



# A Quick Way to Fingerprint Your Products!

## **IMM Task Force on Coating Fingerprinting**



Prof. Ts. Dr. Melissa Chan Chin Han - Universiti Teknologi MARA & Cochairperson



Prof. Ts. Dr. Mohamad Kamal Harun - Universiti Teknologi MARA & Cochairperson











Institute of Materials, Malaysia (IMM) project on polymeric coating fingerprinting, which is custom-tailored for oil & gas industry since 2013. This project has been led by UiTM research team and supported by other universities, oil & gas users, paint manufacturers, FTIR instrument vendors and testing laboratories. Serba Dinamik Holdings Bhd. is the research fund provider for the mock-execution of the coating fingerprinting for Phase 3 (2018-2020).

Prof. Ts. Dr. Mohamad Kamal Harun (UiTM - leader), Prof. Ts. Dr. Melissa Chan Chin Han (UiTM - leader), Nurul Fatahah Asyqin (UiTM - member), Hairunnisa Ramli (UiTM - member), Suhaila Idayu Abdul Halim (UiTM - PhD candidate) and Norsyazlin Abd Rashid (UiTM - Master candidate) participated in a few product/service innovation competitions.

Recently, the UiTM research team participated in the Selangor Research & Development and Innovation Expo 2019 at Malaysia International Trade & Exhibition Centre (MITEC), Kuala Lumpur. The Expo, with 120 exhibitors occupying 328 booths, was hosted by the Selangor State Government from 10th – 13th October 2019. In the competition held in conjunction with the Expo, the UiTM team's exhibit titled "A quick way to fingerprint your products!" won the 3rd prize with a cash reward of RM3,000 along with a trophy and certificate under the machinery/ equipment cluster for University/College.





Figure 1: UiTM research team at Selangor Research & Development and Innovation Expo 2019

Furthermore, after a gruelling but exciting 1-day Mini Business Accelerator Workshop organized by Malaysian Technology Development Corporation at the TM Convention Centre on 30<sup>th</sup> September 2019, 3 university teams and 3 SMEs shortlisted from each of the regional Road 2 Growth pitching competitions (Northern, Central, Southern, East Coast, Sarawak and Sabah) had pitched their products and services at the **Grand Final Pitching Competition** on 1<sup>st</sup> October 2019. This Grand Final Pitching, held the following day i.e on 1<sup>st</sup> October 2019, placed special emphasis on commercialisation of the product/service. Presenting the same project, the UiTM team was the 1<sup>st</sup> runner-up with RM10,000 Cash Prize under the Institutes of Higher Learning category.

Prior to this Grand Final Pitching Competition, the team qualified by being the 2<sup>nd</sup> runner-up, winning a cash prize of RM1,000 at the Pitching Competition held on 2<sup>nd</sup> July 2019 at the TM Convention Centre where altogether 21 universities and 30 SMEs pitched their products and services.

"Copyright © 2019, by Institute of Materials, Malaysia (IMM). All rights reserved. No part of this article may be reproduced or distributed in any forms or by any means, or stored in a database retrieval system, without the prior written permission of IMM."





Figure 2: From left Nurul Fatahah Asyqin, Norsyazlin Abd Rashid, Suhaila Idayu Abdul Halim, Prof. Ts. Dr. Melissa Chan Chin Han, Prof. Ts. Dr. Mohamad Kamal Harun and Hairunnisa Ramli

Besides, the team walked away with the following prizes at Invention, Innovation & Design Exposition (IIDEX2019) which was held at Dewan Agong Tuanku Canselor, UiTM, Shah Alam on  $10^{th} - 15^{th}$  September 2019:

- 1) Elevator Pitch Silver Award with RM750 Cash Prize
- 2) Innovation Competition Silver Medal



Figure 3: At IIDEX2019 – FTIR fingerprinting is applicable for plastic, health care products etc.



Figure 4: At IIDEX2019 – Promoting IMM and distributing Materials Mind to the visitors

The UiTM research team wishes to share the achievements and the prizes with all the committee members of IMM Task Force on Coating Fingerprinting for Phase 1, Phase 2 and Phase 3. The honour is yours.



Institute of Materials, Malaysia

# **CORROSION**

## **HIGHLIGHTS**

- Cost of Corrosion: Roles of Education and Technology
- Silver Sulfide-Based
  Nanocomposite:
  Synthesis,
  Characterization and Its
  Red/Near-IR Light Driven
  Photodegradation Activity
- Big Wave Mock Execution of Polymeric Coating Fingerprinting for IMM Standard and/or SIRIM Industry Standard
- ◆ A Quick Way to Fingerprint Your Products!
  - Physical Examination of Metals (as-Reflowed Sn-Ag -Cu) Using the Characterization Techniques





## CONTENTS

#### **COVER STORY**

4 Cost of Corrosion: Roles of Education and Technology

#### TECHNICAL ARTICLE

**10** Silver Sulfide-Based Nanocomposite: Synthesis, Characterization and Its Red/Near-IR Light Driven Photodegradation Activity

#### STUDENT EDITORIAL

- 16 Physical Examination of Metals (as-Reflowed Sn-Ag-Cu) Using the Characterization Techniques
- 18 Memorandum of Understanding between Institute of Materials, Malaysia and Universiti Tun Hussein Onn Malaysia to Establish UTHM-IMM Materials Student Chapter
- 21 IMM Corrosion Committee Half-Day Seminar and Site Visit to Prasarana Centre of Excellence and Rapid Rail Depot
- 22 Sabah Oil & Gas Conference & Exhibition 2019 Parallel Session – Youth Forum on Technical and Vocational Education and Training
- 24 Big Wave Mock Execution of Polymeric Coating Fingerprinting for IMM Standard and/ or SIRIM Industry Standard
- 28 A Quick Way to Fingerprint Your Products!
- 30 IMM Profile
- 32 IMM Council Members & Comittees 2018-2020 Session

#### FRAUD NOTICE

#### ALERT ON FAKE IMM CERTIFCIATES

The Institute of Materials, Malaysia (IMM) has been made aware of the use of fake IMM Competency Certificates to seek employment or for other fraudulent claims.

IMM views the fraud use of fake IMM certificates very seriously and would like to remind individuals or companies engaging in such practices that we would not hesitate to proceed with legal action. Such acts would also be subject to investigation and prosecution by law enforcement authorities.

At the same time, through this notice, we would also like to alert all employers of IMM certified personnel and other external stakeholders you have any concerns or suspicion on the authenticity of any IMM certificate of competency or receive any related suspicious communication or have any complaint, please direct your enquiry or complaint providing details through our "Contact Us" page on this website, or email to the IMM Secretariat at secretariat@iomm.org.my or call us at 03-78801753.

## OCTOBER 2019 Issue 26 **EDITORIAL BOARD MEMBERS**

#### **Chief Editor**

Ts. Dr. Tay Chia Chay (Universiti Teknologi MARA)

#### **Deputy Chief Editor**

Assoc. Prof. Dr. Lim Teck Hock (Tunku Abdul Rahman University College)

#### **Managing Editor**

Ms. Hairunnisa Ramli (Universiti Teknologi MARA)

#### **Committee Members**

Prof. Ts. Dr. Melissa Chan Chin Han (Universiti Teknologi MARA) Ir. Mohd Raziff Embi (Malakoff Power Bhd) Ms. Nurul Fatahah Asygin Zainal (Universiti Teknologi MARA)



#### **INSTITUTE OF MATERIALS, MALAYSIA**

Suite 515, Level 5, Block A, Kelana Centre Point (Lobby B), No. 3 Jalan SS 7/19, Kelana Jaya, 47301 Petaling Jaya, Selangor Tel: +603-7880 1753

Secretariat@iomm.org.my

www.iomm.org.my

+60 18-911 3480

Institute of Materials, Malaysia



**Disclaimer:** The articles written by various authors and news from external sources are published in good faith for the benefit of our readers and do not necessarily reflect the views of IMM. Further, we give no assurance or warranty that the published information is current or accurate and take no responsibility for any losses or consequences arising from its transmittal through the bulletin.

**Electronic copy of Materials Mind can be accessed via** www.iomm.org.my under Materials Mind Webpage



## Announcement

## Membership Benefits!

- Fellow, Professional □ IMM Company members may share their employment opportunities via IMM social media in Jan and July each year (COMPLIMENTARY).
- Download the recruitment advertisement templates from

Institute of Materials, Malaysia

www.iomm.org.my

secretariat@iomm.org.my



