Two-day Workshop on Industrial Corrosion and Its Control

(Focus on Case Studies)

Date: 25-26th July 2025

Venue: KI Vasu Auditorium Materials Engineering Department Indian Institute of Science, Bengaluru 560012

Organized By



The Electrochemical Society of India

Indian Institute of Science Campus, Bengaluru 560012

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About The Electrochemical Society of India

The Electrochemical Society of India (ECSI) has been a prominent presence on the IISc campus for over 73 years. As a professional society, it serves as a dynamic platform for knowledge exchange in diverse areas of Electrochemistry, including Corrosion, Batteries, Coatings, Electroplating and Forming, and other branches of electrochemical science and technology.

A major initiative of ECSI is the publication of the *Journal of the Electrochemical Society of India (JECSI)*, which proudly marks 73 years of uninterrupted publication. The Society also maintains an extensive library with a collection of over 3,000 books covering various facets of electrochemical science and technology. Members are welcome to visit and utilize this valuable resource.

ECSI's **Annual Technical Symposium**, held every July, is a much-anticipated event that attracts enthusiastic participation from the electrochemical community across the country.

Membership is open to individuals and institutions under several categories: Individual, Industrial, Corporate, Life Member, Donor, Patron, and Student. Those interested in joining the Society are encouraged to contact the Honorary General Secretary for further information.

Importance of the Workshop

Corrosion is a significant challenge that impacts productivity, safety, environmental sustainability, and profitability across a wide range of industries. It is estimated that the cost of corrosion amounts to approximately 3.5% of a nation's Gross National Product (GNP).

Effectively combating corrosion requires a thorough understanding of **Metallur-gical and Electrochemical Aspects** of corrosion as they relate to industrial components, fabrication techniques, operational conditions, and maintenance practices.

This course is designed to explore these complexities and offer practical **remedial measures**. The program is led by a distinguished faculty with extensive experience in addressing corrosion-related challenges across various industrial sectors.

Workshop Content

- Types and Mechanism of Corrosion
- Protective Paint Coatings for Corrosion Prevention
- Metallic Coatings for Corrosion Resistance
- Electrochemical Methods for Corrosion Analysis
- Material Selection Strategies for Corrosion Control
- High-Temperature Protective Coatings
- Corrosion Testing Methods and Online Monitoring Techniques
- Hydrogen-Induced Damage and Its Mitigation
- Design and Fabrication Considerations for Corrosion Prevention

- Corrosion Protection Strategies for Pipelines
- Case Studies: Engineering Failures Attributed to CorrosionLive Demonstration: Potentiostat and Corrosion Measurement Techniques

Resource Persons

- Prof. VS. Raja, IIT Bombay
- Prof.E.S.Dwarakdasa, IISc, Bengaluru
- Dr. Raghavendra Bhat, Ex DGM, HAL (F&F)
- Prof. S. Ramanathan, IITM, Chennai
- Dr. JN Balaraju, CSIR-NAL, Bengaluru
- Dr. K. Elayaperumal, Consultant
- Prof. S. Parida, IIT Bombay
- Prof. Kallol Mandal, IIT Kanpur
- Dr. M. Sujata, CSIR-NAL
- Mr Anuj Awasthi, MTX Labs, Bangalore

Certificate

All participants will receive a Certificate of Participation after the course. This certificate is recognized and valued across the engineering, automobile, and aerospace industries.

Arrangements

All participants are responsible for making their own arrangements for accommodation and transportation to the venue in Bengaluru. However, if needed, ECSI can assist in locating suitable accommodation options in and around the venue based on your preferences."

Registration:

A limited number of delegates will be registered for this course to enhance interaction between the specialists and participants. Registration will be on a first-come, first-served basis. The registration fee includes course materials, lunch, and tea during the program. Please note that once registered, the fee is non-refundable under any circumstances.

Rs. 6,000 +18% GST

Rs 4,000 +18% GST

Rs. 5,000 +18% GST

Registration Link: https://forms.gle/Rvyrvd2J9Yuu19mB9

REGISTRATION FEE:

Individuals (offline)
Individuals (online)
Members of ECSI /MFAI

College / University Teachers (offline)

College / University Teachers (online)

Student (offline)

Student (online)

Company registration-4 delegates (offline)

Rs. 4,000 +18% GST

Rs. 3,000 +18% GST

Rs. 2,000 +18% GST

Rs. 2,000 +18% GST

Rs. 2,000 +18% GST

Rs. 2,000 +18% GST

Rs. 20,000 +18% GST

Rs. 15,000 +18% GST

Sponsorship

Gold sponsor Rs. 100,000 +18% GST

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Geetha Mobile: 9945105791/Balaraju 9686543725

For any other information contact:

MAILING ADDRESS FOR REGISTRATION DETAILS

Convener / President & Gen. Secretary, ECSI

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