



# COVER STORY



## UTAR IMM STUDENT CHAPTER

 Sungai Long Campus  
Jalan Sungai Long,  
Bandar Sungai Long  
Cheras 43000, Kajang, Selangor.

 [utarimmstudentchapter@gmail.com](mailto:utarimmstudentchapter@gmail.com)

 012-5919593  
Callista Ng  
Chairperson 2020 - 2021

UTAR IMM Student Chapter was established in 2012 under the LKC FES Department of Mechanical and Materials Engineering (DMME). UTAR IMM Student Chapter is a course-based society mainly for Materials and Manufacturing engineering students. UTAR IMM Student Chapter allows students to know the engineering students in UTAR ranging from all years of study and stay connected with the latest engineering topics and technologies. UTAR IMM Student Chapter also organizes engineering-related soft skills and technical skills, giving students an in-depth view of the engineering career pathway.

UTAR IMM Student Chapter's current advisor is Ts. Dr. Jun Hieng Kiat, Co-advisor, is Dr. Jeffrey Chin Kong Leong. UTAR IMM Student Chapter currently has 42 members. Over the years, UTAR IMM Student Chapter has successfully nurtured wholistic leaders and members and strives to continue to do so. The student chapter might not possess the largest member base but is undoubtedly and steadily growing with the commitment and hard work of committee members as well as by looking forward to more collaboration with external parties. The main goal of UTAR IMM Student Chapter is to expose members to industrial engineering knowledge while also not forgetting to contribute back to society whenever possible.

1. To equip members with the latest materials knowledge and manufacturing processes.
2. To update on the latest industrial technologies and practices via Industrial Talks, Workshops, Site Visits.
3. To provide industrial exposure and career opportunities.

### OUR MISSION

### OUR VISION

1. To be a forum for members from all engineering discipline for academia and industrial exchanges.
2. To boost hard skills of materials background to members.
3. To develop and enhance the soft skills of members.

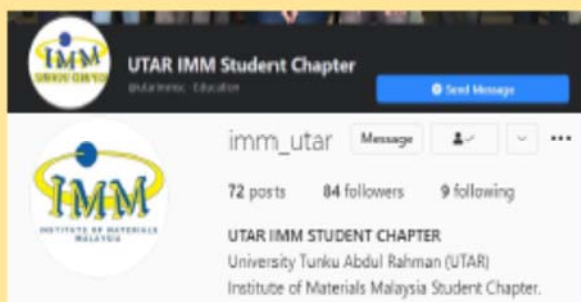


Welding Workshop, 2019

Webinar, 2021

Besides organizing events, UTAR IMM Student Chapter has come up with a “1 Week 1 Fact” activity where every week, a fact related to materials and manufacturing is posted on our UTAR IMM social media. The purpose of having this activity is to share interesting and knowledgeable facts.

UTAR IMM Student Chapter would like to thanks IMM for giving the opportunity for the invitation and collaboration. Hope to have more collaborations in the future!



Follow us for more information

Before the COVID-19 pandemic, UTAR IMM Student Chapter had successfully reached out to industrial experts and corporate organizations to expose students to technical requirements and real-life materials related industrial applications. These were done in the form of site visits and talks in UTAR campus by leaders in their respective fields.

Amid the COVID-19 pandemic, UTAR IMM Student Chapter had shown resilience in adapting and overcoming obstacles to achieve its vision and mission by conducting events online. Even though difficulties had arisen, committee members had adhered to new Standard Operating Procedures as per required by the university to organize virtual events.

Even though events were online, they had still managed to attract students from various disciplines as shown by the number of responses and attendance. Hence, the student chapter would still look into the possibility of conducting virtual events as well as continuing physical events even after COVID-19 restrictions were lifted to suit the needs and preferences of all members.



“1 Week 1 Fact” Activity



# MATERIALS IND

Issue 32

October 2021

[www.iomm.org.my](http://www.iomm.org.my)

Institute of Materials, Malaysia



## HIGHLIGHTS

IMM Student Chapter

Addressing the Issues of Significant Figures for Degree of Similarity and Specific FTIR Fingerprint Regions for Paints: A Pilot Study

Predicting the Whiteness Index of Cotton Fabric with a Least Squares Model



# TABLE OF CONTENTS

## COVER STORY

IMM Student Chapter	04
UiTM-IMM Student Chapter	06
UTAR-IMM Student Chapter	08
Information Note of IMM Protective Coating Technician Level 1/ Level 2 Certification Program	10
IMM Training and Certification Program Overview	14
IMM Authorized Training Body (ATB)/ Authorized Testing Centre (ATC)/ Authorized Training Partner (ATP) for IMM Courses and Certification	18
Information Note of IMM Coating Inspector Level 1/ Level 2 Competency Certification Scheme	20

## TECHNICAL ARTICLES

Addressing the Issues of Significant Figures for Degree of Similarity and Specific FTIR Fingerprint Regions for Paints: A Pilot Study	24
Predicting the Whiteness Index of Cotton Fabric with a Least Squares Model	26

## STUDENT EDITORIAL

Hydrothermal Growth of Niobium Oxide Microrods in Ammonium Fluoride for Electrochromic	28
--	----

IMM Protective Coating Technician (Blaster & Painter) Competency Certification Scheme	32
New Upgrade Members IMM Fellow and Professional	34
<b>EVENT ARTICLES</b>	
UTHM-IMM Materials Lecture Competition 2021	36
Virtual Industrial Talk 2021: Material Testing (in collaboration with CTRM Testing Laboratory)	37
Sarawak Shell Berhad Participation in ICPER Seminar by Universiti Teknologi Petronas (UTP)	38
Materials Lecture Competition 2021 (MLC 2021)	40
1-Day Rheology Workshop on Polymers	45
IMM Profiles	50
IMM Council Members and Committees	52
IMM 6 <sup>th</sup> Council Meeting	57

## OCTOBER 2021 Issue 32

### EDITORIAL BOARD MEMBERS

#### Chief Editor

Assoc. Prof. 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. Nurul Fatahah Asyqin Zainal  
(Universiti Teknologi MARA)  
Ts. Dr. Nur Aimi Jani  
(Universiti Teknologi MARA)

#### Committee Members

Prof. Ts. ChM. Dr. Melissa Chan Chin Han  
(Universiti Teknologi MARA)  
Dr. Amirah Amalina Ahmad Tarmizi  
(Universiti Teknologi MARA)  
Ir. Mohd Raziff Embi  
(Malakoff Power Bhd)  
Ts. Brian Lim Siong Chung  
(Geopolitan Sdn Bhd)  
Ms. Hairunnisa Ramli  
(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: +603-76611591

✉ secretariat@iommm.org.my  
🌐 www.iommm.org.my  
☎ +60 18-911 3480  
📘 Institute of Materials, Malaysia




**EDITORIAL BOARD MEMBERS**

- Chief Editor**  
Assoc. Prof. Ts. Dr. Tay Chia Chay
- Deputy Chief Editor**  
Assoc. Prof. Dr. Lim Teck Hock
- Managing Editor I**  
Ms. Nurul Fatahah Asyqin Zainal
- Managing Editor II**  
Dr. Nur Aimi Jani
- Committee Member**  
Dr. Amirah Amalina Ahmad Tarmizi
- Committee Member**  
Ir. Mohd Raziff Embi
- Committee Member**  
Ts. Brian Lim Siong Chung
- Committee Member**  
Ms. Hairunnisa Ramli
- Committee Member**  
Prof. Ts. ChM. Dr. Melissa Chan Chin

**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.