# Course on Corrosion Prevention and Control (CPC 2025)

February 27 & 28, 2025 @ IIT Madras Research Park (Raman Hall), Chennai

# Coordinators

Dr. K.G. Pradeep, IIT Madras Mr. V.R. Raju, Saipem India

# Patron

Prof. U. Kamachi Mudali, HBNI Mumbai

# Chairman

Prof. M. Kamaraj, IIT Madras

# Organised by

Association for Materials Protection and Performance (AMPP) Chennai Chapter



# Co-organised by

Indian Institute of Metals (IIM) – Human Resources Development Centre (IIM HRDC) Kalpakkam-Chennai



# About AMPP, USA & Chennai Chapter

The Association for Materials Protection and Performance (AMPP) is a global community of professionals focused on the protection of assets and the performance of industrial and natural materials. AMPP protects infrastructure and assets worldwide through member and workforce education and credentialing, company accreditation, technological innovation, and global standardization. AMPP was established in 2021 following a merger between NACE International and SSPC: The Society for Protective Coatings. The new association unites 145 years of corrosion control and protective coatings expertise and service to industry and members worldwide. Today, AMPP is the world's largest corrosion control and protective coatings organization, serving more than 34,000 members in 140+ countries. AMPP provides members with the knowledge and resources to ensure high performance materials are used to build and maintain sustainable infrastructure. Mission of AMPP is advancing materials performance to protect society, assets. and the environment, with a vision - A world built and protected with safe, reliable, sustainable materials. AMPP is headquartered in the United States with offices all over the world. For more details visit: http://www.ampp.org

AMPP Chennai Chapter was formed recently on 31 August 2024 and it represents the largest community of researchers, academia and industry professionals in southern part of India. AMPP Chennai members are dedicated to advancing technical and practical expertise in corrosion prevention and control.

# IIM Human Resources Development Centre (IIM HRDC-Kalpakkam Chennai)

The IIM HRDC-KC was started in 2007 with the objective to act as a bridge between IIM and Industry for human resources development through training courses, consultancy, web portals, books, etc., to act as a centre for learning for career advancement in Metallurgical and Materials Engineering for students, to publish books / monographs and to promote greater interaction between Chapters of IIM in the Southern region. Dr. U. Kamachi Mudali, Vice Chancellor, HBNI is the Chairman, Prof. B. S. Murty, Director, IIT Hyderabad is Co-Chairman, and Prof. M. Kamaraj, IIT Madras is Convener, along with members representing all fourteen Chapters of IIM in the Southern region constitute the Management Committee. IIM HRDCKC has organized many courses of interest to industries in association with IIM Chapters in Southern region and other professional associations.

# About the Course

Corrosion can pose serious problems to the safe and economic operation of a wide variety of industrial installations by damaging industrial components, structures and utilities. It occurs in different forms with different materials depending on the environment and metallurgical state of the materials. Despite its extreme nuisance value, the study of corrosion and is control has not been tackled scientifically. As per global estimation earlier by NACE International, USA, it is estimated that India lost 11.2 lakh crores (3.5% of GDP) in 2023, and 40% loss could have been saved if corrosion prevention & control measures have been adopted.

Engineers and managers become engaged in controlling or preventing corrosion by appointment rather than as the final step in a process of formal education having this as its original goal. The major concern is that a "find it and fix it" mentality is pursued at the expense of corrosion prevention strategies. Without a best practice of corrosion prevention strategy, corrosion will continue and the cost of repairing a deteriorating component will greatly increase capital expenditures for component replacement and major rehabilitation in the long term. Thus, corrosion control has become the order of the day. Companies will have to resort to corrosion data management, system quantification through the use of global positioning surveys, remote monitoring, and sensors and electronic equipment developments to provide significant improvement in several areas of corrosion maintenance. Based on awareness of corrosion, changes in the development of risk assessment strategies and integrity management programs have to be resorted to.

To address this important issue, a Two-Day Course on **Corrosion Prevention and Control (CPC 2025)** is being organized by the AMPP Chennai Chapter & IIM HRDC-KC during February 27 & 28, 2025. Renowned specialists from industry, R&D and academia will address the participants during the Course.

## Topics to be covered

There will be invited lectures by eminent experts from industry, R&D and academia. The topics to be covered are:

#### ⑦ Corrosion Processes

General and localized Corrosion Environment Sensitive Cracking (SCC, CF, HE)

Corrosion Measurement, Analysis and Monitoring Electrochemical techniques Non-destructive testing techniques Electron-optic and surface analytical techniques

Corrosion Prevention Designing for corrosion prevention and guidelines Cathodic and Anodic Protection Coatings, Surface Engineering & Modification Paints and Protective Coatings

#### ⑦ Corrosion in Industry

Power Plants (Fossil & Nuclear) Petrochemical, Oil & Gas and Fertiliser Chemical & Pharmaceutical Aerospace & Defence Construction Industry

⑦ Special Topics Stainless Steels Pipeline Corrosion and Monitoring Corrosion Failures & Case Studies

#### Who should attend this Course ?

Production managers, maintenance & inspection engineers, and shop floor engineers from Heavy Fabrication Industry; Nuclear Industry; Power Industry; Aeronautical and Space Industry; Defence Industry; Chemical, Petrochemical and Pharmaceuticals Industries, Surface& Transportation Industry, Researchers in corrosion, and Faculty and Students from Engineering colleges, corrosion practitioners, designers, quality control personnel and those involved in failure analysis to update their knowledge on corrosion and its prevention.

#### **Benefits of attending**

- ✓ Understanding basics and various types of corrosion
- ✓ Corrosion prevention strategies and methods to control corrosion sector wise

- ✓ Practical knowledge on corrosion related design, fabrication, coatings and failures
- $\checkmark$  Corrosion detection, testing and monitoring methodologies

#### You carry back

- ⊕ Lecture notes in PDF format
- + List of recommended practices, standards and codes
- References of technical literatures & books
- Information on corrosion failures and case studies
- Knowledge on practical aspects of corrosion and its prevention strategies.

## Course Fees (including 18% GST)

Industry Personnel	Rs. 7,000
Personnel from Govt. Institutions	Rs. 6,000
Faculty from University/College	Rs. 6,000
Full time Research Scholars/Students	Rs. 3,000

If there are more than 5 delegates from same institute/ industry, 10% discount will be offered. The fee includes lecture notes, course kit, coffee / tea and lunches.

## **Sponsorship**

Companies are invited to support this course by the display of products/services/pamphlets to attract the participants with latest information. For further details please contact the organisers for limited space on first-come-first serve basis.

## Address for communication

**Dr. K.G. Pradeep (Co-ordinator)** Department of Metallurgical & Materials Engineering IIT Madras, Chennai – 600035. Email: kgpradeep@iitm.ac.in

## Mr. V. R. Raju (Co-ordinator)

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#### Mr. T. Jayaraman IIT Madras Research Park, Chennai – 600113. Mobile: 9969100967 Email: amppchennai@gmail.com

# Course on

# **Corrosion Prevention and Control (CPC 2025)**

February 27-28, 2025, IIT Madras Research Park, Chennai

## Registration details (online mode)

## Course Fee per Participant (<u>18% GST included</u>):

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Faculty from University/College	Rs. 6,000
Full time Research Scholars/Students	Rs. 3,000

If there are more than 5 delegates from same institute/industry, a 10% discount will be offered. For group registration kindly contact the organizers before registration.

Full time Research Scholars / Students should obtain a bonafide certificate from Head of the Department, which should be uploaded in the registration form.

### Payment:



BHIM UP!

#### Name of the Bank:

State Bank of India, IIT Madras Campus, Chennai 600 036, Tamilnadu

Name of Account: I I M HRDC Account No.: 30320881571 IFS Code: SBIN0001055 No cheques/DDs will be accepted.

## **Registration link:**

https://forms.gle/bMP3T4Q1AQbiTQK89

Last date for registration: 14<sup>th</sup> February 2025.

For queries please contact: amppchennai@gmail.com