



***Automotive Coating Technologies and Trends:
Materials and Applications
AC-6464-V***

Automotive coatings require high performance, workability, and long-term durability. This applied and highly interactive workshop offers a sound assessment of the latest developments in materials, application methods, and design of high performance and environmentally compliant coating materials and operations.

WHO SHOULD ATTEND?

All personnel dealing with functional, decorative and protective coatings including process, design, specification engineers and quality control personnel will find this interactive workshop highly informative and relevant. The course is appropriate for attendees at all levels.

BENEFITS OF ATTENDING:

- Gain a thorough understanding of automotive coating materials and application parameters.
- Develop an overall understanding of coatings and corrosion prevention methods.
- Enhance durability of coatings and learn how to improve overall performance
- Learn how to save costs by judicious selection of materials and processes
- Receive unbiased technical opinions on what works, what does not and why.
- Reinforce your mastery of troubleshooting and problem solving capabilities.

Virtual Course Outline

- **Automotive Coatings**
 - Overview of Automotive Coating Technologies
 - Global Challenges, Opportunities and Unmet Needs
 - Cost and Regulatory Constraints
- **Adhesion of Coatings**
 - Requirements for Good Adhesion: Materials and Application
 - Methods of Promoting and Maintaining Adhesion
 - Effect of Adhesion on Aesthetic, Durability and Corrosion Resistance of Coatings
- **Surface Pretreatment**
 - How to Measure and Assess Surface Cleanliness
 - How to Select a Proper Surface Treatment Process
 - The Impact of Zinc Phosphate Grain Size on Corrosion Control/Adhesion
 - Most Recent Surface Treatment Technologies
 - What are the Controlling Parameters?
 - How to identify Off-specification Surface Treatment/Electrocoat

- **How to Design for Corrosion Control**
 - Material Selection
 - Process Variables
 - Intact and Non-intact Protection Methods
- **Corrosion and Corrosion Prevention**
 - Methods of Preventing Corrosion
 - Factors Affecting Corrosion Protection of Coatings
 - Selecting Coatings for Corrosion Protection
 - The Most Informative Methods of Evaluating Corrosion Protection of Coatings
- **Selection, Properties and Application of Liquid Organic Coatings**
 - Exterior and Interior Coatings
 - Performance Rating of Conventional and Compliant Coatings
 - Selecting Compliant Liquid Coatings
 - Recent Developments and Future Trends
- **Waterborne Coatings**
 - Waterborne Coating Technologies
 - Performance and Durability of Waterborne Coatings
 - Special Considerations for Waterborne Coatings Application
 - Selection, Merits, Application and Process Variables
- **Durability and Testing of Coatings**
 - Factors Affecting the Performance of Coatings
 - Mechanisms of Paint Failure
 - Approaches to Coating Life Prediction
 - How to Extend the Life of a Coating

Virtual Course Details

- The virtual course will be presented through live Microsoft Teams sessions. Participants may attend from either home or office, and will require a computer with a microphone and webcam.
- Participants must attend 100% of all sessions to receive an electronic certificate of completion.
- Scheduled course times are Eastern Standard Time (EST).
- Private questions/consulting sessions maybe scheduled by attendees during the designated hours.
- **All training materials (slides) will be available for download.**