services, Inc.**
  Sylvan Lake, AB, Canada
  +1 403-836-7001
  Web site: www.enerclear.ca
  Booth Number: 2055

- **Energy Economics, Inc.**
  Dodge Center, MN
  1 800-733-2557
  Web site: www.eei.com
  Booth Number: 2026

- **Enpar Sonderwerkstoffe**
  Gummersbach, Germany
  +49 2261 796-0
  Web site: www.enpar.de
  Booth Number: 1454

- **Enviropeel, USA**
  Indianapolis, IN
  +1 317-631-9100
  Web site: www.enviropeel.com
  Booth Number: 1659

- **European Federation of Corrosion (EFC)**
  Frankfurt, Germany
  +49 6975640
  Web site: www.efcweb.org
  Booth Number: 908

---

**Visit us at CORROSION 2019 Conference and Expo Booth 2539**

---

**HIGH-TEMPERATURE PROTECTIVE COATINGS CELEBRATING 100 YEARS**

- CUI
- Offshore
- VOC Compliant
- Hot Apply
- Colors

---

85 Paris Street (Dept. MP), Everett, MA 02149 USA
Tel: (800) 537-7023 or (617) 389-2805 Fax: (617) 389-0484
Email: sales@dampney.com Website: www.thurmalox.com
There’s a reason we make them rugged.

We make our range of decouplers rugged for a reason.

They have to work under the most demanding conditions, even when it’s bitter cold outside. Fact is, Dairyland’s reputation is built on reliability and that’s why we make our electrical equipment nearly indestructible.

Applications include:
- AC Voltage Mitigation
- Insulated Joint Protection
- Decoupling Equipment
- Grounding Systems
- Gradient Control Mat Decoupling

Visit us at CORROSION 2019 Conference and Expo Booth 2236

www.dairyland.com | +1 (608) 877-9900 | marketing@dairyland.com
Exhibitors

- Evonik Corp.
Parsippany, NJ
+1 973-929-8000
Web site: www.evonik.com
Booth Number: 2226

E-Z Line Pipe Support Co., LLC
Manvel, TX
+1 713-675-6693
Web site: www.ezline.com
Booth Number: 1161

- Farwest Corrosion Control Co.
Downey, CA
+1 310-532-9524
Web site: www.farwestcorrosion.com
Booth Number: 1618

THANK YOU TO OUR EXHIBITORS...
Exhibitors

GMC Electrical, Inc.
Ontario, CA
+1 909-947-6016
Web site: www.gmcelectrical.net
Booth Number: 2150

Goebel Fasteners, Inc.
Houston, TX
+1 713-393-7007
Web site: www.goebelfasteners.com
Booth Number: 2104

GPT (Pikotek)
Wheat Ridge, CO
+1 303-988-1242
Web site: www.gptindustries.com
Booth Number: 2145

Greenman-Pedersen, Inc.
Babylon, NY
+1 631-587-5060
Web site: www.gpinet.com
Booth Number: 1504

Grid-Guard
Alpharetta, GA
+1 225-335-9676
Web site: www.grid-guard.net
Booth Number: 1453

Grillo-Werke AG
Duisburg, Germany
+1 732-616-8273
Web site: www.grillo.de
Booth Number: 2218

Guided Ultrasonics, Ltd.
London, U.K.
+44 845 605 0227
Web site: www.guided-ultrasonics.com
Booth Number: 1950

Guided Wave Analysis, LLC
San Antonio, TX
+1 210-842-7635
Web site: www.gwanalysis.com
Booth Number: 2153

Hangzhou King Titanium Co., Ltd.
Hangzhou, Zhejiang, China
+571-8653-2468
Web site: www.king-titanium.com
Booth Number: 1310

Harsco Minerals International
Camp Hill, PA
1 888-733-3646
Web site: www.blackbeautyabrasive.com
Booth Number: 2632

Haynes International, Inc.
Kokomo, IN
+1 765-456-6012
Web site: www.haynesintl.com
Booth Number: 1930

HCL Fasteners
Bath, U.K.
+44 1761417714
Web site: www.hclfasteners.com
Booth Number: 1334

Hempel USA, Inc.
Conroe, TX
+1 936-523-6000
Web site: www.hempel.us
Booth Number: 1230

Highland International, LLC
Boone, NC
+1 828-265-2513
Web site: www.highland-international.com
Booth Number: 2636

High Performance Alloys, Inc.
Windfall, IN
+1 765-945-8230
Web site: www.hpalloy.com
Booth Number: 2149

Highridge Consulting Services, LLC
Prague, OK
+1 405-395-7775
Web site: www.highridgecorrosion.com
Booth Number: 2413

Hippo Coatings Co.
Venice, FL
+1 816-474-4643
Web site: www.hippocoatings.com
Booth Number: 1224

HMI Technical Solutions
Blue Bell, PA
+1 610-832-7308
Web site: www.hmiservices.com
Booth Number: 1211

New Exhibitors

International Pavilion Exhibitors

Visit us at CORROSION 2019 Conference and Expo Booth 1411

Measure wall thickness of structural steel, boiler tubes, storage tanks and more with the UMP Series from Fischer.
- Ultrasonic corrosion and precision thickness gages
- Small in size, big on features
- Vibrates on alarm
- Field Upgradeable Software

Contact us today!
Fischer Technology Inc.
860.683.0781
www.fischer-technology.com
info@fischer-technology.com

Visit us at CORROSION 2019 Conference and Expo Booth 1411
Sealing, Connecting and Protecting the World’s Pipelines

Proven reliability and safety assurance

GPT manufactures pipeline solutions that ensure the transportation of oil and gas products is done safely and efficiently. Our complete line of isolating gaskets, monolithic isolation joints and wall penetration seals and more are durably constructed to withstand the extreme rigors of the environment. But our commitment doesn’t end with our products. On-staff industry experts are readily available to work with your business to create the most logical solution to your needs—from concept to completion.

With global focus on safety, reliability and sustainability, we produce innovative solutions that enhance the integrity of pipeline systems today to meet the demands of tomorrow.

Visit us at CORROSION 2019 Conference and Expo Booth 2145

Denver, US  |  Houston, US  |  St. Neots, UK  |  Dubai, UAE

www.gptindustries.com
Exhibitors

HoldTight Solutions, Inc.
Houston, TX
+1 713-266-9339
Web site: www.holdtight.com
Booth Number: 2100

Honeywell Corrosion Solutions
Houston, TX
+1 281-444-2282
Web site: www.honeywellprocess.com/corrosion
Booth Number: 1936

HZJ Tech
Sharjah, U.A.E.
+971-551539738
Web site: www.hzjtech.com
Booth Number: 2655

IBIX North America
Largo, FL
+1 727-322-4611
Web site: www.ibixusa.com
Booth Number: 2514

ICORR Technologies, Inc.
Morgan, UT
+1 801-388-1215
Web site: www.icorrtech.com
Booth Number: 2651

InduMar Products, Inc.
Houston, TX
+1 713-977-4100
Web site: www.indumar.com
Booth Number: 2355

Innerspec Technologies
Forest, VA
+1 434-948-1301
Web site: www.sales@innerspec.com
Booth Number: 2525

Integrated Corrosion Engineering
Houston, TX
+1 713-789-9181
Web site: www.integratedcorrosion.com
Booth Number: 1916

Integrated Global Services
Richmond, VA
+1 804-194-1646
Web site: www.integratedglobal.com
Booth Number: 1658

Integrity Products
Sherwood Park, AB, Canada
1 800-673-0925
Web site: integrity-products.com
Booth Number: 1110

Integrity Solutions Field Services, Ltd.
Denver, CO
+1 989-388-3051
Web site: www.isfieldservices.com
Booth Number: 1253

International Paint
Houston, TX
+1 713-682-1711
Web site: www.internationalpaint.com
Booth Number: 2336

Interco Integrity Services
Houston, TX
+1 281-484-2000
Web site: www.interco-integrity.com
Booth Number: 1262

Interplastic Corp.
St. Paul, MN
+1 651-481-6860
Web site: www.interplastic.com
Booth Number: 1133

INNOVATED
CORROSION COMPANIES

INTEGRATED
CORROSION COMPANIES

InnoTech Alberta
Edmonton, AB, Canada
+1 780-450-5111
Web site: www.innotechalberta.ca
Booth Number: 1656

Innovative Analytical Solutions (IAS)
Bremen, AL
+1 256-287-1477
Web site: www.steelanaizer.com
Booth Number: 2431

Intech Services
Newark, DE
+1 302-366-8530, ext. 110
Web site: www.intechservices.com
Booth Number: 1416

INTEGRATED
CORROSION COMPANIES

New Exhibitors

International Pavilion Exhibitors
HT 365 is an anti-corrosive coating, a water displacing agent, a lubricant, and a penetrating fluid. It creates an imperceptible thin-film coating that offers excellent salt contaminant and humidity protection.

**Protection for these typical applications and more:**

- Unpainted metal surfaces
- Equipment in storage
- Machined parts
- Marine exposed components
- Moving parts that cannot be protected with a paint, polymer, or epoxy coating

Contact your HoldTight® representative or visit Holdtight.com for more information.

Visit us at CORROSION 2019 Conference and Expo Booth 2100
Exhibitors

ICCC
International/Interprovincial Corrosion Control Co. (ICCC)
Burlington, ON, Canada
+1 905-634-7751
Web site: www.rustrol.com
Booth Number: 2044

Intertek
Houston, TX
+1 713-479-8400
Web site: www.intertek.com
Booth Number: 1233

Ionix Advanced Technologies, Ltd.
Huddersfield, West Yorkshire, U.K.
+44 1484 505859
Web site: www.ionix.at
Booth Number 918

Iris Inspection Services, Inc.
Baytown, TX
+1 281-424-3200
Web site: www.iris-inspection.com
Booth Number: 1210

IRISNDT, Inc.
Houston, TX
+1 713-722-7177
Web site: www.irisndt.com
Booth Number: 1033

IRT Integrated Rectifier Technologies, Inc.
Edmonton, AB, Canada
+1 780-447-1114
Web site: www.irtrectifier.com
Booth Number: 1624

IUPAT Finishing Trades Institute
Hanover, MD
+1 410-564-5850
Web site: www.iupat.org
Booth Number: 2748

Ivium Technologies
Eindhoven, The Netherlands
+31 40 239 0600
Web site: www.ivium.com
Booth Number: 2252

Jotun Paints, Inc.
Belle Chasse, LA
+1 504-394-3538
Web site: www.jotun.com
Booth Number: 2007

Kantex Industries, Inc.
Olathe, KS
+1 918-780-5813
Web site: www.kantex.com
Booth Number: 1451

King Innovation
O’Fallon, MO
+1 636-519-5467
Web site: www.kinginnovation.com
Booth Number: 1435

Kirk Engineering Co., Inc.
Oneonta, AL
+1 205-274-2221
Web site: www.kirkengineering.com
Booth Number: 2523

Koch Specialty Plant Services, LLC
Houston, TX
+1 713-427-7756
Web site: www.kochservices.com
Booth Number: 1100

Kubota Materials Canada Corp.
Orillia, ON, Canada
+1 705-323-2391
Web site: www.kubotamaterials.com
Booth Number: 1603

Kuraray America, Inc.
Houston, TX
+1 713-408-8902
Web site: www.kuraray.com
Booth Number: 1757

KTA-Tator, Inc.
Pittsburgh, PA
+1 412-788-1300
Web site: www.ktat.com
Booth Number: 1100

Kubota Materials Canada Corp.
Orillia, ON, Canada
+1 705-323-2391
Web site: www.kubotamaterials.com
Booth Number: 1603

LAIKEN S.A.
Buenos Aires, Argentina
+54 11 4304 0111
Web site: www.laiken.com.ar
Booth Number: 1431

JA Electronics
Stafford, TX
+1 281-879-9903
Web site: www.jaelectronics.com
Booth Number: 1914

Jennings Anodes USA
Houston, TX
+1 281-844-6560
Web site: www.jenningsanodes.com
Booth Number: 2203

John Manville Industrial Insulation Group
Denver, CO
+1 970-964-7292
Web site: www.jm.com
Booth Number: 2737

Lamons
Houston, TX
1 800-231-6906
Web site: www.lamons.com
Booth Number: 1056

LAIKEN S.A.
Buenos Aires, Argentina
+54 11 4304 0111
Web site: www.laiken.com.ar
Booth Number: 1431

Lamons
Houston, TX
1 800-231-6906
Web site: www.lamons.com
Booth Number: 1056

LBBB Baskerville
Leeds, UK
+44 (0)113 256 2155
Web site: www.lbbcbaskerville.co.uk
Booth Number: 2111

Jotun Paints, Inc.
Belle Chasse, LA
+1 504-394-3538
Web site: www.jotun.com
Booth Number: 2007

 visita us at CORROSION 2019 Conference and Expo Booth 2044

www.Rustrol.com

Cathodic Isolator
effectively blocks the DC current needed for cathodic protection, while providing grounding path for:
• AC Fault Currents
• Lightning Protection
• Mitigation of Induced AC Voltages
• Power Switching Surge Currents

Cathodic Isolator features electronic/electrical construction that responds instantly, protecting personnel and equipment against electrical shock hazards.

E-mail: Contact@Rustrol.com
Central Fax: 905-333-4313

Visit us at CORROSION 2019 Conference and Expo Booth 2044

Rustrol® Cathodic Isolator®
Lewco Specialty Products
Baton Rouge, LA
+1 225-924-3221
Web site: www.lewcosupermat.com
Booth Number: 1002

Lloyd’s Register
Houston, TX
+1 281-398-7370
Web site: www.lr.org
Booth Number: 2316

Loftis Co., The
Midland, TX
+1 432-682-8343
Web site: www.loftiscompany.com
Booth Number: 1209

Lonza, Inc.
Morristown, NJ
+1 201-316-9200
Web site: www.lonza.com
Booth Number: 1408

LORESCO, Inc.
Hattiesburg, MS
+1 601-544-7490
Web site: www.loresco.com
Booth Number: 1910

Luna
Charlottesville, VA
+1 434-972-9950
Web site: www.lunainc.com/lunalabs
Booth Number: 2224

Magneto Special Anodes; an EVOQUA Brand
Union, NJ
+1 908-851-5814
Booth Number: 1406

Mascoat
Houston, TX
+1 713-465-0304
Web site: www.mascoat.com
Booth Number: 1327

MATCOR, Inc.
Chalfont, PA
+1 215-348-2974
Web site: www.matcor.com
Booth Number: 1606

McClure Engineering Co.
North Kansas City, MO
+1 816-309-7755
Web site: www.mcclureenergy.com
Booth Number: 1307

For Quality Rectifiers, Short Lead Times and Superior Customer Service ...Choose IRT!

We have the solution to help you Protect your Assets and our Environment!

Email: sales@irtrectifier.com  Website: www.irtrectifier.com
An active certification equals an active career!
Keep your career active by keeping your certification current.
Visit www.naceinstitute.org/recertify to renew your certification today!
INTEGRITY MANAGEMENT & ASSESSMENT

- ECDA, Casing ECDA, Facility ECDA & SCCDA
- CP Assessments (CIS/DCVG/ACVG/ACCA/SOIL/GPS)
- Asset & Profile Mapping, GIS Database Integration
- Interference, Influence Study & Corrective Action
- AC & Inducted CP Threat Assessment
- Data Management & Integration

VISIT US AT
NACE CORROSION 2019
BOOTH 1444

MESAPRODUCTS.COM

1.888.800.MESA
CALL OUR TEAM OF EXPERTS TODAY!


VISIT WITH US AT CORROSION 2019

BOOTH #2325

PIPE WRAP COMPOSITE REPAIR SYSTEMS
REPAIR DENTS, GOUGES, CORROSION, WRINKLE BENDS
AND MORE WITH:

A+W™
ATLAS™
FORMAShield™
PIPE WRAP®

EXTENDING THE LIFE OF THE WORLD’S INFRASTRUCTURE.

Around the world, asset owners are faced with the challenges of deteriorating infrastructure — and every day, Milliken Infrastructure is there with innovative solutions to help strengthen, repair, protect and rehabilitate. From our superior engineering expertise and field support to our unmatched research and testing capabilities, we help you implement customized solutions that get the job done quickly, easily and without lengthy disruptions. How can we help you face your next challenge head-on?

Visit infrastructure.milliken.com or call 855.655.6750 to learn more.

Milliken Infrastructure Solutions, LLC
Spartanburg, SC
+1 855-655-6750
Web site: www.infrastructure.milliken.com
Booth Number: 2325

MISTRAS Group, Inc.
Princeton Junction, NJ
+1 833-MISTRAS
Web site: www.mistrasgroup.com
Booth Number: 2123

Mobiltex Technologies, Inc.
Calgary, AB, Canada
+1 403-291-2770
Web site: www.mobiltex.com
Booth Number: 2330

Modern Water, Inc.
New Castle, DE
+1 302-669-6900
Web site: www.modernwater.com
Booth Number: 1459

Modumetal, Inc.
Seattle, WA
+1 281-660-3638
Web site: www.modumetal.com
Booth Number: 932

Monti Tools, Inc.
Houston, TX
+1 832-623-7970
Web site: www.monti-tools.com
Booth Number: 1050

Montipower, Inc.
Manassas, VA
1 877-629-8777
Web site: www.mbxit.com
Booth Number: 2117
Exhibitors

NVI, LLC
Gray, LA
+1 985-876-5559
Web site: www.nvindt.com
Booth Number: 2017

Oceanscan
Stafford, TX
+1 281-240-5441
Web site: www.oceanscan-usa.com
Booth Number: 1226

OLI Systems, Inc.
Cedar Knolls, NJ
+1 973-539-4996
Web site: www.olisystems.com
Booth Number: 1527

OmniMetrix
Buford, GA
+1 770-209-0012
Web site: www.omnimetrix.net
Booth Number: 2011

OneBridge Solutions, Inc.
Edmonton, AB, Canada
1 877-261-7045
Web site: www.onebridgesolutions.com
Booth Number: 1558

Onstream Pipeline Inspection
Houston, TX
+1 281-977-7880
Web site: www.onstream-pipeline.com
Booth Number: 1022

Onyx Services
New Caney, TX
Tel: +1 281-577-5110
Web site: www.onyxservices.com
Booth Number: 916

Outokumpu Stainless USA, LLC
Calvert, AL
+1 251-829-3600
Web site: www.outokumpu.com
Booth Number: 2644

Owens Corning FOAMGLAS Insulation
Toledo, OH
+1 724-327-6100
Web site: www.foamglas.com
Booth Number: 2200

Oxifree Metal Protection
Frimley, Surrey, U.K.
+44 1276 534110
Web site: www.oxifree.com
Booth Number: 1858

Pacific Sensor
Carrollton, TX
+1 972-242-5750
Web site: pacificsensor.com
Booth Number: 1655

P.A., Inc.
Houston, TX
+1 713-570-4900
Web site: www.painc.com
Booth Number: 1503
FOAMGLAS® INSULATION
IS AN EXCELLENT CHOICE DESIGNED TO PREVENT CUI

Cellular glass is the only impermeable insulation material. For over 70 years, FOAMGLAS® cellular glass insulation has been proven to resist moisture and provide constant thermal resistance.

FOAMGLAS® insulation is:
• Impermeable to water and water vapor
• Resistant to acids and organic solvents
• Dimensionally stable
• Inherently inhibitive to corrosion

Contact us to learn more
www.foamglas.com
1-724-327-6100 | 800-545-5001
Exhibitors

- Parr Instrument Co.
  Moline, IL
  +1 309-762-7716
  Web site: www.parrinst.com
  Booth Number: 2216

- PCC Metals Group
  Warrensville Heights, OH
  +1 636-887-9060
  Website: www.pccmetalsgroup.com
  Booth Number: 1600

- PCC Rollmet, Inc.
  Irvine, CA
  +1 949-221-5285
  Web site: www.rollmetusa.com
  Booth Number: 1202

- PDS
  El Dorado, AR
  +1 870-863-5707
  Web site: www.pdscoinc.com
  Booth Number: 1202

- Penspen
  Houston, TX
  +1 713-953-7007
  Web site: www.penspen.com
  Booth Number: 1753

- Performance Pipe
  Plano, TX
  +1 972-599-7306
  Web site: www.performancepipe.com
  Booth Number: 2506

- Pine Research Instrumentation
  Durham, NC
  +1 919-782-8320
  Web site: www.pineresearch.com
  Booth Number: 939

- Pipeline Inspection Co., Ltd.
  Houston, TX
  +1 713-681-5837
  Web site: www.picltd.com
  Booth Number: 1623

- PLIDCO
  Westlake, OH
  +1 440-871-5700
  Web site: www.plidco.com
  Booth Number: 900

- Polycorp Protective Linings
  Elora, ON, Canada
  +1 519-846-2075
  Web site: www.poly-corp.com
  Booth Number: 2445

- Polycorp Protective Linings
  Elora, ON, Canada
  +1 519-846-2075
  Web site: www.poly-corp.com
  Booth Number: 2445

- Polyguard Products, Inc.
  Ennis, TX
  +1 281-580-5700
  Web site: www.polyguard.com
  Booth Number: 1430

- Pond
  Peachtree Corners, GA
  +1 678-336-7740
  Web site: www.pondco.com
  Booth Number: 2201

- PPG Protective & Marine Coatings
  Pittsburgh, PA
  1 888-9PP-GPMC
  Web site: www.ppgpmc.com
  Booth Number: 1536

- Praxair Surface Technologies, Inc.
  Indianapolis, IN
  +1 317-240-2500
  Web site: www.praxairsurfacetechnologies.com
  Booth Number: 2029

- Premium Inspection & Testing Group
  Houston, TX
  +1 281-310-5898
  Web site: www.pitinc.com
  Booth Number: 1358

- Princeton Applied Research
  Oak Ridge, TN
  +1 865-425-1289
  Web site: www.ameteksi.com
  Booth Number: 2052

- Pro-Mark Utility Supply, Inc.
  Whittier, CA
  +1 562-692-6161
  Web site: www.promarksupply.com
  Booth Number: 2122

- Protección Catódica de Colombia
  Bogota, Colombia, Colombia
  +57 313 495 9571
  Web site: www.proteccioncatodica.com
  Booth Number: 1859

- PureHM
  Nisku, AB, Canada
  +1 780-436-4400
  Web site: www.pureHM.net
  Booth Number: 936
Harsh environment?
Meet tough coatings and easy application.

Your challenging environment has met its match with PPG’s industry-leading coatings that stand up to corrosion and protect your assets.

From heat-resistant coatings to one-coat applications, our durable finishes and topcoats are ideal for heavy-duty equipment in industries such as:

- Oil and gas
- Commercial infrastructure
- Rail
- Power

Our coatings are easy to apply and dry quickly, which means you could be up and running faster than ever. Protect your assets, protect your people, and protect your productivity with PPG.

Visit www.ppgpmc.com or discuss with your PPG representative today.

Visit us at CORROSION 2019 Conference and Expo Booth 1536
Qingdao Rising-Sun Shine Ship Engineering Technique Co., Ltd.
Qingdao, ShanDong, China
+86 (0) 532 5865 9012
Web site: www.qdrss.com
Booth Number: 2423

Q-Lab Corp.
Westlake, OH
+1 440-835-8700
Web site: www.q-lab.com
Booth Number: 923

QSA Global, Inc.
Burlington, MA
+1 781-272-2000
Web site: www.QSA-Global.com
Booth Number: 1005

Radiodetection
Raymond, ME
+1 207-655-8525
Web site: www.radiodetection.com
Booth Number: 1508

Ramco Manufacturing Co.
Kenilworth, NJ
+1 908-245-4500
Web site: www.ramcosealing.com
Booth Number: 1311

RBW Enterprises, Inc.
Newnan, GA
+1 770-251-8989
Web site: www.rbwe.com
Booth Number: 2622

RD Coatings—Dothee S.A.
Assesse, Belgium
+32 83 233 800
Web site: www.rd-coatings.com or www.rdcoatingsusa.com
Booth Number: 1959

REMA Tip Top/North America, Inc.
Northvale, NJ
1 800-334-7362
Web site: www.rematiptop.com
Booth Number: 2022

RigUp
Austin, TX
+1 512-501-5452
Web site: www.rigup.com
Booth Number: 2502

RJ Lee Group
Monroeville, PA
+1 724-325-1776
Web site: www.rjlg.com
Booth Number: 930

RMB Products, Inc.
Fountain, CO
+1 719-382-9300
Web site: www.rmbproducts.com
Booth Number: 1400

Roberts Corrosion Services, LLC
Ellenboro, WV
+1 304-869-4007
Web site: www.robertscorrosionservices.com
Booth Number: 2202

Rock Armour
Jacksonville, TX
+1 903-339-6620
Web site: www.therockarmour.com
Booth Number: 947

Do you currently work, want to work, or simply learn more about coatings?

Protective Coatings WORKSHOP

March 26 - 27, 2019
Nashville, TN • Nashville Music City Center


For more information on workshop details, visit nacecorrosion.org
Exhibitors

Seaguard International—A Division of Canada Metal
Delta, BC, Canada
+1 604-940-2010
Web site: www.seaguardinternational.com
Booth Number: 1049

Seal for Life Industries BVBA
Franklin, MA
+1 713-623-3929
Web site: www.sealforlife.com
Booth Number: 2128

Sensor Networks, Inc.
Boalsburg, PA
+1 814-466-7207
Web site: www.sensornetworksinc.com
Booth Number: 1018

Sentinel Corrosion Services
Houston, TX
+1 713-789-9181
Web site: www.integratedcorrosion.com
Booth Number: 1918

Shaanxi Elade New Material Technology Co., Ltd.
Xi’an Shaanxi, China
+86-29-83151667
Web site: www.eladeanode.com
Booth Number: 1115

Shanghai Zhongzhou Special Alloy Materials Co., Ltd.
Shanghai, China
+86 21 59622255
Web site: www.en.china-alloy.com
Booth Number 1760

Shat-R-Shield
Salisbury, NC
1 800-223-0853
Web site: www.shatrsheild.com
Booth Number: 2317

Shawcor
Toronto, ON, Canada
+1 416-744-5541
Web site: www.shawcor.com
Booth Number: 2530

Sherwin-Williams
Cleveland, OH
+1 216-566-2000
Web site: www.sherwin-williams.com/protective
Booth Number: 1818

Ship 2 Shore
Burnaby, BC, Canada
1 800-430-1533
Web site: www.ship-2-shore.com
Booth Number 2749

Sika Corp. (Tuff-N-Nuff)
St. Louis, MO
1 800-325-3605
Web site: www.tuff-n-nuff.com
Booth Number: 2008

Southwestern Paint Panels
Houston, TX
+1 281-442-0000
Web site: www.swpaintpanels.com
Booth Number: 2051

Southwest Research Institute
San Antonio, TX
+1 210-522-6654
Web site: www.swri.org/industries/materials
Booth Number: 945

Speir Hunter, Ltd.
Long Bennington, UK
+44 1400 283480
Web site: www.speirhunter.com
Booth Number: 1324

Sponge-Jet, Inc.
Newington, NH
+1 603-610-7950
Web site: www.spongejet.com
Booth Number: 2004

SSPC: The Society for Protective Coatings
Pittsburgh, PA
+1 412-281-2331
Web site: www.sspc.org
Booth Number: 908

Ultimate Corrosion PROTECTION
Sauereisen’s vast selection of polymer linings offer superior corrosion protection, chemical resistance and abrasion resistance for municipal and industrial treatment plants including the collection systems, concrete and steel tankage and secondary containment.

Extend the life of your structure by contacting us for an Engineered Solution.

Sauereisen
160 Gamma Drive
Pittsburgh, PA 15238-2989, U.S.A.
P (412) 963-0303 • F (412) 963-7620
www.sauereisen.com

Visit us at CORROSION 2019 Conference and Expo Booth 1429
Are you Planning to Hire Employees?

Participate in the NACE Career Fair at CORROSION 2019

Tuesday, March 26, 2019 – 1 p.m. to 4 p.m.
Nashville Music City Center, Nashville, TN

The NACE CORROSION Conference attracts over 6,000 attendees each year. The Career Fair, which takes place during the conference, brings in more than 500 seasoned and young professionals, graduate or post-doc candidates primed for the job market.

Benefits of Participating

• Showcase your company
• Expand your business networking by connecting with other corrosion professionals
• Recruit talent
• Web link to your company site
• Reserve your table (6 ft.), 2 chairs – no electricity
• Complimentary posting on the NACE Career Board (A value of $295 for a 30 day posting)

Cost: $250 USD

Don’t miss out on recruiting top talent and showcasing your company’s job opportunities. Contact Cindy Tracy at cindy.tracy@nace.org to reserve your spot.
### Exhibitors

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Location</th>
<th>Phone Number</th>
<th>Web Site</th>
<th>Booth Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless Structurals</td>
<td>Conroe, TX</td>
<td>1 877-739-6057</td>
<td><a href="http://www.sssus.com">www.sssus.com</a></td>
<td>1227</td>
</tr>
<tr>
<td>Step-Ko Products, LLC</td>
<td>Lafayette, LA</td>
<td>+1 337-837-4141</td>
<td><a href="http://www.stepko.com">www.stepko.com</a></td>
<td>2409</td>
</tr>
<tr>
<td>Stress Engineering Services</td>
<td>Houston, TX</td>
<td>+1 281-955-2900</td>
<td><a href="http://www.stress.com">www.stress.com</a></td>
<td>1424</td>
</tr>
<tr>
<td>Structural Integrity Associates, Inc.</td>
<td>Huntersville, NC</td>
<td>1 877-4SI-POWER</td>
<td><a href="http://www.structint.com">www.structint.com</a></td>
<td>2223</td>
</tr>
<tr>
<td>Stuart Steel Protection Corp.</td>
<td>S. Bound Brook, NJ</td>
<td>+1 732-469-5544</td>
<td><a href="http://www.stuartsteel.com">www.stuartsteel.com</a></td>
<td>1507</td>
</tr>
<tr>
<td>Sulzer Mixpac USA, Inc.</td>
<td>Salem, NH</td>
<td>+1 603-244-9733</td>
<td><a href="http://www.sulzer.com/mixcoat">www.sulzer.com/mixcoat</a></td>
<td>2433</td>
</tr>
<tr>
<td>Superior Products International (SPI)</td>
<td>Shawnee, KS</td>
<td>+1 913-962-4848</td>
<td><a href="http://www.spicoatings.com">www.spicoatings.com</a></td>
<td>1652</td>
</tr>
<tr>
<td>Swain Meter Co./The</td>
<td>Mt. Pleasant, MI</td>
<td>+1 989-773-3700</td>
<td><a href="http://www.swainmeter.com">www.swainmeter.com</a></td>
<td>2416</td>
</tr>
<tr>
<td>Sypris Technologies, Inc.</td>
<td>Louisville, KY</td>
<td>+1 502-774-6011</td>
<td><a href="http://www.sypris.com">www.sypris.com</a></td>
<td>2427</td>
</tr>
<tr>
<td>Tantaline CVD</td>
<td>Central Islip, NY</td>
<td>+1 631-981-7081</td>
<td><a href="http://www.cvdequipment.com">www.cvdequipment.com</a></td>
<td>1653</td>
</tr>
<tr>
<td>TEAM, Inc.</td>
<td>Sugarland, TX</td>
<td>1 800-662-8326</td>
<td><a href="http://www.teaminc.com">www.teaminc.com</a></td>
<td>1032</td>
</tr>
<tr>
<td>Technical Toolboxes</td>
<td>Houston, TX</td>
<td>+1 713-630-0505</td>
<td><a href="http://www.technicaltoolboxes.com">www.technicaltoolboxes.com</a></td>
<td>1352</td>
</tr>
<tr>
<td>Technofink, LLC</td>
<td>Spring, TX</td>
<td>+1 396-331-6200</td>
<td><a href="http://www.tecnofink.com">www.tecnofink.com</a></td>
<td>2535</td>
</tr>
<tr>
<td>Teledyne Marine</td>
<td>Daytona Beach, FL</td>
<td>+1 386-236-0780</td>
<td><a href="http://www.teledynemarine.com">www.teledynemarine.com</a></td>
<td>1552</td>
</tr>
<tr>
<td>Thorpe Specialty Services Corp.</td>
<td>Houston, TX</td>
<td>+1 713-443-7200</td>
<td><a href="http://www.thorpepm.com">www.thorpepm.com</a></td>
<td>1017</td>
</tr>
<tr>
<td>Tiger-Vac, Inc.</td>
<td>Dana, FL</td>
<td>1 800-668-4437</td>
<td><a href="http://www.tiger-vac.com">www.tiger-vac.com</a></td>
<td>1105</td>
</tr>
<tr>
<td>Tinker &amp; Rasor</td>
<td>San Bernardino, CA</td>
<td>+1 909-890-0700</td>
<td><a href="http://www.tinker-rasor.com">www.tinker-rasor.com</a></td>
<td>1844</td>
</tr>
<tr>
<td>Titanium Electrode Products, Inc.</td>
<td>Sugarland, TX</td>
<td>+1 281-498-4727</td>
<td><a href="http://www.telprocompanies.com">www.telprocompanies.com</a></td>
<td>2048</td>
</tr>
<tr>
<td>TruQC</td>
<td>Kirkwood, MO</td>
<td>1 866-488-4170</td>
<td><a href="http://www.truqc.com">www.truqc.com</a></td>
<td>2434</td>
</tr>
<tr>
<td>Tulsa Inspection</td>
<td>Tulsa, OK</td>
<td>+1 918-274-1100</td>
<td><a href="http://www.tulsainspection.com">www.tulsainspection.com</a></td>
<td>1009</td>
</tr>
<tr>
<td>TWI, Ltd.</td>
<td>Cambridge, U.K.</td>
<td>+44 122389000</td>
<td><a href="http://www.twi-global.com">www.twi-global.com</a></td>
<td>1510</td>
</tr>
<tr>
<td>ULVA CUI Prevention</td>
<td>Telford, Shropshire, U.K.</td>
<td>+44 195267600</td>
<td><a href="http://www.ulva.co.uk">www.ulva.co.uk</a></td>
<td>1761</td>
</tr>
<tr>
<td>United Pipeline Systems, Inc.</td>
<td>Durango, CO</td>
<td>1 800-938-6483</td>
<td><a href="http://www.unitedpipeline.com">www.unitedpipeline.com</a></td>
<td>1744</td>
</tr>
<tr>
<td>United Titanium</td>
<td>Wooster, OH</td>
<td>+1 330-264-2111</td>
<td><a href="http://www.unitedtitanium.com">www.unitedtitanium.com</a></td>
<td>2131</td>
</tr>
<tr>
<td>University of Akron—NCERCAMP</td>
<td>Akron, OH</td>
<td>+1 330-972-678</td>
<td><a href="http://www.uakron.edu/ncercamp">www.uakron.edu/ncercamp</a></td>
<td>1222</td>
</tr>
</tbody>
</table>

---

**New Exhibitors**

**International Pavilion Exhibitors**
Aerolon®, a spray-applied thermal insulating coating, can help reduce the frequency and severity of condensation, prevent problems associated with corrosion under insulation (CUI) and offer a personnel protection barrier from hot surface temperatures. Find out more at tnemec.com/aerolon.
Exhibitors

Western Specialties, LLC
Dansville, NY
1 800-482-9388
Web site: www.westernspecialtiesllc.com
Booth Number: 1150

WrapMaster, Inc.
Longview, TX
+1 903-643-8080
Web site: www.wrapmaster.us
Booth Number: 2113

Xing Chan Tai Anodes Technology (Beijing)
Co., Ltd. (XCTAT)
Beijing, China
+86 10 8580 6993
Web site: www.xctat.com/EN
Booth Number: 1450

Zerust Oil & Gas
Beachwood, OH
1 800-328-2433
Web site: www.zerust-oilgas.com
Booth Number: 1001

Zhejiang Yuxi Corrosion Control Corp.
Ningbo, Zhejiang, China
+86 574-83882231
Web site: www.yuxi-anode.com
Booth Number: 1122

Zibo Deyuan Metal Material Co., Ltd.
Zibo, Shandong, China
+86-533-3230567
Web site: www.deyuanmetal.com
Booth Number: 1107

---

Engage with NACE International

Search volunteer opportunities.

Join a community.

Give back to the industry.

Discover, share, and connect through an online community.

Visit volunteer.nace.org

---
Celebrating the award winners

Wednesday, March 27, 2019
at noon

NACE International’s CORROSION Conference & Expo in Nashville.

Want to join in on the celebration?
Email CPcontractorawards@coatingspromag.com for more details.

Photos courtesy of the award winners