



AMPP East Asia Pacific Area Conference 2023

November 27-28, 2023

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Schedule at a Glance

Sunday, November 26th

Pre-Conference Registration	1:00 p.m. – 5:00 p.m.	Boardroom, Level 3
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Monday, November 27th

Registration Hours	8:00 a.m. – 4:00 p.m.	Grand Ballroom Foyer
Welcome Reception	8:45 a.m. – 9:00 a.m.	Grand Ballroom Foyer
Opening and Keynote Presentation	9:00 a.m. – 11:30 a.m.	Grand Ballroom I-III
Exhibit Opening and Lunch	11:30 a.m. – 1:00 p.m.	Grand Ballroom Foyer
Exhibit Hours	11:30 a.m. – 4:00 p.m.	Grand Ballroom Foyer
Technical Sessions	1:00 p.m. – 4:15 p.m.	Grand Ballroom I-III
Carbon Capture Storage and Geothermal Applications Session	1:00 p.m. – 4:15 p.m.	Grand Ballroom I
Corrosion Research and Innovation	1:00 p.m. – 4:15 p.m.	Grand Ballroom II
Advanced Protective Coatings	1:00 p.m. – 4:15 p.m.	Grand Ballroom III

Tuesday, November 28th

Registration Hours	8:00 a.m. – 3:00 p.m.	Grand Ballroom Foyer
Exhibit Hours	9:00 a.m. – 4:00 p.m.	Grand Ballroom Foyer
Technical Presentation	9:00 a.m. – 4:30 p.m.	Grand Ballroom I-III
Carbon Capture Storage and Geothermal Applications Session	9:00 a.m. – 2:00 p.m.	Grand Ballroom I
Internal Corrosion	9:00 a.m. – 3:45 p.m.	Grand Ballroom II
Advanced Protective Coatings	9:00 a.m. – 10:00 a.m.	Grand Ballroom III
Pipeline Integrity and Cathodic Protection	10:15 a.m. – 4:15 p.m.	Grand Ballroom III
Corrosion Research and Innovation	2:45 p.m. – 4:15 p.m.	Grand Ballroom I



Keynote Speaker

The Role of Corrosion Engineers in Material Sustainability

Presented by Alexander (Sandy) Williamson
President, Williamson Integrity Services

Technical specialist in corrosion, materials, and inspection technologies related to oil and gas production, refining, geothermal and lithium extraction industries.

Mission

Promote awareness of corrosion technologies, material sustainability and material stewardship in order to reduce the cost of corrosion. Mentor junior engineers in materials and corrosion engineering for the oil and gas and geothermal industries.

43 years of oil and gas experience in corrosion, materials and inspection

- 18 years with Shell Canada supporting upstream, downstream, offshore, and downhole
- 2 years as Technical Manager for Shaw Pipe
- 4 years as Director of Cormetrix Labs
- 18 years as President of Ammonite Corrosion Engineering Inc.
- President of Williamson Integrity Services since 2016

NACE International/AMPP member for 43 years and NACE International President (2016-17).



Technical Committee

- | | |
|-------------------------------|-------------------------------|
| • David Hunter, | Hempel |
| • David Barnes, | Elcometer |
| • Asokan Pillai, | Pipeline Integrity |
| • Bob Phang, | SMEC |
| • Suryani Suryani, | Pertamina |
| • Budi Susilowati Soedarsono, | MedcoEnergy |
| • Bowei Zhang, | USTB |
| • Hiroshi Honda, | Marubeni-Itochu Steel Inc. |
| • Ken Yong, | CWS Global Coatings Co., Ltd. |
| • Lei Zhang, | USTB |

Conference Schedule

November 27, MONDAY

Time	Grand Ballroom
8:45 a.m. - 9:00 a.m.	Welcome Reception
9:00 - 9:40 a.m.	Opening and Welcome Remarks
9:40 - 10:30 a.m.	AMPP - Generating Today's Value & Innovating for a Sustainable Future Presented by Amir Eliezer, AMPP Chair
10:30 - 11:00 a.m.	Keynote Presentation The Role of Corrosion Engineers in Material Sustainability Presented by Sandy Williamson President, Williamson Integrity Services Ltd.
11:00 - 11:30 a.m.	Innovation Talk Long Term Performance of Glass Flake Reinforced Polyesters Presented by Shashi Kumar Nagapah Global Technical Support Manager, Jotun
11:30 - 1:00 p.m.	Exhibit Opening and Lunch

Grand Ballroom I

Carbon Capture Storage and Geothermal Applications Session

Session Chairs: Hiroshi Honda, Marubeni-Itochu Steel Inc. and Lei Zhang, USTB

	Presentation Title	Speaker	Company
1:00 - 1:30 p.m.	Assessment of CO2 Conditions in CO2 Storage Wells	Yuichi Kamo	JFE Steel, Steel Research Laboratory
1:30 - 2:00 p.m.	Materials Selection Strategy for CO2 Injection Condition During CCS	Lei Zhang	University of Science & Technology-Beijing
2:00 - 2:30 p.m.	Effect of Corrosive Impurities in CO2 on Corrosion of CCS Injection Tubing	Hiroyasu Ebina	JFE Steel Corporation
2:30 - 2:45 p.m.	Visit to Exhibit and Afternoon Break		
2:45 - 3:15 p.m.	Probing the Corrosion Risks of Dense-Phase CO2 Transport Pipeline as Relevant to CCUS Application	Chong Sun	China University of Petroleum
3:15 - 3:45 p.m.	Interface Characterisation and Corrosion Mechanism of Pipe Materials in CO2/H2S-Containing Geothermal Environments	Yong Hua	Zhejiang JIULI Hi-Tech Metals Co. Ltd

Conference Schedule

Grand Ballroom II

Corrosion Research and Innovation Session

Session Chair: Bowei Zhang, USTB

	Presentation Title	Speaker	Company
1:00 - 1:30 p.m.	Why Do Additive Manufactured Magnesium Alloys Corrode Faster than Their Cast Counterparts?	D Blackwood	National University of Singapore
1:30 - 2:00 p.m.	Corrosion Behaviors and Mechanisms of Biodegradable Zn Alloys	Zhang-Zhi Shi	University of Science and Technology Beijing
2:00 - 2:30 p.m.	Development of a Novel Corrosion Inhibitor for Mitigating Top-of-the-Line Corrosion in Carbon Steel Pipelines	Jeremy Moloney	ChampionX
2:30 - 2:45 p.m.	Visit to Exhibit and Afternoon Break		
2:45 - 3:15 p.m.	Microcapsules Introduced Epoxy Composites with Advanced Anticorrosion Properties for Improving the Strength of Adhesion of the Coatings on Metal Substrates	Dr. Nalini Dhandapani	PSGR Krishnammal College for Women
3:15 - 3:45 p.m.	Analysis of a Highly Corrosive Microbial Community Enriched from a Deep-Sea Corroding Mooring Chain at 1988 M Depth	Yee Phan Yeo	Nanyang Technological University
3:45 - 4:15 p.m.	Corrosion Properties of Alloy 35Mo, New PREN 52 Alloy for Refinery and Chemical Industry	Sudhinda Hathwar	Alleima



Conference Schedule

Grand Ballroom III

Advanced Protective Coatings

Session Chairs: David Barnes, Elcometer; David Hunter, Hempel; and Ken Yong, CWS Global Coatings Co., Ltd.

	Presentation Title	Speaker	Company
1:00 - 1:30 p.m.	Novel Thermal Management Technology for Next-Generation Thermal Insulation Coatings with Enhanced Performance	Vernon Sze	Evonik (SEA) Pte Ltd
1:30 - 2:00 p.m.	Design Guidance on Correctly Specifying Cryogenic Spill Protection on LNG Projects in Compliance with ISO 20088 Standards and Industry Best Practice	Richard Holliday	PPG Protective & Marine Coatings
2:00 - 2:30 p.m.	Improving Reliability by Upgrading Metallurgy Utilizing High Velocity Thermal Spray	Peter Johnson	Integrated Global Services
2:30 - 2:45 p.m.	Visit to Exhibit and Afternoon Break		
2:45 - 3:15 p.m.	Corrosion and UV Protective Behavior of Advanced Silica-Rich Graphitic/Polymer Coating for Marine Infrastructure	Anu Verma	Indian Institute of Technology
3:15 - 3:45 p.m.	Silicosis and Worker Safety in Surface Preparation Abrasive Choice	Craig Reynolds	BlastOne International
3:45 - 4:15 p.m.	Mechanical Surface Preparation Standards for Maintenance Coating	Benjamin Biddle	AkzoNobel

November 28, TUESDAY

Grand Ballroom I

Carbon Capture Storage and Geothermal Applications Session

Session Chairs: Hiroshi Honda, Marubeni-Itochu Steel Inc. and Lei Zhang, USTB

	Presentation Title	Speaker	Company
9:00 - 9:30 a.m.	A Summary of the Corrosion Behaviour of Stainless and Nickel-Based Alloys and an Assessment of Their Potential as Materials for Deep Geothermal Applications	Yong Hua	Zhejiang JIULI Hi-Tech Metals Co. Ltd
9:30 - 10:00 a.m.	A Large Scale Multiphase Flow Test Facility and Its Applications	Lei Wen	University of Science & Technology-Beijing
10:00 - 10:15 a.m.	Visit to Exhibit and Morning Break		

Conference Schedule

	Presentation Title	Speaker	Company
10:15 - 10:45 a.m.	Downhole Material Selection Considerations for Geothermal Wells	Alexander Williamson	Williamson Integrity Services Ltd
10:45 - 11:15 a.m.	Material Selection for Acidic Geothermal Flowlines	Chee Wei Ong	MISA
11:15 - 11:45 a.m.	Qualification and Selection of Metallic Materials for Carbon Capture and Storage Transport and Injection – From A Material Corrosion Assessment and Testing Perspective	Iwan Winarta	DNV
11:45 - 1:00 p.m.	Visit to Exhibit and Lunch		
1:00 - 2:00 p.m.	Carbon Capture Storage and Geothermal Applications Open Discussion		
2:30 - 2:45 p.m.	Visit to Exhibit and Afternoon Break		

Corrosion Research and Innovation Session Session Chair: Bowei Zhang, USTB

	Presentation Title	Speaker	Company
2:45 - 3:15 p.m.	Multi-Element Low-Alloying Strategy for Pure Titanium: Breaking the Tradeoff Between Oxidation Resistance and Ductility	Meng Li	University of Science and Technology Beijing
3:15 - 3:45 p.m.	Understanding Steel Corrosion-Associated Microorganisms Using Metagenome-Resolved Pathway Analysis	Winona Wijaya	Nanyang Technological University
3:45 - 4:15 p.m.	Localized Corrosion Induced by Precipitates in Laser Powder Bed Fusion Alloys	Jiuyang Xia	Nanyang Technological University

Grand Ballroom II Internal Corrosion Session

Session Chairs: Suryani Suryani, Pertamina and Budi Susilowati Soedarsono, MedcoEnergi

	Presentation Title	Speaker	Company
9:00 -9:30 a.m.	Asset Life Extension Through Deployment Of Corrosion And Inspection Technologies: Corrosion Monitoring Vs. Condition Monitoring	Rakan Alshebel	Saudi Aramco
9:30 - 10:00 a.m.	Corrosion Monitoring Program for Electrical and Rotating Equip.m.ent? – User Perspective	Saiful Azrin Osman	PETRONAS
10:00 - 10:15 a.m.	Visit to Exhibit and Morning Break		

Conference Schedule

	Presentation Title	Speaker	Company
10:15 - 10:45 a.m.	Evaluation of the Performance of Corrosion Inhibitors Designed to Mitigate Top of the Line Corrosion	Wei Zhang	Schlumberger
10:45 - 11:15 a.m.	Unveiling the Pervasive Corrosion Dilemma Through Elaborate Root Cause Analysis in Sour Gas Concentration Unit	Nurjaimi Ali	PETRONAS
11:15 - 11:45 a.m.	Investigation of Cooling Water Heat Exchanger Failure After 2 Years in Operation	Istiazah Ab Aziz	PETRONAS
11:45 - 1:00 p.m.	Visit to Exhibit and Lunch		
1:00 - 1:30 p.m.	A Corrosion-Resistant Treatment Surface for Internals In Refinery	Jianming Xiao	Candor Technology Co., Ltd.
1:30 - 2:00 p.m.	Mitigation of High Iron Fouling Issue at Upstream Closed Loop Cooling Water System	Upenthiran Ganeson	PETRONAS
2:00 - 2:30 p.m.	Comprehensive and Digitalized Management in Microbially Influenced Corrosion (MIC)	Suthasinee Jinarakpong	PTTEP
2:30 - 2:45 p.m.	Visit to Exhibit and Afternoon Break		
2:45 - 3:15 p.m.	Preventing Flow Accelerated Corrosion In Deaerator System via Chemicals Management To Increase Equip.m.ent Reliability And Integrity	Umar Kamaruddin	PETRONAS
3:15 - 3:45 p.m.	Saudi Aramco Corrosion Management Solution (CMS) – A Proactive Transformation in Corrosion Management	Rakan Alshebel	Saudi Aramco

Grand Ballroom III

Advanced Protective Coatings

Session Chairs: David Barnes, Elcometer; David Hunter, Hempel; and Ken Yong, CWS Global Coatings Co., Ltd.

	Presentation Title	Speaker	Company
9:00 -9:30 a.m.	Reducing OPEX, CAPEX And CO2 Emissions in Refining and Chemical Process Unit Fired Heaters and Heat Exchangers Using Tubacoat Technology	Sanjay Lodha	Tubacex Inc

Conference Schedule

Presentation Title	Speaker	Company
9:30 - 10:00 a.m. Recent Changes to, and Correct Implementation of, the UL1709 Edition 6 Fireproofing Standard	Richard Holliday	PPG Protective & Marine Coatings
10:00 - 10:15 a.m. Visit to Exhibit and Morning Break		

Pipeline Integrity and Cathodic Protection

Session Chairs: Asokan Pillai, Pipeline Integrity and Bob Phang, SMEC

Presentation Title	Speaker	Company
10:15 - 10:45 a.m. Challenges in Condition Assessment of Aged Buried Pipelines and Assets in Service Enhanced by Life Extension Utilizing Cathodic Protection Systems	Bob Phang	SMEC
10:45 - 11:15 a.m. External Corrosion Integrity Management for Non-Piggable Pipeline	Shaikh Harunor Rashid	Himoya Corrosion Technology Sdn Bhd
11:15 - 11:45 a.m. Underground CP Test Station Remote Monitoring System	Abed Sneineh	Borin
11:45 - 1:00 p.m. Visit to Exhibit and Lunch		
1:00 - 1:30 p.m. Cathodic Protection of Steel at Sub-Surface, Surface & Atmosphere in Oil/Gas, Refinery, Petrochemicals, Power Plants Etc. with Case Studies	Shaikh Harunor Rashid	Himoya Corrosion Technology Sdn Bhd
1:30 - 2:00 p.m. How Modern Data Management Software and State of the Art Inspection Gauges Can Improve the Efficiency of the Pipeline Coating Inspection Process	David Barnes	Elcometer
2:00 - 2:30 p.m. Vapor Phase Corrosion Inhibitor (Vpci) Gel Casing Filler For Cased Pipeline Crossings	Vincent Ong Wen Xuan	Cortec VCI
2:30 - 2:45 p.m. Visit to Exhibit and Afternoon Break		
2:45 - 3:15 p.m. Utilization of Robotic Technology for Assessing Internal Pipeline Condition During Construction - An Optimized Inspection Approach	Rakan Alshebel	Saudi Aramco
3:15 - 3:45 p.m. Effect of Strain Behaviour on Hydrogen Embrittlement of Cladded Pipeline Steel with Inconel 625	Vijay Shankar Sridharan	Nanyang Technological University

Policies & Procedures

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.
- Striving to increase the competence and prestige of the materials protection and performance profession.

THE FUNDAMENTAL CANONS

1. Uphold the safety, health, and welfare of the public in the performance of their professional duties.
2. Represent areas of competence and build reputation based on merit of services.
3. Strive for continuous professional development and foster development of others in field.
4. Serve in professional matters for AMPP, employer, and/or client as faithful agents or trustees and shall avoid conflicts of interest.
5. Members shall associate only with reputable persons or organizations.
6. Members shall issue public statements only in an objective and truthful manner.
7. Act with integrity and honesty in all professional endeavors and be forthcoming with concerns of unethical behaviors.
8. Foster behaviors of respect, value diversity of our members, staff, partners, customers, and suppliers, and strive to promote recognition and participation by individuals regardless of differences.
9. Harassment, including but not limited to cultural, religious, or sexual, by or against any employee, member, officer, director, or other volunteer, vendor, or customer; and such conduct will not be permitted or condoned.

Anti-Harassment Policy

AMPP 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 AMPP EAPA Conference 2023, 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 AMPP staff if you notice harassment. If you are being harassed, notice that someone else is being harassed, or have any other concerns, please contact Reygie De Borja at +63 917-654-1108 on-site immediately.

Alcohol and Drug Policy

AMPP and the AMPP Global Center are committed to the health and well-being of its staff, members, customers, event participants, and vendors. This Policy addresses the availability and consumption of alcoholic beverages at AMPP affiliated events. Those who choose to drink alcoholic beverages at AMPP-affiliated events are expected to do so legally and in moderation and are expected to act responsibly and behave professionally.

The sale or distribution of alcoholic beverages at any AMPP affiliated event must be conducted through a licensed provider. Non-alcoholic beverages are required at all affiliated events at which alcohol is served. Alcohol should cease being served to allow for safe consumption before the designated time for close of the function. Non-alcoholic beverages may remain available at this time. Advertisements shall not highlight the availability of alcohol at any affiliated event. Advertising shall not promote consumption of alcohol.

Policies & Procedures

International Communities are not covered under AMPP insurance programs and should conform to all applicable regulations. Appropriate insurance coverage is recommended. Those international Communities not explicitly covered under AMPP insurance programs must indemnify and hold harmless AMPP for any and all sponsored events where alcohol is distributed and consumed. For all affiliated events where alcohol is available, the sponsoring group will endeavor to establish agreements establishing reciprocal indemnification and hold harmless responsibilities and insurance requirements with the venue.

Any member, sponsor, vendor or exhibitor at an affiliated event wishing to sell or distribute alcohol must conform to this Policy and any other directives made by AMPP staff.

The use of alcoholic beverages or other controlled substances by any member, sponsor, vendor or exhibitor at an AMPP affiliated event shall comply with federal, state, and local laws. Members, staff, vendors and customers at AMPP affiliated events shall conform to this Policy and all other applicable policies, including, but not limited to, the Code of Ethics and Health, Safety, and Risk Management, current versions of which are incorporated herein by reference.

Individuals who violate this Policy may be subject to the disciplinary procedures, including, but not limited to, suspension or loss of membership, disbarment from future AMPP affiliated events and/or other sanctions as deemed appropriate. Communities or other AMPP affiliates who violate this Policy may be subject to the disciplinary procedures, including, but not limited to, suspension or loss of affiliation, disbarment from future affiliated events and/or other sanctions as deemed appropriate by the Association or Center Board of Directors. Violations of this Policy may be addressed by the Association or Center Board of Directors or the Ethics and Professional Practice Committee, at its sole discretion.

Minor Policy

Children under the age of 15 are not permitted at Central Conference. Children over the age of 15 must be registered as guests and always wear badges while in the convention center. To accommodate nursing mothers, the following will apply:

1. Nursing infants will be allowed in the Exhibit Hall during show hours only and must always be carried by a registered AMPP attendee either in his or her arms or in a front baby carrier (NO STROLLERS PERMITTED). Everyone who attends the exhibition must be registered and have a badge. Badges for minors 15 and older are free and available on site at the registration desk. Minors between 15 and 18 years of age must be accompanied by an adult at all times. Guardians are asked to help maintain a professional, disturbance-free exhibition environment.
2. Meetings and technical presentations: To provide all AMPP attendees an optimal learning environment, minors and guests are not permitted in technical presentations. Those attending these sessions must be registered for the conference and show the appropriate badge.

Mobile Phone Policy

As a courtesy to the speakers and your fellow attendees, please turn off all mobile phones during meetings and sessions.

Consent to Use of Photographic Images, Audio and Video Recordings

AMPP may elect to take photographs and/or make audio and visual recordings of the event, and participants grant to AMPP the absolute right and permission to use any such photographs or recordings that may be taken during the event for any purpose in its sole discretion.

Attendees, exhibitors, and visitors to the Conference are not permitted to make audio or video recordings of sessions, presentations, activities, or other events unless expressly so authorized by AMPP and the subjects of the recording.

Right to Deny or Remove

We reserve the right to deny registration or admission to or remove any party from the conferences, at our sole discretion.

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A new, virtual, technical series from AMPP!

Forefront Innovation Series is a new and innovative web-based series from AMPP. Filled with the latest insights and technical developments, Forefront brings together subject matter experts from a wide variety of industries and professional backgrounds to discuss hot-button materials protection and performance related technical topics. Utilizing best practices, case studies, and lessons learned, these engaging sessions will shed light on challenges faced by different industries.

Top 5 reasons to attend:

- Gain insights to the New & Emerging Technologies
- Participate in Open Discussions about Future Innovations and Theories
- Engage with Subject Matter Experts to get your questions answered
- Network with peers & discuss hot-button materials protection and performance related technical topics
- Earn Professional Development Hours

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