

Call For Paper

NACE International Gateway India Section (NIGIS) is organizing 26th International Conference & Expo on corrosion “**CORCON 2018**” from 23 – 26 September 2019 in Mumbai, India.

CORCON, the annual conference and expo on corrosion science and engineering held in India, is the largest event of its kind in Asia, attracting participation from academic and research institutions, public and private sector organizations including defense establishments and professionals. This event offers an excellent platform for exchange of information on matters concerning corrosion, learning about existing and upcoming products and technologies and networking. As the world faces more and more challenges with ageing infrastructure, it is imperative for advocates of corrosion mitigation to unite and address the problem. Each year over 800 industry leaders from around the world come together at CORCON, in an effort to tackle corrosion issues, and inform participants of the latest solutions and methods. For more info about exhibition and sponsorship please visit the website www.corcon.org

We invite you to submit abstracts for presentations and share your expertise to advance your career and the industry by sharing your wealth of corrosion mitigation knowledge. This is your opportunity to be recognized for your knowledge by industry leaders from around the world

The papers in the technical symposia are aimed to provide information about advancements in the various areas of corrosion and its control and new techniques / products to enhance corrosion resistance, so as to develop deeper insight and greater understanding on corrosion degradation and corrosion protection. Also included, will be case studies on corrosion-related deterioration/ failures in various industries. .. You are encouraged to submit your paper on the following topics:

Symposia Topics

Biomaterials Corrosion
Cathodic and Anodic Protection
Coatings, Linings and Thermal Insulation
Corrosion Control in Water Treatment Utilities
Corrosion in Automobiles and transportation industry
Corrosion in Chemical and Fertilizer Industries
Corrosion in Defence Equipment & Facilities
Corrosion in Oil and Gas
Corrosion in Petrochemical and Refineries Industries
Corrosion in RCC Structures
Corrosion Monitoring and Testing
Direct Assessment Methodology Application
Internal Corrosion in Pipelines
Marine Corrosion and Offshore
Materials and Composites
Microbial Corrosion and Inhibitors
Power Plants and Utilities
Young Student & Scientist Forum

Important Dates

Paper and poster proposals will be assessed by members of the Conference Program Committee for compliance with the criteria for acceptance. All submissions will be reviewed and you will be notified if your abstract is approved.

Abstract submission opens	ASAP
Abstracts due	30 April 2019
Acceptance of Abstract	15 May 2019
Full Text Paper due	30 June 2019
Acceptance of Full Text Paper	15 July 2019
Presentation upload due	15 August 2019
Registration deadline for Authors	15 August 2019
Acceptance notification	30 August 2019

Technical Symposia Scope

Track 1 - Cathodic and Anodic Protection

Issues and challenges associated with the application of cathodic protection systems for protection against corrosion of metallic surfaces of pipelines/structures in contact with soil/water/electrolyte. Specific topics of interest for CP design/engineering, construction, monitoring and maintenance may include development and application of new materials, technologies and techniques, case studies and AC/DC interference detection and mitigation. CP of tanks, bullets and plant piping, as well as CP for cross country pipelines, city gas distribution pipelines, municipal water and sewage pipelines and in-shore and off-shore structures will also be covered.

Track 2 - Coatings, Linings and Thermal Insulation

Issues and challenges associated with Coatings & Linings for various industries where these are used to protect or decorate the system. Specific topics of interest may cover pipelines, offshore steel structures, concrete coatings, transport vehicles, power & petrochemical plants, inspection & study of coatings including design & failure analysis, material selection, new developments, implementation, case studies and development and application of new technologies related to coatings & linings. This symposium also includes case studies, monitoring methods and preventive (and regulatory) steps against corrosion under insulation.

Track 3 – Corrosion Control in Water Treatment Utilities

This symposium contains technical papers associated with the following areas of interest—mitigation of corrosion and fouling, best practices, new chemistries/new equipment for corrosion and fouling control, failures/failure analysis, chemical cleaning, and core histories/studies—all associated with water from pretreatment to the end use and discharge (i.e., waste water).

Track 4 – Corrosion in Automobiles and transportation industry

Corrosion issues and its challenges become major problem in Automobiles and transportation industry. Many of the coatings used to prevent or slow corrosion can have specific vulnerabilities. The transportation category includes vehicles and equipment, such as motor vehicles, aircraft, rail cars, and HAZMAT transport. It also includes vehicles and equipment used to transport people and products (i.e., automobiles, ships, aircraft, etc.)

Track 5 - Corrosion in Chemical and Fertilizer Industries

This symposium is seeking technical papers on addressing the issues and challenges associated with corrosion control in the chemical and fertilizer industries. A paper may be of a research or industrial nature. Specific topics of interest may include mitigation of corrosion and fouling, case histories of materials performance and new materials for corrosion control, successes, failures (or failure analysis), mechanisms of corrosion, life assessment, predictive modeling, laboratory research, or development and application of new technologies in the above industries. Corrosion in urea manufacturing plants, use and passivation technologies of stainless steel for corrosion mitigation, optimizing inspection programs, and other related topics will also be addressed.

Track 6 – Corrosion in Defence Equipment & Facilities

Issues and challenges related to development of high performance corrosion resistant materials / coatings for various components in defence sector in order to improve their long-term reliability in service. Specific topics include materials development to combat various types of corrosion encountered by defence equipments and machineries based on their functional requirement, corrosion control strategies, design changes to mitigate corrosion and other advanced methods to mitigate corrosion of defence equipments for longer durability and improved performance in service.

Track 7 – Corrosion in Oil and Gas

Issues and challenges associated with corrosion and its control in the oil and gas production. Most oil and gas production includes co-produced water makes corrosion a pervasive issue across the industry. Age and presence of corrosive materials such as carbon dioxide (CO₂) and hydrogen sulfide (H₂S) exacerbate the problem. Oilfield corrosion can be divided into corrosion due to oxygen, "sweet" corrosion, and "sour" corrosion. Specific topics of interest may include mitigation of corrosion and fouling, case studies of material performance and new materials for corrosion control, mechanisms of corrosion, life assessment, predictive modelling, laboratory research, and development and application of new technologies in oil and gas production.

Track 8 - Corrosion in Petrochemical and Refineries Industries

Issues and challenges associated with corrosion control in petrochemical industries. Specific topics of interest may include mitigation of corrosion and fouling, case studies of material performance and new materials for corrosion control, mechanisms of corrosion, life assessment, predictive modeling, laboratory research, and development and application of new technologies in these industries. Issues and challenges associated with corrosion control in the refineries. Specific topics of interest may include mitigation of corrosion and fouling, case studies of material performance and new materials for corrosion control, mechanisms of corrosion, life assessment, predictive modeling, laboratory research, and development and application of new technologies. Issues and challenges associated with corrosion control in refineries: different forms of corrosion and specific mechanism, specific corrosive environments in refineries, corrosion control methods based on design, modification of environment, cathodic and anodic protection, coatings, applying corrosion prevention to design process in refineries.

Track 9 - Corrosion in RCC Structures

Issues and challenges associated with corrosion control of reinforced cement concrete (RCC) structures. Technical papers related to research and industrial applications are invited on the causes of corrosion in RCC structures as well as its mitigation. Specific topics of interest may include mechanism of initiation and propagation of corrosion in reinforcement embedded in concrete, biocorrosion, corrosion resistant concrete mix, admixtures to enhance corrosion resistant properties of concrete, protective reinforcement coating, surface painting of structures, other corrosion control measures for RCC structures, corrosion based predictive modelling, case studies and emerging techniques.

Track 10 - Corrosion Monitoring and Testing

Corrosion monitoring and testing is the primary step to identify the causes of failure of components, plants and equipments, which in some cases can be catastrophic. Monitoring and testing using different techniques help one to establish defects in materials right from the manufacturing stage to those that get created during operation/service stage. Early detection and sizing of corrosion degradation helps to assess the extent of damage, find out the root cause, take preventive actions and as a long term strategy integrate these into preventive maintenance schedules and plant safety management. This symposium covers all the monitoring and testing techniques e.g. non-destructive tests, online monitoring techniques and sensors and probes. Research & development on these techniques, case studies related to establishment of corrosion damage and/or its prediction, material selection and training of personnel for specific skill sets, remaining life assessment. Plant experiences related to corrosion monitoring and testing are welcome.

Track 11 – Direct Assessment Methodology Application

The application of the 4-step Direct Assessment (DA) process as a code-compliant pipeline integrity validation technique. Referencing the existing NACE International DA standards for external corrosion (ECDA), stress corrosion cracking (SCCDA) and internal corrosion (ICDA) for dry gas, wet gas, liquid petroleum and multiphase product pipelines. Symposia invite papers related to case studies, methodology, standards, benefits and limitation, improvements for above ground surveys, in the ditch non destructive examinations, internal corrosion predictive modeling for liquid and solid hold up, corrosion rate modeling, terrain modeling and newer technologies related to DA. Application related for onshore, offshore, piggable and non-piggable pipelines.

Track 12 - Internal Corrosion in Pipelines

Topics specific to internal corrosion of pipelines: corrosion resistant materials, corrosion inhibitors, internal coatings, assessment of corrosion through software modeling & simulation studies, protection against microbiologically influenced corrosion, recent advances in pigging technology, maintenance practices, failure case studies, corrosion monitoring, preventive and control techniques. The symposium invites the participation of scientists, inventors of new technology, product developers, managers, engineers, scientists and students involved in managing internal corrosion.

Track 13 - Marine Corrosion and Offshore

Material degradation due to corrosion under adverse operating and environmental conditions, bio-fouling, life assessment and asset integrity management, CP of underwater portion of offshore platform jackets including its rehabilitation and maintenance. The symposium invites the participation of scientists, inventors of new technology, product developers, managers, engineers, scientists and students involved in managing corrosion for marine and offshore applications.

Track 14 - Materials and Composites

Unpublished work related to corrosion resistant materials and composites (both metals and non-metals). Studies related to mechanisms of corrosion of materials, new materials development and its application, design of new techniques for combating corrosion are invited for presentation. Corrosion and degradation of composites will be also covered in this symposium.

Track 15 - Microbial Corrosion and Inhibitors

Fundamental and applied aspects of microbial corrosion and use of inhibitors to control corrosion. Topics may cover diagnosis of microbiologically influenced corrosion (MIC), detection, measurement, monitoring techniques; material behaviour under bio-films, MIC control strategies including biocides, microbial corrosion inhibitors, bio-electrochemical techniques, case studies on MIC, corrosion failures; futuristic trends and new tools for detection and control. Corrosion inhibition implied under this symposium covers behaviour of organic, inorganic and newly termed green inhibitor compounds and also polymeric compounds intended for industrial corrosion preventive applications. Papers may also include effects on mechano-corrosion behaviour of materials under the influence of corrosion inhibitors.

Track 16 - Power Plants and Utilities

Experiences with corrosion and corrosion control in power plants (thermal and nuclear) and in various utilities for these plants as also those for captive power plants. Aspects related to material selection, case studies related to failures, implementation of measures to avoid corrosion, water chemistry measures, corrosion monitoring and modelling are covered. Papers related to research on specific issues for these plants as well as those for development of corrosion resistant materials are included.

Track 17 –Young Student Scientist Forum

Papers by students on any symposia topic covered in this conference. The aim is to encourage presentation of work carried out by students in the field of corrosion and its control. To encourage Research Scholars and Students a unique session “**YOUNG SCIENTIST FORUM**” has been designed.