



IMM Coating Fingerprint Certification Scheme

Coating Fingerprint Foundation Course

Code: FTIR

HRDF claimable

The paint & coatings industries have initiated the requirement for a polymeric **Coating Fingerprint Certificate** similar to a Mill Certificate for metals) to improve quality assurance. Fourier Transform Infra-Red (FTIR) method has been selected as the appropriate method to provide the fingerprinting requirement in addition to other physical & chemical tests which are regularly conducted by the paint & coating manufacturers.

This 1 day course will consist of a half-day theory lectures on the FTIR method followed by half-day of demonstration of the FTIR equipment to provide participants to understand the mechanics of the FTIR testing, appreciation of the strengths and limitations of FTIR method, interpretation and analysis of FTIR results, and a first-hand experience of running the FTIR testing with the actual FTIR equipment in the classroom.

Objectives

To equip the participants with the knowledge and skills to demand sufficient authority for his/her decisions to be recognized by both client and contractor, in the preparation of Coating Fingerprint Certificate for 3rd-party or in-house laboratories.

Course content

- (1) Coating Fingerprint Certificate
- (2) Sampling standards of materials
- (3) FTIR analysis standard for protective coatings
- (4) Basic introduction to FTIR
- (5) Basic application of a FTIR software
- (6) Generation of reference FTIR spectrum
- (7) Estimation of degree of similarity for samples
- (8) Rejection and acceptance of samples
- (9) Dos and Don'ts in FTIR analysis
- (10) Running samples using ATR accessories
- (11) Interpretation of FTIR test results
- (12) Quality control tools in a FTIR software
- (13) Data analysis using a commercial FTIR software

Course duration

1 day

Who should attend

Anyone interested in the topic and their applications including graduates with bachelor degree through Ph.D level, researchers, chemists, engineers, physicists, or technicians from academic and industry who work in or are beginning to work in the field. Managers in this industry will greatly benefit from this in-depth lecture course.

Pre-requisite(s)

No previous experience required.

Certificate

IMM Coating Fingerprint Foundation Certificate

