

# INSTITUTE OF MATERIAL, MALAYSIA

#### **IMM Corrosion Certification Scheme**

## **Certified Corrosion Monitoring Practitioner Level 3**

Code: CMP3 HRDF claimable

IMM Certified Corrosion Monitoring Practitioner Level 3 program will assess candidates who have acquired the IMM Corrosion Monitoring Practitioner Level 2 Certification and have acquired at least 3 years of post-certification experience in corrosion inhibition monitoring and cathodic protection monitoring.

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

- ASTM E-797 Standard Practice for Measuring Thickness by Manual Ultrasonic Pulse-Echo Contact Method
- ASTM G96-90 Standard Guide for Online Monitoring of Corrosion in Plant Equipment (Electrical and Electrochemical Methods)
- IMM CM01: Corrosion Monitoring, Competency Levels of Corrosion Monitoring Persons: Basis for Certification Scheme
- ISO 15589-1: Petroleum, Petrochemical and Natural Gas Industries Cathodic Protection of Pipeline Systems - Part 1: On-land Pipelines
- ISO 15589-2: Petroleum, Petrochemical and Natural Gas Industries Cathodic Protection of Pipeline Transportation Systems Part 2: Offshore Pipelines
- NACE 3T199 Techniques for Monitoring Corrosion and Related Parameters in Field Applications
- NACE SP0775 Preparation, Installation, Analysis and Interpretation of Corrosion Coupons in Oilfield Operations

### Who should apply

Holders of the IMM Certified Corrosion Monitoring Practitioner Level 2 Certification with sufficient work experience, who have met the pre-requisites recognized by IMM in Tables A.1 & A.2 of Annex A in the IMM CM01 Standard and has achieved the minimum years of corrosion inhibition monitoring and cathodic protection monitoring experience, plus having attended a relevant training course.

#### Objectives

This program is aimed to examine the knowledge and experience of the candidate who is expected to have acquired sufficient skills as a Corrosion Monitoring Practitioner in order for him/her to manage a team of corrosion monitoring technicians and supervisors as well as to communicate with the Stakeholders. He/she shall be examined not only in terms of technical knowledge and technical code-of-conduct and integrity, but also on his/her capabilities to manage a team of personnel under his/her wing.

## Examination topics

- Corrosion and electrochemistry relevant to corrosion monitoring.
- Principles of corrosion inhibition and preservation.
- Corrosion monitoring techniques and measurements.
- Key-point corrosion monitoring techniques and measurements such as Ultrasonic Testing Thickness Gauge and other specialized corrosion monitoring methods.
- Corrosion and electrochemistry relevant to cathodic protection.
- Principles of cathodic protection and coatings relevant to corrosion monitoring.
- Monitoring techniques for cathodic protection systems, including AC and DC techniques.
- Standards and Codes of Practice in the relevant application sector.
- Health, Safety and Environmental issues relating to corrosion monitoring tasks.

- Code of Ethics and Professional Conduct of all corrosion monitoring persons.
- Interpersonal communication skills.
- Report writing and technical analytical skills relating to process corrosion monitoring and cathodic protection monitoring.

#### Examination format

Writing technical analysis reports of 2 case studies Oral Interview

#### **Examination duration**

Writing technical analysis reports of 2 case studies: 1 hour

Oral interview: 2 hours

#### Examination fee

As specified on the IMM website.

## Candidate's criteria

Candidate should have

- Passed IMM Certified Corrosion Monitoring Practitioner Level 2 and shall show proof of having attended a minimum total of 5 days of IMM approved/recognized training course in corrosion monitoring within the last 3 years prior to this application OR
- Passed IMM Certified Corrosion Monitoring Practitioner Level 2 who has achieved the minimum years of corrosion monitoring experience listed in Tables A.2 of Annex A in the IMM CM01 Standard OR
- Submit (with application in advance) his/her latest record of work experience with copies of actual work done in the field of process corrosion monitoring, key-point corrosion monitoring and cathodic protection monitoring, endorsed by the candidate's superiors or clients. Number of years for the work record experience as per Table A.2 of Annex A in the IMM CM01 Standard OR
- Submit a testimonial of their total work experience in corrosion monitoring with details of employment dates, scope of work performed, and proof of continuous corrosion monitoring work without any lapse of more than 18 months. The testimonial must be endorsed by their latest employer or a representative from their client

NOTE: The applicant must pass the Eye Acuity Examination, with or without corrective lenses, to prove near vision acuity on Jaeger J2 at 12" or greater (≥30.5 cm). All applicants shall take a colour perception test.

## 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

Pass the examination with a minimum total mark of 70% for each assessment.

## Certificate awarded

IMM Certified Corrosion Monitoring Practitioner Level 3

## 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.