



# **NACE NORTHERN AREA WESTERN CONFERENCE 2020** FINAL PROGRAM

February 5 - 6, 2020 | Saskatchewan, Canada

Final Program Sponsored by

**BRENNTAG**



## Hello and Welcome to the 2020 NACE Northern Area Western Conference!

On behalf of the Organizing Committee, I would like to welcome you to Regina and the exciting conference we have planned for this year. The theme this year is ***Doin' it Right! The Diversity of Managing Asset Integrity on the Prairies.***

Our land, people and industries are diverse, but they all can be impacted by corrosion and integrity challenges. Within that diversity is a common goal to protect the public and environment, and the challenge to prolong the life of our assets. With that in mind, we have put together a very diverse and exciting program covering a wide range of topics from across multiple industries. Additionally, we have a couple fantastic guest speakers who will tie our conference theme and diversity of topics together into some great opening presentations each day around growing through partnerships and our common pursuit of excellence. Be sure as well to join us on Wednesday evening after the close of the technical program in the exhibit hall for "A Sip of Saskatchewan". This will be an opportunity to try samples from the area's diverse mix of local breweries and distilleries, while you further explore the exhibits in the hall to spend time interacting with the exhibitors and network with your fellow corrosion professionals.

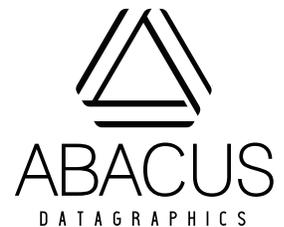


We want to thank our presenters for taking the time to prepare their presentations and sharing with everyone, our exhibitors for participating in the show, and our sponsors for their generous support to help make this conference happen! We hope that you find the technical presentations interesting, the vendors in the exhibit hall informative, and the networking event on Wednesday evening entertaining.

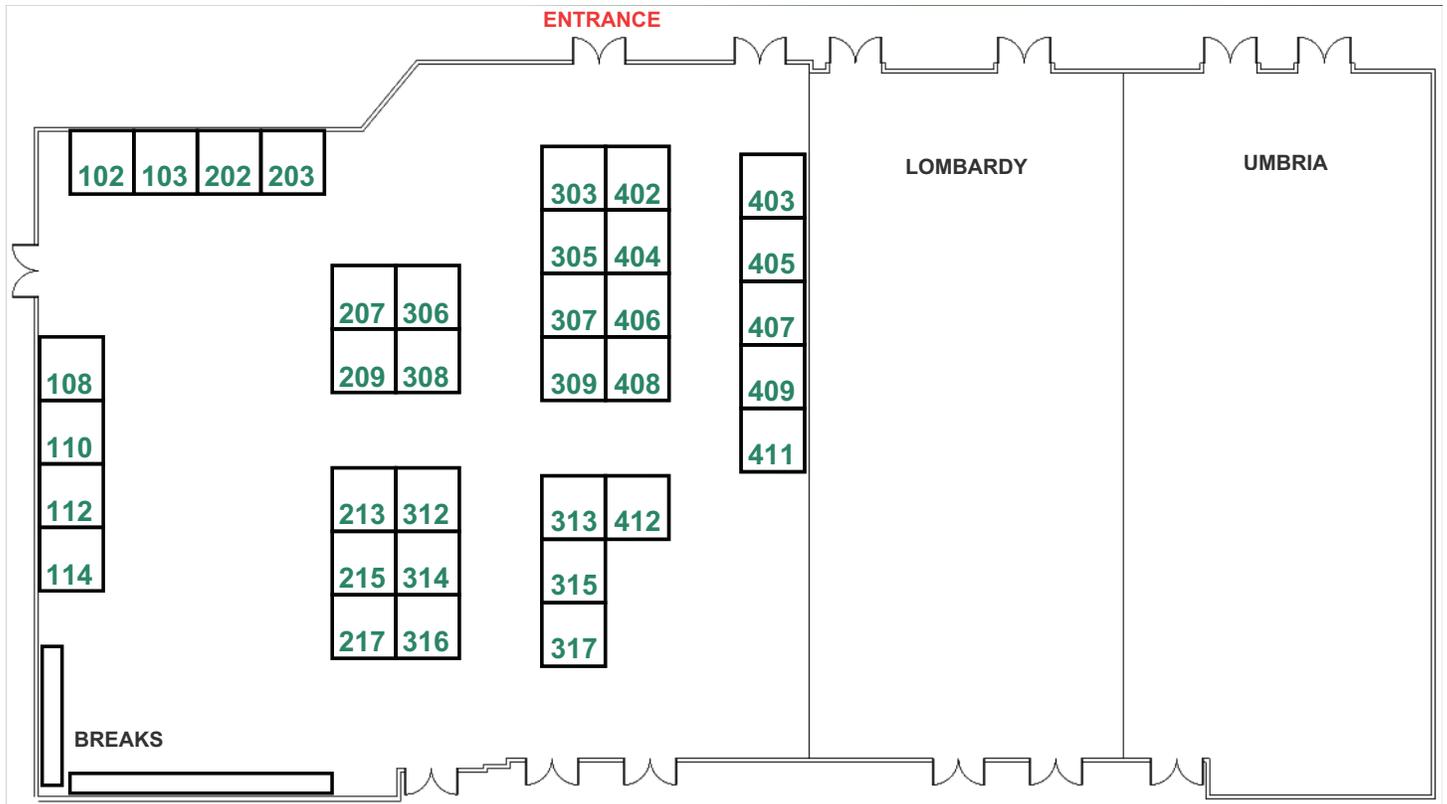
Thank you everyone for attending the 2020 NACE Northern Area Western Conference!

Sincerely,  
Bob Prieston, P.Eng.  
*2020 NAWC Chair*

# Thank You to Our Sponsors



# 2020 Floor Plan



## Exhibitors/Booth Numbers

### ● 2020 Sponsors

● **Abacus Datagraphics Ltd.** Booth 307

**Caproco (1987) Limited** Booth 308

**Carboline Co.** Booth 317

**CENOZON INC** Booth 209

**Clean Harbors** Booth 309

● **Cloverdale Paint Inc.** Booth 108

**Commercial Sand Blasting and Painting** Booth 202

**Corrizon Canada Inc.** Booth 314

**Corrosion Service Company Limited** Booth 403

**Critical Control Energy Services Inc.** Booth 303

**Daam Galvanizing** Booth 316

**Dairyland Electrical Industries** Booth 405

**Denso North America** Booth 112

**DistributionNOW** Booth 102

**Droycon Bioconcepts Inc.** Booth 306

● **Explore Inc.** Booth 114

**Ingu Solutions** Booth 411

● **International Paint / AkzoNobel** Booth 312

**International/ Interprovincial  
Corrosion Control. Co. Ltd.** Booth 217

**Nilex Inc.** Booth 305

**Onstream Pipeline Inspection, Inc.** Booth 110

● **Pipetech Corp.** Booth 207

**PureHM** Booth 203

**Radiodetection** Booth 404

**ROSEN** Booth 402

**Russell NDE Systems** Booth 408

**Rysco Corrosion Services, Inc.** Booth 103

**Sherwin-Williams** Booth 313

**Spartan Controls** Booth 215

**Specialty Polymer Coatings, Inc. (SPC)** Booth 213

**Trenton Corp.** Booth 412

**Tuff-N-Nuff** Booth 406

## Schedule of Events

Day	Event	Time
Tuesday, February 4	Registration	2:00 p.m. – 5:00 p.m.
	Exhibitor Setup	2:00 p.m. – 5:00 p.m.
Wednesday, February 5	Registration	7:30 a.m. – 4:30 p.m.
	Program	7:50 a.m. – 4:00 p.m.
	Lunch	11:30 a.m. – 1:00 p.m.
	A Sip of Saskatchewan Reception	4:30 p.m. – 7:00 p.m.
Thursday, February 6	Registration	7:30 a.m. – 12:00 p.m.
	Program	8:00 a.m. – 4:00 p.m.
	Lunch	11:30 a.m. – 1:00 p.m.
	Exhibit Teardown	3:00 p.m. – 6:00 p.m.

## Conference Committee

Position	Name
Conference Chair	Bob Prieston
Conference Vice-Chair	Barry Sudom
Technical Program Chair	Rob Fritz
Session Chairs	Matthew Kemp Ranga Krishnaiyer Eric Zahn Shelise Berteig
Social Events	Kendra Nichol
Publicity/Sponsorship	Jadon Rempel
Trade Show/Logistics	Dave Shannon
Registration	Shaun Fraser

# Technical Program

WEDNESDAY, FEBRUARY 5		
10:00 a.m. – 7:00 p.m.	Exhibition (Trentino-Tuscany Hall)	
	Umbria	Lombardy
7:50 a.m. – 8:00 a.m.	Opening and Welcome Remarks	
8:00 a.m. – 8:30 a.m.	<b>Keynote Speech</b> <b>Integrity Management... Our Pursuit of Excellence</b> Colin McGovern Advisor, Corporate Asset Integrity Canadian Natural Resources	
8:30 a.m. – 9:00 a.m.	MORNING BREAK – Sponsored by Park Derochie (Trentino-Tuscany Hall)	
	Oil & Gas Asset Integrity Chair: Shelise Berteig	Coatings & Linings Chair: Ranga Krishnaiyer
9:00 a.m. – 9:30 a.m.	<b>Regulatory Status Regarding the Use of Vapor Corrosion Inhibitors in Pipeline and Tank Applications</b> Presented by Kelly Baker, Zerust Oil and Gas	<b>Saving the Deer - The Enbridge Tank 79 Mural Restoration Project</b> Presented by Barry Sudom, Commercial Sand Blasting and Painting
9:30 a.m. – 10:00 a.m.	<b>Electronic Internal Pipeline Corrosion Monitoring and Mitigation Case Studies</b> Presented by Ryan Finlayson, Rysco Corrosion Services Inc.	<b>Investigation of a New Approach for Collection of Field Joint Coating QC Data</b> Presented by Connor Blake, Advanced Data Logistics
10:00 a.m. – 10:30 a.m.	MORNING BREAK – Sponsored by Park Derochie (Trentino-Tuscany Hall)	
10:30 a.m. – 11:00 a.m.	<b>Pipeline Casing Corrosion Protection Using Vapor Corrosion Inhibitors</b> Presented by Brooks Magnowski, Corrosion Service	<b>Field and Shop-Applied Pipeline Coatings in Canada (CSA Z245.30)</b> Presented by Pablo Fernandez Marchi, CSA Group
11:00 a.m. – 11:30 a.m.	<b>A Comparison Between Pipers and MFL Pipeline Data</b> Presented by Zachary Shand, INGU Solutions	<b>How Safe Is Your Passive Fire Protection (PFP)?</b> Presented by Ravishankar Nagarajan, AkzoNobel Coatings/ International Paints
11:30 a.m. – 1:00 p.m.	LUNCH BREAK – Sponsored by Abacus Datagraphics Ltd. and NACE Saskatchewan Section (Trentino-Tuscany Hall)	
	Oil & Gas Asset Integrity Chair: Shelise Berteig	Corrosion Modelling & Assessment Chair: Rob Fritz
1:00 p.m. – 1:30 p.m.	<b>Passivation Studies of Mild Steel in a Thermal In-Situ Oil Sands Environment</b> Presented by Ayodele Okunola, Baker Hughes	<b>Incorporating Inline Inspection and Cathodic Protection Data to More Effectively Evaluate External Corrosion for Pipelines</b> Presented by Vincent Soo, Dynamic Risk
1:30 p.m. – 2:00 p.m.	<b>Validation of the New Gamma Exponent Model for Localized Corrosion Assessment in Oil and Gas Pipelines</b> Presented by Colin Scott, IRISNDT	<b>Holistic Internal Corrosion Risk Assessment Methodology for Crude Oil Pipeline Segments</b> Presented by Chukwuma Onuoha, PureHM

## Technical Program

2:00 p.m. – 2:30 p.m.	<p><b>Developing an IOW program for Acid Gas Enrichment Equipment to Avoid Amine Corrosion</b> Presented by Reza Zareie, SPGC (South Pars Gas Complex)</p>	<p><b>Advancements in Pipeline Risk Analysis Using Integrated Data and Software</b> Presented by Jennifer Thornton, GDM Pipelines</p>
2:30 p.m. – 3:00 p.m.	<p><b>AFTERNOON BREAK</b> – <i>Sponsored by Park Derochie (Trentino-Tuscany Hall)</i></p>	
3:00 p.m. – 3:30 p.m.	<p><b>Flawless. No HAZ Over Similar or Dissimilar Material</b> Presented by Paul Cheng, FuseRing</p>	<p><b>A New Approach to IR Thermography as a Non-Destructive Helpful Method in Corrosion Detection in Slug Catchers of Gas Refineries: A Case Study in South Pars Gas Refineries</b> Presented by Reza Zareie, SPGC (South Pars Gas Complex)</p>
3:30 p.m. – 4:00 p.m.	<p><b>Terminal Piping Integrity Program Risk Factors and Methodology</b> Presented by Michael Zhou and Sockalingam Sekkappan, Gibson Energy</p>	<p><b>Risk Based Inspection Data Integration for Assessing Microbiologically Influenced Corrosion in the Oil and Gas Industry</b> Presented by Andre De Araujo Abilio, University of Alberta</p>
4:30 p.m. – 7:00 p.m.	<p><b>A Sip of Saskatchewan Reception</b> – Exhibit Hall (Trentino-Tuscany) <i>Sponsored by Explore Inc., Steel Reef Infrastructure Corp., Baker Hughes, NACE Saskatchewan Section</i></p> <p>Taste some of the best beverages from Saskatchewan while growing your professional network! Local breweries and distilleries will be offering samples of their creations on the Exhibition floor. Appetizers will be served too. Access to this reception is included in conference registration. Please note that you must be at least 19-years-old and above to attend the reception.</p> <p>Participating breweries and distilleries: Last Mountain Distillery, Pile O' Bones Brewing Co., Sperling Silver Distillery, District Brewing Co., Outlaw Trail Spirits Inc., and Rebellion Brewing Co.</p>	

THURSDAY, FEBRUARY 6			
10:00 a.m. – 3:00 p.m.	Exhibition Hours (Trentino-Tuscany Hall)		
	Umbria - Lombardy		
8:00 a.m. – 8:30 a.m.	<b>Keynote Speech</b> <b>Growing Through Partnerships</b> Eric Anderson Executive Director, SIMSA		
8:30 a.m. – 9:00 a.m.	MORNING BREAK (Trentino-Tuscany Hall)		
	Umbria	Lombardy	Campania A
	<b>Oil &amp; Gas Asset Integrity</b> <i>Sponsored by Anotec</i> Chair: Shelise Berteig	<b>Coatings &amp; Linings</b> Chair: Ranga Krishnaiyer	<b>Mining Industry Asset Integrity</b> Chair: Matthew Kemp
9:00 a.m. – 9:30 a.m.	<b>Insulation and CUI: Breakthroughs in Material Technology and an Explanation of Current Industry Standards</b> Presented by Fadi Bachir, Rockwool	<b>Protecting Anti-Corrosion Coatings during HDD Pull Back Using Fibre Reinforced Sacrificial Coatings</b> Presented by Aaron Geiger, Shawcor Pipeline Performance Products	<b>Corrosion Concerns in Mining Industry</b> Presented by Kai Li, Engcomp
9:30 a.m. – 10:00 a.m.	<b>AST's Cathodic Protection: Typical Problems from a Consulting Engineer Perspective</b> Presented by Johanna Chavez Lares, Norda Stelo	<b>Treat the Metal. Don't Just Coat It</b> Presented by Ofir Yaacov, Corrizion Canada Inc.	<b>Pipeline Coating Solutions for the Mining Industry</b> Presented by Maurice Batallas, Shawcor
10:00 a.m. – 10:30 a.m.	MORNING BREAK (Trentino-Tuscany Hall)		
10:30 a.m. – 11:00 a.m.	<b>Factors Affecting the Assessment of AC Corrosion on Coupons</b> Presented by Hycem Bahgat, Corrosion Service Company Limited	<b>The Use of Protective Coatings on Stud Bolts and the Effect on Stud Friction</b> Presented by Anthony Currie, Flexitallic Canada	<b>Planning for Assessment of Mechanical Asset Integrity in the Mining Industry</b> Presented by Xavier Ortiz Gonzalez, Stantec Consulting Ltd.
11:00 a.m. – 11:30 a.m.	<b>Evaluating AC Interference Corrosion Risk and Mitigation Effectiveness for NACE SP21424 Compliance</b> Presented by Jamey Hilleary, Elecsys Corporation	<b>In Situ Innovation for Internal Pipeline Rehabilitation &amp; New Pipeline Internal Protection</b> Presented by Chad Carriere, EnerClear Services Inc.	<b>The Future of Asset Integrity: How Technology Is Changing the Way We Design, Inspect, and Manage Our Facilities</b> Presented by Steven Matschke, Stantec Consulting Ltd.
11:30 a.m. – 1:00 p.m.	LUNCH BREAK – <i>Sponsored by Abacus Datagraphics Ltd. and NACE Saskatchewan Section</i> (Trentino-Tuscany Hall)		
	<b>Infrastructure &amp; Asset Integrity</b> <i>Sponsored by Anotec</i> Chair: Eric Zahn	<b>Corrosion Modelling &amp; Assessment</b> Chair: Rob Fritz	
1:00 p.m. – 1:30 p.m.	<b>45 Years of Cathodic Protection for Reinforced Concrete Bridge Structures</b> Presented by Scott McCulloch, Vector Corrosion Technologies	<b>Understanding the Electrochemical Corrosion Response of API 5L X70 Pipeline Steel After Different Thermomechanical Treatments</b> Presented by Enyinnaya Ohaeri, University of Saskatchewan	
1:30 p.m. – 2:00 p.m.	<b>Decouplers and AC Mitigation Station Decoupling</b> Presented by Timothy Bechtel, Dairyland Electrical Industries	<b>Case Studies of Successful ECDA and SCCDA Programs</b> Presented by Vignesh Shankar, PureHM	
2:00 p.m. – 2:30 p.m.	<b>You Zinc You Know Hot-Dip Galvanizing</b> Presented by Darcy Pretula, Daam Galvanizing	<b>Homogenized Corrosion Parameters of Rebars in Concrete: A Simplified Circuit Model</b> Presented by Gang Li, University of Saskatchewan	
2:30 p.m. – 3:00 p.m.	AFTERNOON BREAK (Trentino-Tuscany Hall)		
3:00 p.m. – 3:30 p.m.	<b>Design Recommendations for Cathodic Protection Monitoring in Municipalities –</b> Presented by Michael Trask, Corpro Canada	<b>A Comprehensive GIS Integrated Data Model for Internal Corrosion Pipeline Assessment</b> Presented by Adam Duval, Brenntag Canada Inc.	
3:30 p.m. – 4:00 p.m.	<b>Lunar Induced Corrosion</b> Presented by Venkatesan Mukeshvashan, BS Abdur Rahman Crescent Institute of Science and Technology	<b>Latest NDT Technologies for the Inspection of Lined Pipelines</b> Presented by David Russell, Russell NDE Systems Inc.	

# Code of Ethics

## THE FUNDAMENTAL PRINCIPLES

Members uphold and advance the integrity, honor, and dignity of the members' profession by using their knowledge and skill for the enhancement of human welfare; being honest and impartial, and serving with fidelity the public, their employers, and clients; and striving to increase the competence and prestige of the corrosion engineering profession.

## THE FUNDAMENTAL CANONS

- A. Members shall hold paramount the safety, health, and welfare of the public in the performance of their professional duties.
- B. Members shall perform services only in the areas of their competence.
- C. Members shall continue their professional development throughout their careers and shall provide opportunities for the professional development of those members under their supervision.
- D. Members shall act in professional matters for each employer or client as faithful agents or trustees and shall avoid conflicts of interest.
- E. Members shall build their professional reputation on the merit of their services and shall not compete unfairly with others.
- F. Members shall associate only with reputable persons or organizations.
- G. Members shall issue public statements only in an objective and truthful manner.
- H. Members shall not maliciously injure the reputation, prospects, or business of others, but this does not remove the moral obligation to expose unethical conduct.

NACE International specifically prohibits sexual harassment by or against any employee, member, officer, director, or other volunteer, vendor, or customer; and such conduct will not be permitted or condoned.

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# 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 to abide by this Anti-Harassment Policy in all venues at NACE Northern Area Western Conference, 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 at +1 281-228-6413 on-site immediately.***

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# Alcohol Consumption Policy

NACE International is committed to the health and well-being of its staff, members, customers, event participants, and vendors. The Association expects individuals who choose to consume alcohol at NACE-affiliated events to do so legally and in moderation. The use of alcoholic beverages by any participant at a NACE-affiliated event shall be in compliance with federal, state and local laws. Persons who infringe upon the rights of others, who conduct themselves in a disorderly manner, or who damage or destroy property shall be subject to disciplinary and/or criminal action. All NACE Northern Area Western Conference participants are expected to abide by this alcohol policy in all venues at NACE Northern Area Western Conference, including ancillary events and official and unofficial social gatherings. Participants shall conform to the requirements of this Policy and all other applicable NACE International policies, including but not limited to the NACE Code of Ethics and anti-harassment policies.



**CORROSION**  
Conference & Expo  
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- 400+** companies from around the globe displaying the latest corrosion control products, technologies, and services

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