

Workshop

Managing Corrosion Impact on Integrity

Towards Net Zero

Corrosion problems & solutions; sharing of experiences; expert interactions

19-20 Jan, 2024

Indian Institute of Science, Bengaluru

Power Plants
(Thermal,
Nuclear,
Renewables)

Petrochemicals

Oil & Gas
(Upstream,
Refineries,
Pipelines)

Fertilisers
&
Cement Plants

Chemicals
&
Processing
Industry

Defence
(Naval,
Land based,
airborne)

Off-shore,
Marine

Heavy
Engineering
Industrial
Equipment

Organised by

India Energy Network

In collaboration with

IISc

RGIPT

InSIS

PREAMBLE

Corrosion is globally causing a damage to the tune of 4-5% of GDP. In India, this could be even higher, as we have a very big coast line, and maintenance practices need significant improvement. Some estimates suggest cost of corrosion energy sector alone is to the tune of Rs 2 lakh crores per year or more!!.

Losses due to corrosion and damage to Indian Economy is at an alarmingly high level. Despite this **RED ALERT** situation, focus on R&D and solution development within India is sub-critical.

Corrosion is a highly complex and multi-disciplinary phenomena involving materials, electro-chemistry, thermo-mechanics, reaction kinetics, geo-environmental conditions etc.

This calls for a national effort to:

- ▶ train and sensitise people on corrosion issues,
- ▶ encourage researchers to take up corrosion related projects in problem solving mode;
- ▶ motivate institutions and industries to set up collaborative initiatives to establish centers of excellence in corrosion.

India Energy Network, IISc, and RGIPT have come together to organize this workshop on corrosion bringing together people from various industries to address the issues related to corrosion science and engineering.

Objective of Workshop

- **Bring together all stake holders involved in corrosion:**
 - ▶ asset owners/ operators,
 - ▶ researchers and academics,
 - ▶ R&D organizations
 - ▶ providers of corrosion solutions (protective coatings, paints, inhibitor development etc) on one platform.
- **Share experiences and exchange ideas about the corrosion related problems faced, solution methods and approaches.**
- **Explore opportunities for collaboration in R&D, technology development, and solution based consultancy services etc.**
- **Identify gaps in science based understanding of the multi-disciplinary area of corrosion, and initiate suitable efforts to prop up corrosion related R&D.**
- **Identify areas of need for indigenous development of technologies and promote , innovation, and foster start-ups in corrosion prediction and mitigation technologies.**

THEMES of Workshop

Discussions in the workshop are centered on related themes as depicted above.

INSPECTION

INTEGRITY

PREDICTION

PREVENTION

DIGITIZATION

Corrosion



Workshop is centered around aspects of Corrosion in multiple industrial sectors. Core idea is to exchange experiences about corrosion problems and mitigative measures and enable cross industry learning.

Who are participants?

- Inspection Professionals involved in detection of corrosion; prevention of corrosion;
- Corrosion Prevention/ Mitigation Professionals involved in development and application of anti-corrosive coatings, paints; corrosion inhibitors; cathodic protection, materials modification; etc
- Material Scientists/Chemists/Electro-chemical technologists
- Integrity Assessment Professionals involved in FFS, RLA/RLE, risk analysis, failure analysis, RBI
- Corrosion Prediction Professionals: involved in corrosion R&D, testing and experimentation, development of physics based and databased models (AI/ML etc.)
- Digitalisation Professionals

Format of Workshop

Different Industries impacted by corrosion will present:

- Corrosion problems they are facing and highlight the issues in detail including the impact.
 - o Industries will explain the methods/ solution and its rationale.
 - o Challenges they have faced in finding and implementing the solution.
- Solution approaches from participants are solicited:
- These approaches are then compared with the ones already implemented in other industry sectors
- Facilitation involving experts (including academics, and solution providers) will present problem solving approaches, methodologies, and solutions.
- Participants will quiz and improvise on ideas from others; interact to explore better solution that derives best of all the ideas.
- Experts will point out if any of the scientific principles are in conflict and if the solution could be explored further.
- There will be key note lectures from experts of international repute

Present on Your Corrosion related Experience in the workshop:

Participants who are interested to present their experience in areas related Corrosion (Corrosion Prediction, Prevention, Inspection, Asset Integrity, Digitization and related topics) can submit an abstract on or before... For more details visit https://indiaenergynetwork.in/corrosion_workshop_bangalore.php

Email your interest to: corrosion@indiaenergynetwork.in

REGISTRATION DETAILS

(Registration fee covers workshop participation, delegate kit, lunch & coffee)

	Early Bird Before 15th Dec 2023	Regular After 16th Dec 2023
Standard	Rs 15,000/-	Rs 18,000/-
Academic	Rs 7,500/-	Rs 9,000/-
Students	Rs 3,500/-	Rs 6,000/-

PS: 10% discount for members of InSIS

GST @ 18% extra to be added.

Registration fee to be paid by bank transfer DD/ NEFT/ RTGS to "India Energy Network – Science & Engineering Foundation of India" A/c Number 41460965 924, IFSC Code- SBIN0018239, State Bank of India; Peenya Industrial area Branch, Bengaluru- 560058.

SPONSORSHIP OPPORTUNITIES

Who Can Benefit from Sponsoring the workshop?

- Asset owners/ operators (oil & Gas, Power Plant, utilities and similar large assets)
- Corrosion prevention and management service/ technology providers
- Protective coatings / paints/ Tapes
- Cathodic Protection
- Materials, R&D, Lab equipment providers
- Digitalisation AI/ ML/ IIoT/
- Inspection technology and service providers (NDT / Robotics/ Drones/ etc)
- Asset Integrity services/ technology/ solution providers

SPONSORSHIP OPTIONS and BENEFITS

Details	Platinum	Gold	Silver	Exhibitor
Regular (Payment before 15th Dec 2023)	Rs 300,000/-	Rs 250,000/-	Rs 150,000/-	Rs75,000/-
After 15th Dec 2023 (late fee of 35%)	Late fee of 35%, GST of 18% applicable			
BENEFITS of SPOOSORSHIP				
Table top Display + Poster	✓	✓	✓	✓
Distribution of company promotion material	✓	✓	✓	✓
Display of Logo in Seminar hall, lunch	✓	✓	✓	✓
Dsiplay of Logo in Website	✓	✓	✓	✓
Display of Logo in Report	✓	✓	✓	
Panelist Opportunity	✓	✓		
Speaking Opportunity	✓			
Complementary Delegates	8	6	4	2

GST @ 18% extra to be added.

For sponsorship enquiries email: corrosion@indiaenergynetwork.in or call 99000 67486



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India Energy Network (IEN) is an initiative of “Science & Engineering Foundation of India”. IEN provides a platform for cross disciplinary interactions among Indian energy community including operators, technology providers, government agencies, policy makers & consumers. IEN strives towards Energy Security & Energy transition in India.

India Energy Network commits to take the cause of creating an ecosystem for energy asset integrity management including the four pillars of EAIM viz., Operations, Inspection, Structural integrity and Digitalisation. India Energy Network aims to work with all stake holders including government agencies, energy operators, technology and service providers, academics, and start-ups.

For more details visit <https://www.indiaenergynetwork.in/> ■

RGIPT is an institution of national importance under Ministry of Petroleum, Government of India. RGIPT has several R&D programs, academic programs related to energy including new and renewable energy. RGIPT plans to add subjects relevant to EAIM in the core curriculum of academic programs, strive towards R&D in corrosion related research, and work to solve problems related to energy asset integrity through collaborative R&D initiatives.



■ For more details visit <https://www.rgipt.ac.in/>

InSIS

Indian Structural Integrity Society



InSIS is a professional society uniting professionals from wide variety of disciplines that together impact safety & reliability of structures, machines, vehicles and devices. InSIS conducts a variety of programs. InSIS has started a series of foundation courses in various aspects related to structural integrity.

For more details visit <https://insis.in/> ■

Indian Institute of Science (IISc) is a premier R&D and academic institution conducting cutting edge research in several areas of strategic interest to India, including in energy sector. IISc has set up a interdisciplinary center for energy research.



■ For more details visit <https://iisc.ac.in/>