

WebCorr Corrosion Consulting Services Presents

Corrosion Control and Prevention in Liquid Cooling Systems for High-Power Electronics and Data Centers

Date: As published on website Venue: As published on website

Course Overview

This 3-day training course covers corrosion control and prevention in liquid cooling systems for high-power electronics and data centers. Attendees will learn why and how corrosion occurs in the liquid cooling systems and what can be done to minimize the corrosion risks in heat sinks, cold plates, and other components in the cooling systems. Materials selection and design for corrosion prevention are discussed in details. Also presented in this course are the design guidelines and design rules for corrosion control and prevention in liquid cooling systems. State-of-the-art computer software tools for modeling and prediction of various types of corrosion in heat sinks, cold plates, and other components in liquid cooling systems are reviewed and demonstrated.

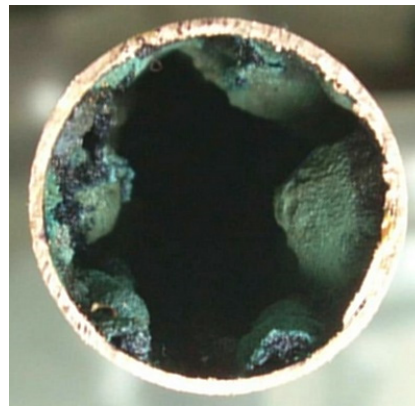
This training course is available for in-house training, on-demand, online, and on-Webex/on-ZOOM training worldwide. It can also be customized to meet the specific needs of your organization.

Who Should Attend

Design engineers, reliability engineers, QA/QC personnel, maintenance and inspection engineers working in the microelectronics, semiconductor, and data center industries.

Course Outline

1. Introduction To Corrosion
2. Basic Concepts in Electrochemistry
3. Practical Corrosion Cells
4. Overview of Different Forms of Corrosion
5. Materials Selection for Corrosion Control and Prevention
 - 5.1 Materials Selection: Basic Concepts
 - 5.2 Material Selection: Carbon Steels and Cast Irons
 - 5.3 Material Selection: Stainless Steels & Nickel Alloys
 - 5.4 Materials Selection: Copper, Aluminum & Ti Alloys
 - 5.5 Material Selection - Nonmetals



6. Design Guidelines for Corrosion Prevention in Liquid Cooling Systems for High Power Electronics and Data Centers
7. Design Rules for Corrosion Prevention in Liquid Cooling Systems for High Power Electronics and Data Centers
8. Software Tools for Modeling and Prediction of Corrosion in Liquid Cooling Systems for High Power Electronics and Data Centers
 - 8.1 CIPAL-Compass: Modeling and Prediction of Copper-Induced Pitting in Aluminum Alloys
 - 8.2 PCW-Compass: Process Cooling Water Corrosion Modeling and Life Prediction
 - 8.3 GC-Compass: A Software Tool for Galvanic Corrosion Prediction and Materials Compatibility Assessment
 - 8.4 CRA-Compass: Corrosion Modeling and Corrosion Prediction for Corrosion Resistant Alloys
 - 8.5 DWD-Compass: Modeling and Prediction of Corrosion in Drinking Water Distribution Systems
 - 8.6 ACMF-Compass: Modeling and Prediction of the Effects of AC and Magnetic Field on Metal Corrosion
9. End-of-course examination



Course Registration

Please register online at www.corrosionclinic.com
Or use the form below (photocopies of this form may be used for multiple bookings).

Dr/Mr/Ms _____
Organization _____
Contact Person _____
Contact Dept _____
Telephone _____ Fax _____
Email _____

Payment should be made by TT or online banking. Currencies in Australian Dollar, Canadian Dollar, US Dollar, Euro and Sterling Pound can be transferred directly without conversion. Our bank details can be found at the link below:

<https://www.corrosionclinic.com/payment.html>

Course Fee and Discount

Standard: \$4,950 **Discount:** \$4,455

The fee includes a hardcopy of course note, certificate, light lunch, coffee breaks each day during the course.

Discount applies to a group of 3 or more persons from the same organization registering at the same time, or early-birds making payment at least 8 weeks before the course commencing date.

Cancellation and Refunds

Cancellation or replacement should be conveyed to WebCorr in writing (email or fax). An administration charge of 50% of the course fee will be levied if the cancellation notice is received from 14 to 7 days before the course commencing date. No refund will be made for cancellation notice received 6 days and less. No refunds will be given for no-shows. Should WebCorr find it necessary to cancel a course, paid registrants will receive full refund. Refund of fees is the full extent of WebCorr's liability in these circumstances.

WebCorr has NACE certified Corrosion Specialist (#5047) providing customized in-house training, online and distance learning corrosion courses, corrosion seminars and workshops on corrosion, materials, metallurgy, paints and metallic coatings. Our corrosion courses are developed and taught by NACE certified Corrosion Specialist with 38 years of practical experience in the field. Our training success is measured by your learning outcome.

