



## INSTITUTE OF MATERIAL, MALAYSIA

### IMM Coating Fingerprint Certification Scheme

## Certified Coating Fingerprint Quality Controller Level 2

Code: FP2

*HRDF claimable*

The oil & gas and petrochemical industries have implemented the requirements for Coating Fingerprint Certificate (equivalent to the Mill Certificate for Metals) for all the protective coatings and paints supplied to the industry operators. As such, IMM Certified Coating Fingerprint Quality Controllers Level 2 (FP2) will be engaged by paint manufacturers, 3<sup>rd</sup>-party laboratories, (sub-)contractors, auditors and owners to prepare or to review Coating Fingerprint Certificate for quality assurance and quality control (QA & QC) purpose. This certification program (FP2) places special emphasis on the generation of a good Reference spectrum for in-house paint manufacturers and 3<sup>rd</sup>-party laboratories, which is very crucial for subsequent estimation of degree of similarity for batch-to-batch paint consistency. Besides, good practices of on-site inspection using mobile or handheld equipment, review of Coating Fingerprint Certificate and cross-checking of raw FTIR spectrum will be highlighted.

#### NOTE:

Code: FP1 – inspector level

Code: FP2 – laboratory analyst and auditor level

Code: FP3 – professional technologist level (to be launched)

#### Reference standards (reference used shall refer to the latest published document):

- MS 2736 (previously known as IMM FP01), Coating Fingerprinting Overall Procedures for Paints Using FTIR and Other Related Methods
- IMM FP02, Paint Raw Material Overall Procedures Using FTIR and Other Related Methods
- IMM FP03, Dried Coating Fingerprinting Overall Procedures Using FTIR and Other Related Methods

#### Who should apply

This certification program (FP2) is for those who will be involved in conducting quality assurance or quality control (QA/QC) on paints and coating systems, especially for analysts at testing laboratories (in-house and 3<sup>rd</sup>-party) as well as for internal and external auditors.

#### Objectives

The objective of this certification program (FP2) is to assess and certify IMM Certified Coating Fingerprint Quality Controllers Level 1 (FP1) on upgraded knowledge and skills in quality control and quality assurance on paints and coating systems. In addition, the persons certified as IMM Coating Fingerprint Quality Controller Level 2 (FP2) or higher shall issue the Coating Fingerprint Certificate. Whereas, IMM Coating Fingerprint Quality Controller Level 1 (FP1) should only issue a Coating fingerprint (scheduled / random) monitoring report for on-site analysis.

#### Examination topics

- IMM FTIR Analysis Standards, qualification and fingerprint certificates of raw materials, paints and dried coatings
- Sampling precautions in relation to FTIR fingerprinting for paints
- FTIR fingerprinting of raw materials for epoxy paint manufacturing
- Good practice for generation of Reference FTIR for Coating Fingerprint Certificate
- Good practice for sample storage, collection and analysis
- On-site inspection using mobile or handheld spectrophotometer
- Audit trail of a FTIR spectrum using FTIR software

**Examination format**

Examination consists of 60 multiple choice questions

**Examination duration**

60 min or less

**Examination fee**

As specified on the IMM website.

**Candidate's criteria**

Candidate should have

- Valid IMM Certified Coating Fingerprint Quality Controller Level 1 certificate or equivalent with at least 6-month working experience on coating fingerprinting.

**Pre-requisite training**

A candidate without experience is required to attend IMM approved/recognized training course which prepares and provides comprehensive guidance and practice aligned to the topics covered in the examination.

A candidate with experience is encouraged to attend IMM approved/recognized training course.

**Criteria for certification**

The candidate must pass the examination with a minimum total mark of 70%.

**Certificate awarded**

IMM Certified Coating Fingerprint Quality Controller Level 2 (FP2)

Candidate (FP2 or higher) will also be authorized to use the Coating Fingerprint Quality Controller Rubber Stamp (Figure 1) in all documents and reports, including the Coating Fingerprint Certificate, in relation to coating fingerprinting to any person, company or authority in Malaysia.



Figure 1

**Validity period of certificate**

5 years

**Re-sit of examination**

A candidate who had failed in one or more of the examination parts can apply to re-sit for the failed component(s) of the examination within a year from the date of the first examination. The candidate shall have to pay the full examination fee for the re-sit and without the need to attend any pre-requisite training course.

**Information on re-certification**

6 months prior to the expiry of certification (at the end of the 5<sup>th</sup> year of certification), the candidate can apply for re-certification for another 5 years by

- providing proof to IMM that he/she has been employed in a related profession; and
- attending the relevant Refresher Course for certification (if any).

Prior to the expiry of the 5-year re-certification (at the end of the 10<sup>th</sup> year of certification), the candidate can continue to be certified for a further 5-year period by

- providing proof to IMM that he/she has been employed in a related profession; and
- attending the relevant Refresher Course for certification (if any).

The candidate must re-sit the certification examination if he/she has been out of the profession for more than 18 months continuously during the 5-year certification or re-certification period.