



## ***Fundamentals of Coating and Paint Technology*** ***CP-6618***

This workshop provides a thorough introduction to the fundamentals of paint composition, application, and processing. As such, the basic ingredients and properties of industrial, automotive, and trade sales paints will be presented. Paint selection, performance criteria, application methods, defects, problem resolution, and future paint and raw materials needs will also be discussed..

### **WHO SHOULD ATTEND?**

This course is highly recommended for beginners to the industry, as well as marketing, technical sales, paint users, customer support staff, field service representatives, manufacturing personnel, and all others who can benefit from a broad knowledge of this dynamic and complex technology.

### **WHAT YOU WILL LEARN:**

- What elements make up a paint
- The basic role of paint ingredients
- Fundamentals of paint adhesion
- Requirements of good surface preparation
- Types of paint and coatings, and their basic properties
- How to select high-performing coatings
- Application and processing methods
- What does the market need today?
- Problem resolution: raw material, finished paint, and application troubleshooting

### **Course Outline**

- Overview of paint technologies and the global coatings and paints market
- The basic role of paint ingredients: Resins, solvents, pigments and additives
- Drying and curing of paints and coatings
- Evaluation and standard test methods
- Coping with environmental regulations
- Fundamentals of adhesion
- Surface preparation
- Corrosion control by coatings
- Color and appearance in coatings
- Coating types and properties: Solvent borne, waterborne, powder, and UV-cure
- Electrocoat, EC/Electrodeposition, ED
- Basic formulation of industrial, architectural, and automotive coatings
- Identifying composition and application problems
- Coating defects, prevention methods and troubleshooting
- Why coatings fail, and what to do about it