

## **INSTITUTE OF MATERIALS, MALAYSIA**

### **ANNUAL REPORT OF THE COUNCIL FOR THE YEAR ENDING 31<sup>ST</sup> DECEMBER 2019**

Dear IMM Members,

On behalf of the IMM Council, I am pleased to present the report of the activities of IMM covering the period from 1<sup>st</sup> January 2019 to 31<sup>st</sup> December 2019.

#### **1. IMM COUNCIL AND MANAGEMENT COMMITTEE MEETINGS**

IMM Management Committee and Council meetings (Term 2018-2020) for the year 2019 were held as follows:

<b>Date</b>	<b>Management Committee Meeting</b>
25 <sup>th</sup> February 2019	5 <sup>th</sup> Management Committee Meeting
16 <sup>th</sup> May 2019	6 <sup>th</sup> Management Committee Meeting
17 <sup>th</sup> September 2019	7 <sup>th</sup> Management Committee Meeting
4 <sup>th</sup> December 2019	8 <sup>th</sup> Management Committee Meeting

<b>Date</b>	<b>Council Meeting</b>
25 <sup>th</sup> February 2019	4 <sup>th</sup> Council Meeting
16 <sup>th</sup> May 2019	5 <sup>th</sup> Council Meeting
17 <sup>th</sup> September 2019	6 <sup>th</sup> Council Meeting
4 <sup>th</sup> December 2019	7 <sup>th</sup> Council Meeting

An election was conducted within the Council, in accordance with Clause no. 6.2.2.2 of the IMM Constitution, for the posts of Deputy President, Honorary Secretary and Honorary Treasurer for the 2020-2022 Council term during the 7<sup>th</sup> Council Meeting (Term 2018-2020) on 4<sup>th</sup> December 2019 at the Grand BlueWave Hotel Shah Alam.

In accordance with Clause no. 6.2.2.1 of the IMM Constitution, the position of IMM President for the term 2020-2022 will be filled by the current Deputy President, Dato' Dr. Ir. Hj. Mohd Abdul Karim Abdullah (HF-7442) from Serba Dinamik Group Bhd.

The office-bearers for the remaining key positions for the term 2020-2022 were filled from among the current Council members, as follows:

- i) Deputy President: Ts. Dr. Chew Khoo Hee (F-4355) from Tunku Abdul Rahman University College

Proposer : Assoc. Prof. Dr. Lim Teck Hock (F-8210); and  
Dr. Yong Soon Kong (AO-7092)

Seconder : Prof. Ts. Dr. Mohamad Kamal Bin Harun (F-0117); and  
Mr. Danny Tan Kim Chew (O-7120)

- ii) Honorary Secretary: Prof. Ts. ChM. Dr. Melissa Chan Chin Han (F-4118) from Faculty of Applied Sciences, Universiti Teknologi MARA

Proposer : Dr. Yong Soon Kong (AO-7092); and  
Ts. Dr. Tay Chia Chay (F-6742)

Seconder : Prof. Ts. Dr. Mohamad Kamal Bin Harun (F-0117); and  
Ts. Dr. Chew Khooon Hee (F-4355)

- iii) Honorary Treasurer: Dr. Mohamed Ackiel Mohamed (F-8237) from Serba Dinamik Group Berhad

Proposer : Ts. Dr. Chew Khooon Hee (F-4355)

Seconder : Ts. Dr. Tay Chia Chay (F-6742)

## 2. ACTIVITIES CARRIED OUT IN THE YEAR 2019

DATE	MEETING/EVENT/ACTIVITY
<b>Coating Committee</b> [Chair: Mr. Muhammad Hawari Hasan]	
4 <sup>th</sup> January	Coating Committee Discussion
16 <sup>th</sup> January	Coating Committee Discussion
14 <sup>th</sup> April	Coating Committee Discussion
14 <sup>th</sup> June	Coating Committee Discussion
20 <sup>th</sup> July	Coating Committee Discussion
8 <sup>th</sup> November	Coating Committee Meeting
<b>Corrosion Committee</b> [Chair: Ir. Ong Hock Guan]	
4 <sup>th</sup> March	1 <sup>st</sup> Corrosion Committee Meeting
18 <sup>th</sup> March	Ir. Ong participated in the Industrial Advisory Panel (IAP) for UTP
24 <sup>th</sup> June	2 <sup>nd</sup> Corrosion Committee Meeting
27 <sup>th</sup> June	Seminar on “Corrosion Controls and Prevention in Rail Industry” followed by Site tour to Rapid Depot
19 <sup>th</sup> August	3 <sup>rd</sup> Corrosion Committee Meeting
17 <sup>th</sup> October	1-Day Conference on “Disruptive Technologies in Materials Corrosion and Inspection”
4 <sup>th</sup> December	4 <sup>th</sup> Corrosion Committee Meeting
<b>Education Committee</b> [Co-Chairs: Prof. Ts. Dr. Mohamad Kamal Bin Harun and Ir. Max Ong Chong Hup]	
6 <sup>th</sup> March	Technical Visit to Cenviro Waste Management Facility

DATE	MEETING/EVENT/ACTIVITY
<b>Examination and Certification Panel</b> [Chair: Ts. Brian Lim Siong Chung]	
31 <sup>st</sup> July	1 <sup>st</sup> Examination and Certification Panel (ECP) Meeting
22 <sup>nd</sup> August	2 <sup>nd</sup> Examination and Certification Panel (ECP) Meeting
11 <sup>th</sup> October	3 <sup>rd</sup> Examination and Certification Panel (ECP) Meeting
15 <sup>th</sup> November	4 <sup>th</sup> Examination and Certification Panel (ECP) Meeting
<b>Golf Committee</b> [Chair: Ts. Mohd. Azmi Mohd. Noor]	
2 <sup>nd</sup> March	Participation in MOGEC Golf Championship 2019
8 <sup>th</sup> March	Participation in Post Conference Friendly Golf
<b>Insulation Committee</b> [Chair: Mr. Danny Tan Kim Chew]	
August	Meeting with Institute of Corrosion (UK) for Insulation Applicator Training Scheme (IATS).
<b>Materials Lecture Competition Committee</b> [Chair: Prof. Dr. Esah Hamzah]	
14 <sup>th</sup> March	MLC2019 Competition (University Level)
4 <sup>th</sup> April	MLC2019 Competition (Semi-Final)
30 <sup>th</sup> April	MLC2019 Competition (Final)
September	Preliminary preparations/planning (Checklist & proposed budget between IMM and UPM) for MLC 2020
5 <sup>th</sup> September	Mock Presentation for YPWLC2019 by Mr. Lam Jia Yong, Finalist MLC2019
10 <sup>th</sup> October	2019 Young Persons' World Lecture Competition Final
21 <sup>st</sup> November	MLC2020 Committee Meeting
<b>Materials Mind Editorial Board</b> [Chair: Ts. Dr. Tay Chia Chay]	
January	Publication of Materials Mind Magazine (Issue 23)
April	Publication of Materials Mind Magazine (Issue 24)
July	Publication of Materials Mind Magazine (Issue 25)
October	Publication of Materials Mind Magazine (Issue 26)
<b>Polymer Committee</b> [Chair: Ts. Dr. Chew Khoo Hee]	
22 <sup>nd</sup> March	Forum on “Using Technology to Address Global Plastic & Environmental Issues”
7 <sup>th</sup> November	1-Day Workshop on “Thermal Behaviour of Polymers”

DATE	MEETING/EVENT/ACTIVITY
<b>Standard Assurance Committee</b> [Chair: Assoc. Prof. Dr. Amalina Muhammad Afifi]	
21 <sup>st</sup> March	Committee Meeting
2 <sup>nd</sup> – 3 <sup>rd</sup> May	Attended the ISO 17024 Conformity Training (Four committee members)
27 <sup>th</sup> – 30 <sup>th</sup> May	Internal Audit of IMM for the accreditation to MS ISO/IEC 17024
27 <sup>th</sup> June	Internal Audit of IMMR for the accreditation to MS ISO/IEC 17024
17 <sup>th</sup> and 23 <sup>th</sup> December	Verification of Internal Audit Findings
<b>Student Chapter</b> [Chair: Assoc. Prof. Dr. Lim Teck Hock]	
29 <sup>th</sup> August	Memorandum of Understanding Signing Ceremony Between IMM and Universiti Tun Hussein Onn Malaysia (UTHM)
1 <sup>st</sup> – 3 <sup>rd</sup> November	Exhibition at KLESF (Kuala Lumpur Engineering Science Fair)
<b>Task Force on Coating Fingerprinting</b> [Co-Chairs: Prof. Ts. Dr. Mohamad Kamal Bin Harun and Prof. Ts. ChM. Dr. Melissa Chan Chin Han]	
23 <sup>rd</sup> January	Discussion with IMM Secretariat on Task Force on Coating Fingerprinting Activities
24 <sup>th</sup> January	3 <sup>rd</sup> Task Force on Coating Fingerprinting Meeting
1 <sup>st</sup> March	1 <sup>st</sup> Coating Fingerprinting Forum V Meeting
8 <sup>th</sup> March	1 <sup>st</sup> Workshop for Blasting and Painting on Polymeric Paint Samples
16 <sup>th</sup> March	2 <sup>nd</sup> Workshop for Blasting and Painting on Polymeric Paint Samples
18 <sup>th</sup> March	Meeting on Collaboration with SIRIM STS Division for the Development of IMM Coating Fingerprinting Standard
26 <sup>th</sup> March	2 <sup>nd</sup> Coating Fingerprinting Forum V Meeting
4 <sup>th</sup> April	Forum on “Towards Polymeric Coating Fingerprinting” V Big Wave
9 <sup>th</sup> May	3 <sup>rd</sup> Mock-Execution Subcommittee Meeting
15 <sup>th</sup> May	3 <sup>rd</sup> Workshop for Blasting and Painting on Polymeric Paint Samples
24 <sup>th</sup> July	4 <sup>th</sup> Task Force on Coating Fingerprinting Meeting
24 <sup>th</sup> October (Morning)	Factory Visit to JOTUN
24 <sup>th</sup> October	5 <sup>th</sup> Task Force on Coating Fingerprinting Meeting
5 <sup>th</sup> December	Meeting on Migration of IMM Standard to SIRIM Industry Standard with SIRIM STS Sdn Bhd
<b>Task Force on Upskilling Sarawak Engineers &amp; Technicians</b> [Chair: Ir. Pau Kiew Huai]	
17 <sup>th</sup> January	Task Force Meeting
7 <sup>th</sup> March	Participated in one-day Conference on “Sabah Oil & Gas Skill Needs”

DATE	MEETING/EVENT/ACTIVITY
17 <sup>th</sup> May	Task Force Meeting
<b>Vibration Committee</b> [Chair: Dato' Dr. Ir. Hj. Mohd Abdul Karim Abdullah]	
11 April	1 <sup>st</sup> Vibration Committee Meeting
19 August	2 <sup>nd</sup> Vibration Committee Meeting
13 <sup>th</sup> – 14 <sup>th</sup> November	International Applied Vibration Conference 2019 (IAVIC 2019)
<b>Website Committee</b> [Chair: Dr. Yong Soon Kong]	
8 <sup>th</sup> January	Meeting with IMM Secretariat
9 <sup>th</sup> January	Performed troubleshooting of security threats on IMM website and email
15 <sup>th</sup> May	Completion of the troubleshooting and maintenance of IMM website and website traffic
14 <sup>th</sup> October	Handover meeting with IMM Secretariat on maintenance of IMM website, mobile phone, and all social media portals
15 <sup>th</sup> October	Submission of final documentation for the application of eGHL online payment gateway to SMD Webtech (M)Sdn. Bhd
<b>Welding Committee</b> [Chair: Ms. Tan Su Anne]	
19 <sup>th</sup> April	Memorandum of Understanding Signing Ceremony Between IMM and Prasarana Malaysia Berhad
24 <sup>th</sup> April	Participation in Asia WeldTech 2019 Malaysia Seminar
25 <sup>th</sup> – 26 <sup>th</sup> April	Participation in Asian Welding Federation Council Meeting (Bangi, Selangor)
19 <sup>th</sup> May	Common Welding Certification Schemes (CWCS) Taskforce Meeting and Magnetically Impelled Arc Butt (MIAB) Welding Workshop
17 <sup>th</sup> August	Presentation of IMM and Welding Committee services at charity dinner organized by Kejuruteraan Kawan Lama Sdn Bhd
23 <sup>rd</sup> – 24 <sup>th</sup> October	Participation in Asian Welding Federation Council Meeting (Incheon, South Korea)
<b>Young Professionals Committee</b> [Chair: Mr. Mohd Fairuz Mohd Salleh]	
23 <sup>rd</sup> February 2019	Certificate of Collaboration Signing Ceremony between IMM and Politeknik Kota Kinabalu
24 <sup>th</sup> February 2019	Industrial Dialogue in conjunction with the TVET Career Carnival Sabah 2019 by Politeknik Kota Kinabalu
10 <sup>th</sup> – 11 <sup>th</sup> July 2019	Youth Forum on Technical and Vocational Education and Training (TVET) - In conjunction with the Sabah Oil & Gas Conference & Exhibition 2019 (SOGCE 2019)
<b>Miri Chapter</b> [Chair: Ir. Dr. Edwin Jong Nyon Tchan]	
9 <sup>th</sup> March 2019	1 <sup>st</sup> Miri Chapter Meeting cum Member Get-Together and Lantern Festival Dinner

DATE	MEETING/EVENT/ACTIVITY
13 <sup>th</sup> – 14 <sup>th</sup> April	Participation in the Sarawak O&G Seminar & Exhibition (SOGSE) 2019
18 <sup>th</sup> May	2 <sup>nd</sup> Miri Chapter Meeting cum “Buka Puasa Dinner” and Farewell Dinner to Curtin-IMM Student Advisor, Dr Sumaiya Islam
13 <sup>th</sup> July	3 <sup>rd</sup> Miri Chapter Meeting cum “Sarawak Day & Member Get-Together Dinner”
13 <sup>th</sup> September	Opened a bank account in Miri to be used by Miri Chapter for all IMM related activities and projects
14 <sup>th</sup> September	4 <sup>th</sup> Miri Chapter Meeting cum “Malaysia Day & Member Get-Together Dinner”
2 <sup>nd</sup> November	5 <sup>th</sup> Miri Chapter Meeting for 2019 cum “Deepavali Celebration & Farewell Dinner for Assoc. Prof. Dr. Vincent Lee, Vice-Chairman”
6 <sup>th</sup> – 8 <sup>th</sup> November	Participation in 2 <sup>nd</sup> International Conference on Materials Technology and Energy (ICMTE) 2019 at Curtin University Malaysia
<b>Sabah Chapter</b> [Chair: Mr. Zubaidi Abang Zamhari]	
10 <sup>th</sup> – 11 <sup>th</sup> July	Youth Forum on Technical and Vocational Education and Training (TVET) - In conjunction with the Sabah Oil & Gas Conference & Exhibition 2019 (SOGCE 2019)
<b>Other Activities</b>	
25 <sup>th</sup> – 27 <sup>th</sup> January	Participation of IMM Secretariat in "Bengkel Manual Akreditasi Program Teknologi dan Teknikal" by MBOT
25 <sup>th</sup> January	Appreciation Dinner by Management Committee with IMM Past Advisor, Datuk Ir. (Dr.) Abdul Rahim Hashim
9 <sup>th</sup> March	Participation of IMM Secretariat in "Program Taklimat Pengurusan Berkualiti" by ROS
22 <sup>nd</sup> March	IMM 29 <sup>th</sup> Annual General Meeting
8 <sup>th</sup> May	Assessment of IMM members as Technologists (Ts) by the Malaysian Board of Technologists
29 <sup>th</sup> May	Submission of amendments to IMM Constitution to ROS
4 <sup>th</sup> July	Management Review Meeting at IMM Secretariat
28 <sup>th</sup> September	Exhibition at Carnival Science and Technology by MATECH Student Club
24 <sup>th</sup> November	IMM Management Retreat

### 3. HIGHLIGHTS OF ACTIVITIES IN 2019

#### 3.1 Amendments to IMM Constitution

Amendments to the IMM Constitution were approved during the 29<sup>th</sup> AGM held on 22<sup>nd</sup> March 2019. The constitution was subsequently revised to incorporate the amendments which included the new IMM logo, change of title from “IMM Rules” to “IMM Constitution”, change of Secretariat office address and quorum for AGM, EGM and Council meetings. The reformatted

constitution submitted to ROS as per their requirements was approved with effect from the date of submission i.e. 29<sup>th</sup> May 2019. The official ROS number for the Institute is PPM-004-10-11061987.

### **3.2 Accreditation to MS ISO/IEC 17024 (Project Alpha)**

In collaboration with IMMR, IMM was set the objective of conforming to the requirements of MS ISO/IEC 17024 *Conformity Assessment – General Requirements for Bodies Operating Certification of Persons* and to be accredited for specific certification schemes.

The ISO 17024 Conformity Training Program was held on 2<sup>nd</sup> – 3<sup>rd</sup> May 2019 and attended by the IMM Secretariat staff, IMMR executives, chairpersons and members of Asset Integrity Committee, Vibration Committee, Corrosion Committee, Standard Assurance Committee, Examination and Certification Panel and Task Force on Coating Fingerprinting.

Conformity Manual, Procedures, forms and other documents relating to certification activities were subsequently prepared for approval by the IMM **Examination and Certification Panel (ECP)**. Gaps and shortcomings were identified and corrective actions taken to meet the requirements of MS ISO/IEC 17024.

An internal audit was scheduled and carried out by **Standard Assurance Committee** in May and June 2019. Corrective actions were taken to address the non-conformances reported.

The relevant application documentation for identified schemes under Phase 1 (Coating Inspector and Mechanical Joint Integrity) has been submitted to the Department of Standards Malaysia (DSM) in September 2019 for accreditation to MS ISO/IEC 17024. The application has been accepted and the documentation review by DSM is expected to be completed in January 2020. On-site review and inspection will be scheduled thereafter.

### **3.3 Training, Examination and Certification**

A total of 52 IMM certification examinations were conducted in 2019. Most of these examinations were carried out in conjunction with the related training programmes organized by IMM Resources - Central Training Unit (IMMR-CTU) and Materials, Training and Education Sdn Bhd (MTE). See **Appendix 1**.

The year saw the migration of the coordination of the training programs from the IMM Secretariat to IMMR-CTU which hereon will coordinate all training with the Accredited Training Bodies (ATBs) with IMM managing all examination and certification matters with the objective to fulfill the requirements of MS ISO 17024 on impartiality.

The newly established **Examination and Certification Panel (ECP)** set up to replace the Examination, Certification and Accreditation Panel. It has been tasked with the approval of not only all documentation relating to examination and certification but also the qualification and requirements of examiners, list of examiners for certification schemes and examination results of candidates and approval of their competency certification based on the established criteria.

### 3.4 New Certification Schemes

Three new in-house certification schemes were developed and introduced in 2019. These were IMM-Mechanical Joint Integrity (MJI) for Small-bore Piping, Tubing and Valves and IMM-MJI for Flange Bolted Connections under the **Asset Integrity Committee** and B1B2 Assistant Blaster and Painter under the **Coating Committee**. The training and examination for these schemes were conducted from April 2019 onwards.

In addition, the joint IMM-SSPC C7 Abrasive Blasting and C12 Spray Application certification schemes were introduced during the year as replacement for Protective Coating Technician (Blaster and/or Painter) Level 1 and Level 2. Thus this collaboration with the U.S. based Society for Protective Coatings is the second one with an established international certification body, the first being the Japan Welding Engineering Society (JWES).

### 3.5 Conferences, Seminars, Workshops and Forums

#### 3.5.1 Forum on “Using Technology to Address Global Plastic and Environmental Issues”

This forum organized by the **Polymer Committee** with the aim of looking at the plastic pollution issue from different perspectives was held on 22<sup>nd</sup> March 2019 at Kelab Golf Negara Subang in-conjunction with 29<sup>th</sup> AGM of IMM. The invited speakers were from different backgrounds ranging from scientific instrument suppliers to NGO and green plastic manufacturers.

#### 3.5.2 Forum on "Towards Polymeric Coating Fingerprinting" V Big Wave

This forum was organised by the **Task Force on Coating Fingerprinting** on 4<sup>th</sup> April 2019 and attended by more than 100 participants. FTIR analysis on more coating products such as Inorganic Zinc Coating, Epoxy-Zinc Coating, High Solids Epoxy Coating, Polyurethane Coating, Glass Flake Polyester Coating and Silicone-Aluminum Coating plus comparison of aged (1-2 years old) products was presented.

#### 3.5.3 Seminar on “Corrosion Controls and Prevention in Rail Industry”

The half-day seminar was held on 27<sup>th</sup> June 2019 and this was followed by a site tour to Rapid Depot at Prasarana Centre of Excellence (PACE), Kompleks Rapid Rail Subang, organised and attended by 17 members of the **IMM Corrosion Committee**.

#### 3.5.4 Youth Forum on Technical and Vocational Education and Training (TVET)

In conjunction with the Sabah Oil & Gas Conference & Exhibition 2019 (SOGCE 2019) that was held on 10<sup>th</sup> and 11<sup>th</sup> July 2019, a parallel session on Youth Forum on Technical and Vocational Education and Training (TVET) was successfully organized by the **IMM Young Professionals Committee** and **IMM Sabah Chapter**. This forum attended by about 80 students from seven institutions and TVET schools accompanied by their lecturers provided an excellent platform for students to explore career opportunities and gain knowledge on the industry of oil and gas.

#### 3.5.5 Conference on “Disruptive Technologies in Materials Corrosion and Inspection”

This one-day conference was successfully organised by the **Corrosion Committee** on 17<sup>th</sup> October 2019 at Sheraton Hotel, KL with participation of 135 delegates, 40 undergraduate students, 20 exhibitors, 11 speakers and 7 sponsors. The topics covered included experiences, knowledge, new technologies and innovative ideas on the impact of disruptive technologies.



### **3.5.6 Workshop on “Thermal Behaviour of Polymers”**

The workshop was organised by the **Polymer Committee** in collaboration with the Faculty of Applied Sciences, UiTM on 7<sup>th</sup> November 2019 at the Sports Complex Centre, UiTM Shah Alam. The workshop received overwhelming response and was attended by a total of 121 participants from both the academia and the industry.

### **3.5.7 International Applied Vibration Conference (IAVIC) 2019**

The International Applied Vibration Conference (IAVIC) 2019 themed “Vibration Technology in the Era of Industrial Revolution 4.0” was organised by the **Vibration Committee** over two days, 13<sup>th</sup> – 14<sup>th</sup> November 2019, at Sheraton Imperial Hotel, Kuala Lumpur. The latest technologies and case studies were presented by international and local experts through keynote addresses, technical talks, forums and exhibition. The conference which involved 18 speakers attracted 170 participants and 18 exhibitors.

## **3.6 Collaboration**

### **3.6.1 Collaboration with Politeknik Kota Kinabalu**

IMM was honoured to be among the four (4) collaborative partners during the signing of the Certificate of Collaboration (CoC) with Politeknik Kota Kinabalu, Sabah on 23<sup>rd</sup> February 2019 at the launching ceremony of the Career Carnival TVET Sabah 2019. The parties involved were Materials Technology Education Sdn Bhd, Sabah Economic Development and Investment Authority and Sabah Timber Industries Association. The Chairman of **Young Professional Committee** participated in a dialog session with students held in-conjunction with the carnival.

### **3.6.2 MoU between IMM and Prasarana Malaysia Berhad**

IMM and Prasarana Malaysia Bhd formalized a landmark collaboration to develop and conduct academic and professional training programs leading to certification of skilled workers by signing a Memorandum of Understanding (MOU) on 19<sup>th</sup> April 2019 at the Alila Hotel in Bangsar, Kuala Lumpur. The MOU signing ceremony (coordinated by the IMM **Welding Committee**) was attended by the senior management and staff of both organisations as well as members of the media. Signed by IMM President, Mr. Mohd Azmi Mohd. Noor and Group Chief Executive Officer of Prasarana Malaysia Bhd, Dato’ Mohamed Hazlan Mohamed Hussain, the MOU marks an achievement for both IMM and Prasarana as it paves the way for the collaboration of according certification for workers in ‘thermit welding’, which is a specialized field in rail engineering. It is believed that this is the first thermit welding certification program in the ASEAN region.

### **3.6.3 Memorandum of Understanding between IMM and Universiti Tun Hussein Onn Malaysia**

Universiti Tun Hussein Onn Malaysia (UTHM) has signed a Memorandum of Understanding (MoU) with the IMM during the 10<sup>th</sup> International Conference on Mechanical and Manufacturing Engineering (ICME) 2019 on 29<sup>th</sup> August 2019 at Mudzaffar Hotel, Melaka. Deputy Vice Chancellor of Research and Innovation, Prof. Ts. Dr. Ruzairi Abdul Rahim represented UTHM while IMM was represented by its Honorary Treasurer, Ts. Dr. Zulkarnain Kedah. The MoU (coordinated by the Chair of the IMM **Student Chapter**) was sealed to allow the establishment of IMM Materials Student Chapter in the UTHM campus.

### 3.6.4 Collaboration between IMM and SIRIM STS Sdn Bhd on Standards Development

IMM has signed an MoU with SIRIM STS (a wholly owned subsidiary of SIRIM Berhad) in October 2019 formalising collaboration relating to standards development and promotion of industry standard. The first project that IMM intends to collaborate with SIRIM STS is the migration of the IMM in-house standard on coating fingerprinting into an industry standard.

### 3.7 Coating Fingerprinting

The IMM in-house standard IMM FP01:2019 *Coating Fingerprinting Overall Procedures for Paints Using FTIR and other related methods* has been developed by the **Task Force on Coating Fingerprinting** and was published on the IMM website on 14<sup>th</sup> August 2019.

Since then, in relation to the above, the UiTM research team lead by Prof. Ts. Dr. Melissa Chan Chin Han representing the Task Force has won 5 innovation awards on fingerprinting innovative research.

Earlier in the year, the criteria and checklist for the recommendation of the 3<sup>rd</sup>-Party Testing Laboratory for Coating Fingerprinting Certificate was finalized and announced on the IMM website and mock-executions of coating fingerprinting were held.

### 3.8 Materials Lecture Competition

The MLC 2019 was successfully organized by Universiti Teknikal Malaysia Melaka (UTeM) together with the IMM and the Institute of Materials, Minerals and Mining (IOM3) UK. The aim of the event was to provide a platform for young talents (below the age of 28 years old) to exhibit effective and impressive presentation skills in delivering topics in the field of material science and engineering. The MLC 2019 semi-final was held on 4<sup>th</sup> April 2019 to select the top five finalists who competed in the MLC 2019 final on 30<sup>th</sup> April 2019.

In the finals, Mr. Lam Jia Yong from UPM won the first prize, while Mr. Tan Yong Chee from UTM and Ms. Siti Zubaidah Patuwan from UMS came in as the second and third prize winners respectively. The winners walked away with a cash prize of RM 3000, RM 2000 and RM 1000 together with plaques and souvenirs awarded by the Chairperson of **MLC Committee**, Prof. Dr. Esah Hamzah (on behalf of the President of IMM).

The first prize winner represented Malaysia in the Young Persons' World Lecture Competition 2019 (YPWLC 2019) held in London, United Kingdom on 10<sup>th</sup> October 2019. He was placed second for his lecture titled “DNA Biosensor based on Optical Fibre for the Detection of Pathogen: A novel approach”

### 3.9 Materials Mind

The **Materials Mind Editorial Board** continued with its good work and published 4 issues during the year. The contents of the magazine comprised technical reports, reports on IMM events, corporate advertorials etc. with each issue focusing on one or more particular themes as listed below:

- i) Issue 23 (January 2019) – Vibration; Coating Fingerprinting
- ii) Issue 24 (April 2019) – Student Chapter; Materials Lecture Competition
- iii) Issue 25 (July 2019) – Insulation; Welding

These quarterly IMM magazines (ISSN No: 2289-9030) were published on the IMM website and also distributed to IMM members via eBlast and WhatsApp.

### **3.10 Enhancements to Website**

During the year, the IMM Secretariat with guidance from Dr. Yong Soon Kong, Chair of Website Committee, has made several enhancements and included additional features on the IMM website in relation to the following:

- Amendments to IMM Constitution
- Web page for coating fingerprinting and related IMM Standard
- Web page for MLC
- Design of Vision and Mission statements of IMM
- Membership benefits and renewal of IMM membership
- Details on new certification schemes
- Notice, procedure and fee for re-certification
- Applicant's right and procedures on appeals relating to certification
- Procedures on feedback and complaints
- IMM magazine (Materials Mind)
- Web banners for new events/announcements

### **3.11 Malaysian Board of Technologist – Technology Expert Panel**

IMM has been recognized by the Malaysian Board of Technologists (MBOT) to be a Technology Expert Panel (TEP) to conduct professional assessment for Professional Technologists and Certified Technicians in the field of Materials Science and Technology. Assessors for this purpose will be identified after training of qualified IMM members. The Professional Technologist (Ts) assessment interview to qualify several IMM members as Ts was conducted on 8-May-2019.

### **3.12 Management Retreat**

A Management Retreat with representation from IMM and IMMR Management, Working Committees, Program Custodians of IMM Certification Schemes and the Secretariat was held on 24<sup>th</sup> November 2019 at Sultan Abdul Aziz Shah Golf & Country Club, Shah Alam. The main objective was to set targets for the number of IMM Accredited Training Bodies (ATBs) and certification training courses in 2020 as Target 2020 (T2020) and to resolve key outstanding issues.

## **4. SUMMARY AND MOVING FORWARD**

The various expert and other working committees continued to play their roles effectively and carried out activities such as meetings, conferences and seminars, and collaborations. Nevertheless, the year 2019 was a challenging one for IMM with some new initiatives. The migration of training coordination to IMMR-CTU, the introduction of new certification programmes as well as the discontinuation of some legacy programmes, and IMM's commitment and efforts towards standardisation are all worthy of mention.

The IMM Management Committee and the IMM Council would like to express their sincere gratitude to all members of the Working Committees, Regional Chapters, staff of the IMM Secretariat and IMMR and other parties for their continuous effort and support in fulfilling the objectives of IMM.

To remain relevant and competitive, IMM will continue to keep moving forward with new initiatives and improving existing systems. We look forward to a successful 2020.

**On behalf of the Council**



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Prof. Ts. ChM. Dr. Melissa Chan Chin Han  
Honorary Secretary, IMM  
Date: 3<sup>rd</sup> January 2020

## **APPENDIX 1**

### **IMM CERTIFICATION PROGRAMMES 2019**

<b>NO.</b>	<b>DATE</b>	<b>TRAINING AND EXAMINATION</b>	<b>VENUE</b>
1.	21 – 24 January 2019	Certified Corrosion Technician Level 1	IKBN Miri, Sarawak
2.	28 - 31 January 2019	Certified Coating Inspector Level 1	MTE Sdn Bhd, Petaling Jaya
3.	26 February - 1 March 2019	Certified Coating Inspector Level 1	Meritz Hotel, Miri
4.	20 - 21 March 2019	Certified Coating Inspector Level 2	MTE Sdn Bhd, Petaling Jaya
5.	25 - 28 March 2019	Certified Coating Inspector Level 1	TH Hotel Kelana Jaya
6.	2 - 4 April 2019	IMM Certified Technician in Mechanical Joint Integrity for Flange Bolted Connection	Bintulu, Sarawak
7.	3 April 2019	Coating Fingerprint Foundation Course	Kelab Golf Negara Subang (KGNS), Selangor
8.	5 - 6 April 2019	Certified Coating Fingerprint Quality Controller	Kelab Golf Negara Subang (KGNS), Selangor
9.	16 - 17 April 2019	IMM Certified Technician in Mechanical Joint Integrity for Small-bore – Piping, Tubing and Valves	Bintulu, Sarawak
10.	20 - 23 April 2019	Certified Coating Inspector Level 1	Meritz Hotel, Miri
11.	29 - 30 April 2019	Certified IMM-SSPC Abrasive Blasting Program (C7)	Schmidt, Petaling Jaya
12.	2 - 3 May 2019	Certified IMM-SSPC Spray Application Program (C12)	Schmidt, Petaling Jaya
13.	8 - 9 May 2019	IMM Certified Technician in Mechanical Joint Integrity for Small-bore – Piping, Tubing and Valves	Kota Kinabalu, Sabah
14.	10 - 13 May 2019	Certified Coating Inspector Level 1	Meritz Hotel, Miri
15.	14 - 16 May 2019	IMM Certified Technician in Mechanical Joint Integrity for Flange Bolted Connection	Kota Kinabalu, Sabah
16.	20 - 23 May 2019	Certified Coating Inspector Level 1	MTE Sdn Bhd, Petaling Jaya
17.	21 - 23 May 2019	IMM Certified Technician in Mechanical Joint Integrity for Small-bore – Piping, Tubing and Valves	Kota Kinabalu, Sabah
18.	23 - 24 May 2019	Certified Coating Inspector Level 2	MTE Sdn Bhd, Petaling Jaya
19.	18 - 20 June 2019	IMM Certified Technician in Mechanical Joint Integrity for Flange Bolted Connection	Kota Kinabalu, Sabah
20.	25 - 27 June 2019	IMM Certified Technician in Mechanical Joint Integrity for Small-bore – Piping, Tubing and Valves	Kota Kinabalu, Sabah

NO.	DATE	TRAINING AND EXAMINATION	VENUE
21.	1 - 8 July 2019	IMM - JWES Welding Engineers Certification Course (Welding Engineer)	TH Hotel Kelana Jaya
22.	9 - 11 July 2019	IMM Certified Technician in Mechanical Joint Integrity for Flange Bolted Connection	Kota Kinabalu, Sabah
23.	8 - 11 July 2019	Certified Cathodic Protection Engineer	MTE Sdn Bhd, Petaling Jaya
24.	15 - 23 July 2019	IMM - JWES Welding Engineers Certification Course (Associate Welding Engineer)	TH Hotel Kelana Jaya
25.	16 - 18 July 2019	IMM Certified Technician in Mechanical Joint Integrity for Flange Bolted Connection	Kota Kinabalu, Sabah
26.	22 - 25 July 2019	Certified Coating Inspector Level 1	MTE Sdn Bhd, Petaling Jaya
27.	24 - 25 July 2019	IMM Certified B1B2 Assistance Blaster and Painter	Seacademy, Miri, Sarawak
28.	29 - 31 July 2019	Certified Coating Inspector Level 2	Kelab Golf Miri, Sarawak
29.	29 July - 1 August 2019	Certified Coating Inspector Level 2	MTE Sdn Bhd, Petaling Jaya
30.	5 - 6 August 2019	IMM Certified B1B2 Assistance Blaster and Painter	Seacademy, Miri, Sarawak
31.	13 - 16 August 2019	Certified Coating Inspector Level 1	Sempurna Resort, Kuantan
32.	19 - 22 August 2019	Certified Cathodic Protection Technician Level 1	PETRONAS Carigali (Turkmenistan) Sdn Bhd, Kiyarly Settlement, Turkmenistan
33.	20 - 24 August 2019	Certified Cathodic Protection Engineer	PETRONAS Carigali (Turkmenistan) Sdn Bhd, Kiyarly Settlement, Turkmenistan
34.	20 - 22 August 2019	IMM Certified B1B2 Assistance Blaster and Painter	Seacademy, Miri, Sarawak
35.	23 - 26 September 2019	Certified IMM-SSPC Abrasive Blasting Program (C7) and Certified IMM-SSPC Spray Application Program (C12)	Schmidt, Petaling Jaya
36.	22 - 26 September 2019	Certified Coating Inspector Level 1	TH Hotel Kelana Jaya
37.	1 - 3 October 2019	IMM Certified B1B2 Assistance Blaster and Painter	Seacademy, Miri, Sarawak
38.	14 - 15 October 2019	Certified Coating Inspector Level 2	TH Hotel Kelana Jaya
39.	7 - 10 October 2019	Certified IMM-SSPC Abrasive Blasting Program (C7) and Certified IMM-SSPC Spray Application Program (C12)	Seacademy, Miri, Sarawak
40.	14 - 17 October 2019	Certified IMM-SSPC Abrasive Blasting Program (C7) and Certified IMM-SSPC Spray Application Program (C12)	Schmidt, Petaling Jaya
41.	21 - 23 October 2019	IMM Certified B1B2 Assistance Blaster and Painter	Seacademy, Miri, Sarawak

NO.	DATE	TRAINING AND EXAMINATION	VENUE
42.	21 - 25 October 2019	Certified Vibration Practitioner Category 2	Serba Dinamik
43.	21 - 24 October 2019	Certified Coating Inspector Level 1	Meritz Hotel, Miri
44.	5 - 7 November 2019	IMM Certified B1B2 Assistance Blaster and Painter	Seacademy, Miri, Sarawak
45.	18 - 21 November 2019	Certified Coating Inspector Level 1	Politeknik Kota Kinabalu, Sabah
46.	25 - 28 November 2019	Certified Coating Inspector Level 1	MTE Sdn Bhd, Petaling Jaya
47.	2 - 4 December 2019	IMM Certified B1B2 Assistance Blaster and Painter	Seacademy, Miri, Sarawak
48.	9 - 12 December 2019	Certified IMM-SSPC Abrasive Blasting Program (C7) and Certified IMM-SSPC Spray Application Program (C12)	Schmidt, Petaling Jaya
49.	23 - 27 December 2019	Certified IMM-SSPC Abrasive Blasting Program (C7) and Certified IMM-SSPC Spray Application Program (C12)	Seacademy, Miri, Sarawak
50.	16 - 17 December 2019	Certified Coating Inspector Level 2	MTE Sdn Bhd, Petaling Jaya
51.	12 - 13 December 2019	Certified Vibration Practitioner Category 2	Serba Dinamik
52.	16 - 21 December 2019	Certified Welding Inspector	PETRONAS Carigali (Turkmenistan) Sdn Bhd, Kiyaly Settlement, Turkmenistan