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HIGHLIGHTS

- Report on 28th AGM of the IMM
- IMM Council Members & Committees 2018-2020 Session
- Seminar on Vibration Technology in the Era of Industry 4.0

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30th Anniversary Gala Dinner

Date: 6th November 2017
Venue: Intercontinental Hotel, Kuala Lumpur












28th Annual General Meeting

Edited by Assoc. Prof. Dr. Chan Chin Han, Universiti Teknologi MARA

28th Annual General Meeting (term: 2018 – 2020)
Date: 16th March 2018 (Friday), 5.30 pm – 7.30 pm
Venue: Impiana KLCC Hotel, Kuala Lumpur

The 28th Annual General Meeting (AGM) was held at Impiana KLCC Hotel, Kuala Lumpur on 16th March 2018. The president of IMM, Mr. Mohd Azmi Mohd Noor in his opening address expressed his gratitude to all IMM council members, committee members and members for their endless support to IMM events and activities. He highlighted the celebration of the 30th Anniversary of IMM in 2017 and the iconic event was the 30th Anniversary Gala Dinner of IMM, which was held on 6th November 2017 at the Intercontinental Hotel, Kuala Lumpur. Tan Sri Wan Zulkiflee Wan Ariffin, President & Group CEO of PETRONAS (the guest-of-honor) officiated the gala dinner. More than 300 guests and committee members had memorable moment for this dinner. The president also presented new ecosystem of IMM and IMM Resources Sdn Bhd. A demarcation between Society (under IMM) and Commercial (under IMM Resouces Sdn Bhd) activities was explained. The members approved the moving forwards on the presented new ecosystem. He acknowledged that members were the pillar of strength to IMM for all these years. He shared with the members on the coming IMM Workshop on Vision, which will be held soon on translating the concept of new ecosystem to reality.

The IMM Annual Report of 2017 was presented by Assoc. Prof. Dr. Chan Chin Han, the Honorary Secretary of IMM. The IMM had another eventful year in 2017 with conferences, seminars and other events under various committees such as Materials Lecture Competition 2017 (MLC2017), ½-Day IMM Vibration Awareness Seminar & Plant Visit, 1-Day IMM Awareness Seminar on Monitoring and Management of Vibration, Facility Integrity & Maintenance Conference, IMM Coating Friendly Golf Game, ½-Day IMM-Interscience-Quantachrome Seminar on Characterizing Porous Materials and Powder, 1-Day UTM-IMM Symposium on Materials Processing, Impact and Testing, 1-Day IMM Conference on Pipeline Corrosion Management at Corus Hotel, 1-Day IMM Conference on Prevention of Loss of Primary Containment, 1-Day IMM Coating Conference on Combating Coatings Failure on PFP and many more. She also presented the proposal of amendment to IMM Rules which includes the adoption of new IMM logo and replacement of IMM "Rules" with IMM "Constitution", update of Secretariat address due to relocation of Secretariat office; and the quorum of council meeting, annual general meeting & emergency general meeting. The proposal was accepted by the members unanimously. The statement of accounts of IMM for the year of 2017 was presented by Ir. Suradi Md Yasin, the Honorary Treasurer of IMM.

The Honorary Secretary, Assoc. Prof. Dr. Melissa Chan Chin Han summarized the list of nominated Council Members (term 2018 – 2020), a total of 10 nominations had been received. The IMM President proposed that the first 10 nominated candidates who were present at the AGM be deemed elected and the balance 15 council members will be co-opted by the Council during the first Council Meeting after the AGM. The members present accepted the suggestion unanimously. The elected council members (term 2018-2020) are listed below:-

- Dato' Udani Dato' Seri Mohamed Daud - Max Energy Sdn Bhd
- Dr. Chew Khoon Hee - Tunku Abdul Rahman College University
- Dr. Lim Teck Hock - Tunku Abdul Rahman College University
- Dr. Tay Chia Chay – Universiti Teknologi MARA
- Ir. Ong Hock Guan – Shell Malaysia Exploration & Production
- Brian Lim Siong Chiung - Asia Pacific University of Technology & Innovation
- Danny Tan Kim Chew - Abadi Oil & Gas Services Sdn Bhd
- Nurul Asni Mohamed - PETRONAS Group Technical Solutions
- Rehan Ahmed - PETRONAS Carigali Sdn Bhd
- Sofiyan Yahya - Cekap Technical Services Sdn Bhd

The AGM adjourned at 7.30 pm.

Figure 1: From left: Dato' Dr. Ir. Hj. Mohd Abdul Karim Abdullah, Assoc. Prof. Dr. Chan Chin Han, Mr. Mohd Azmi Mohd Noor and Ir. Mohd Suradi Yasin

Figure 2: Members

IMM COUNCIL MEMBERS & COMMITTEES

2018-2020 SESSION

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	Dr. Lim Teck Hock - Tunku Abdul Rahman College University
	Dr. Tay Chia Chay - Universiti Teknologi MARA
	Ir. Ong Hock Guan - Shell Malaysia Exploration & Production
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International Journal of Institute of Materials Malaysia	Prof. Dr. Mohamad Kamal Harun	UniversitiTeknologi MARA
Materials Lecture Competitions	Prof. Dr. Esah Hamzah	Universiti Teknologi Malaysia
Materials Mind	Dr. Tay Chia Chay	Universiti Teknologi MARA
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Ministry, PPKS to hold 'Meeting of the Minds' in Bintulu

Reported by: Mr. Raymond Phen, IMM Bintulu Chairman

Date: 6th February 2018
Venue: Parcity Everly Hotel, Bintulu

KUCHING: The Education, Science and Technological Research Ministry and Sarawak Skills Development Centre (PPKS) are jointly organising a 'Meeting of the Minds' event, set to take place at ParkCity Everly Hotel Bintulu on Feb 6.

The meeting will focus on talent development slated for meeting the needs of Sarawak Corridor of Renewable Energy (SCORE).

Education, Science and Technological Research Minister Dato Sri Michael Manyin officiated at the opening ceremony.

The executive director of PPKS, Hallman Sabri remarked that: "The Meetings of the Minds would be the ideal platform for the government, academia and key industry representatives from the energy-intensive heavy industries located in Samalaju Industrial Park, to engage in a lively discourse about various issues such as strategic human capital development, Industry 4.0 and the advances in materials science.

"As Sarawak progresses towards its goal of becoming a developed state by 2030 with high-income economy, the contributions of all stakeholders will be of utmost importance to develop the workforce for the various sectors of industry, including those in SCORE."

Hallman also took the opportunity to thank various stakeholders for their support, namely the ministry, Regional Corridor Development Authority (Recoda), British High Commission–Kuala Lumpur and the industry itself. "With their support, we get to gather distinguished speakers comprising representatives from the government, industry and academia under one roof." Hallman also announced that with the assistance of the British High Commission–Kuala Lumpur, the organiser would host two speakers from the UK – Alan Scholes, Chief Technology Officer of Materials Processing Institute and David Collins, a fellow lecturer from University of Birmingham.

Figure 1: Executive director Hallman Sabri greets Education, Science and Technological Research Minister Dato Sri Michael Manyin

He also said to support the state's development initiatives, a plan would be undertaken to set up a Metallurgy and Materials Science Training Centre at PPKS, which would provide relevant training on materials and process innovation as required by the priority industries of SCORE and industries located across the length and breadth of Malaysia.
In this respect, he said during the 'Meetings of the Minds' event, a memorandum of understanding (MoU) would be signed between Institute of Materials Malaysia (IMM) and PPKS.

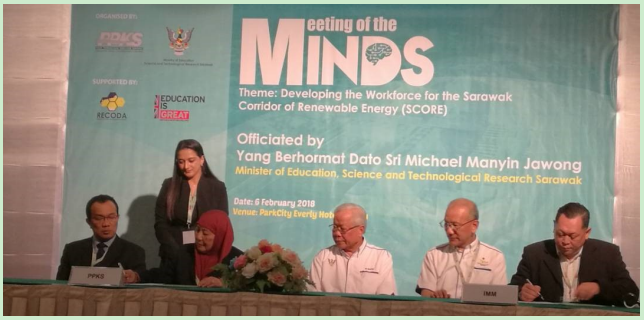

Figure 2: Signing a memorandum of understanding between Institute of Materials Malaysia and PPKS

"The MoU will pave the way for PPKS to make available IMM's certified training programmes (on materials science and technology programmes) in Sarawak."

For more information about the 'Meeting of the Minds', other upcoming events and courses (both soft skills and other technical skills) provided by PPKS, call 082364198/361535.

Information can also be obtained via www.ppks.edu. my.

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PetroEdge & NrgEdge Signed Memorandum of Understanding with Institute of Materials, Malaysia

Reported by: Dr Yong Soon Kong, Chairman of Website Committee

Date: 20th April 2018
Venue: Holiday Inn Glenmarie, Kuala Lumpur

Kuala Lumpur, 20 April 2018: A Memorandum of Understanding (MoU) signing ceremony was held today between Institute of Materials, Malaysia (IMM) and PetroEdge Pte Ltd (AsiaEdge Pte Ltd) and NrgEdge Pte Ltd to mark collaborative efforts to increase brand awareness of IMM, PetroEdge and NrgEdge in the energy industry. The event was held at the Holiday Inn Glenmarie, Kuala Lumpur .

Figure 1: IMM Joins Forces with PetroEdge and NrgEdge to Boost Digital Branding in the Oil, Gas & Energy Industry

IMM, a non-profit professional society, PetroEdge, a specialist in oil and gas training provider entity of AsiaEdge Pte Ltd, and NrgEdge, a professional networking platform for the energy industry, have joined forces to enhance digital branding knowledge and competency for IMM members over a period of two years by offering a Premium Company Page for IMM to extend their reach to the network of users within the NrgEdge platform.

Under the partnership, other strategic initiatives to increase the party branding in the energy industry also include developing workshops for IMM members on the basics of online branding as well as establishing customised training modules in materials science, technology and engineering.

The MoU was signed by Mohd Azmi Mohd Noor, President of IMM, and Malina Raman, Director and Co-Founder of PetroEdge and NrgEdge, Singapore, and witnessed by Dr Yong Soon Kong, Chairman of Website Committee, IMM, and Anas Asalem, Regional Strategic Partnerships Manager, NrgEdge.

The ceremony was attended by more than 15 IMM members who are Materials Science, Technology and Engineering professionals from Malaysia's public sector, large multinational companies and small and medium-sized enterprises.

About Institute of Materials, Malaysia (IMM)
IMM is a non-profit professional society that promotes honourable practice, professional ethics and encourages education in materials science, technology and engineering. Engineers, academicians, technicians, skilled workers and professionals are amongst its members exceeding 3500.

Registered with the Registrar of Societies on 6th November 1987, the Malaysian Materials Science & Technology Society (MMS) changed its name to the Institute of Materials, Malaysia (IMM) on 16th June 1997. The objectives of the IMM include the training and development of individuals and companies in Malaysia to attain professional recognition in various fields of materials science, technology and engineering.

IMM is administered by a council of 30 members, with volunteers leading 18 materials committees, and 5 regional chapters, and supported by a secretariat with full time staffs.

The IMM membership is categorised into 6 different grades and open to anyone above the age of 17 years—individuals and companies keen in developing and contributing towards the growth of materials science, technology and engineering in Malaysia.

About PetroEdge and NrgEdge
AsiaEdge Pte Ltd is the holding company of PetroEdge, the leading provider of Energy, Oil & Gas training in Asia. NrgEdge is the professional networking platform for Energy, Oil & Gas professionals, focusing on the Asia Pacific region. The company aims to create a holistic environment that will empower members to excel at every point in their career journey and to assist companies grow their business more effectively. To find out more, visit www.nrgedge.net.

For media enquiries, please contact:
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Materials Lecture Competition 2018 (MLC 2018) Semi-Final

Reported by: Assoc. Prof. Dr. Astuty Amrin, UTM, MLC 2018 Chairperson
Dr. Nor Akmal Fadil, UTM, MLC 2018 Co-Chairperson
Dr. Nor Hasrul Akhmal Ngadiman, UTM, MLC 2018 Co-Chairperson
Edited by: Prof. Dr. Esah Hamzah, Chairperson, IMM-MLC Committee

Date : 5th April 2018
Venue : UTM Campus, Kuala Lumpur

Universiti Teknologi Malaysia (UTM) has been selected as the host of this year Materials Lecture Competition 2018 (MLC 2018). The MLC 2018 semi-final was organised by UTM together with the Institute of Materials, Malaysia (IMM) and the Institute of Materials, Minerals and Mining (IOM^3-UK) on the 5th April 2018 at UTM Kuala Lumpur campus. The aim of the event was to provide a platform for young talents to exhibit effective and impressive presentation skills in delivering topics in the field of material science and engineering.

The semi-final competition was participated by eleven Malaysian universities, namely, UTM, UKM, UTeM, USM, UniMAP, UM, MMU, UPM, UNITEN, UTP and TAR University College. The panel of judges was selected among the academia and industry practitioners, namely, Prof. Dr. Che Husna Azhari (USIM), Assoc. Prof. Ir. Dr Zuraida Ahmad (UiTM), Ir. Dr. Mohd Azman Yahya (UiTM), Ir. Ong Hock Guan (Shell Malaysia) and Mr. Karthikeyan Supperiamam (Murphy Oil). The top five finalists who won the competitions are Miss Norkhalizatul Akmal Mohd Jamil from Universiti Teknologi Malaysia (UTM), Mr. Andrew Ng Kay Lup from Universiti Malaysia (UM), Miss Raffaella Pian Cheau Mei from Universiti Teknologi Petronas (UTP), Miss Nur Najwa Aqilah Kamrul Zaman from .Universiti Teknikal Malaysia Melaka (UTeM) and Miss Ng Sook Hui from Universiti Malaysia Perlis (UniMAP). They will compete in the MLC 2018 finals on the 3rd May 2018 which will also be held in UTM Kuala Lumpur. The MLC 2018 semi-final event was generously sponsored by Serba Dinamik Bhd and officiated by Prof. Dr. Zaidatun Tasir, the Dean of School of Graduate Studies, UTM.

Figure 1: Back row: The Eleven MLC2018 Semi-Finalists. Front Row: IMM Rep, MLC Chairperson, the Judges, and the Dean of School of Graduates Studies, UTM.

Figure 2: MLC 2018 Top Five Finalists From left: Nur Najwa (UTeM), Norkhalizatul (UTM), Andrew Ng (UM), Raffaella (UTP) and Ng Sook Hui (UniMAP).

MoA Signing Ceremony of IMM - Asia Pacific University of Technology and Innovation

Reported by: Mr. Brian Lim Siong Chung, Asia Pacific University of Technology and Innovation (APU), Chairman, MLC 2017
Edited by: Assoc. Prof. Dr. Melissa Chan Chin Han, Universiti Teknologi MARA (UiTM), Hon. Secretary, IMM

Date: 24th April 2018
Venue: Asia Pacific University of Technology & Innovation (APU)

A Memorandum of Agreement (MoA) signing ceremony was held at APU on 24th April 2018. With the signing of the MoA, both parties will work closely on all joint-venture events planned by APU and IMM.

APU has been actively participating in Materials Lecturer Competition (MLC), an annual event organized by IMM since 2013. With the support and advice given by the IMM-MLC Chairperson, Prof. Dr. Esah Hamzah, APU had successfully hosted the semi-final and final competitions of MLC 2017. This year, APU has initiated a new chapter with IMM where the collaboration has now been extended to internship, final year project, event and talk, training, research and other potential projects. The first milestone of the collaboration is marked by the engagement of the first APU intern, Naguleshwary who began her internship with IMM on 12th March 2018, which will be ended on 12th June 2018. The ongoing internship program will be continued as a part of her final year project for the remaining nine months.

The Academic Liaison of IMM, Prof. Dr. Mohamad Kamal Harun and the Vice Chancellor of APU, Prof. Dr. Ron Edwards represented both parties in the signing of the MoA. It was witnessed by the Honorary Secretary of IMM, Assoc. Prof. Dr. Melissa Chan Chin Han and the Dean of Faculty of Computing, Engineering and Technology of APU, Prof. Dr. Ir. Vinesh Thiruchelvam. The Head of School of Engineering, Assoc. Prof. Dr. Thang Ka Fei and IMM/APU Representatives, Brian Lim Siong Chung also attended the ceremony.

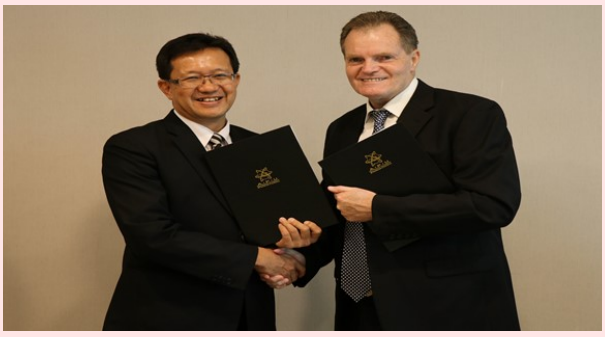

Figure 1: Prof. Dr. Mohamad Kamal Harun (IMM) [left] and Prof. Ron Edwards (APU) [Right]

Seminar on Vibration Technology in the Era of Industry 4.0


Reported by: Dr. Ackiel Mohamed, IMM Vibration Committee 2016-2018
Edited by: Dr. Zulkarnain Kedah, Secretary for IMM Vibration Committee 2016-2018

Date: 16th March 2018
Venue : Impiana KLCC Hotel, Kuala Lumpur

One of the main activities organised by the IMM Vibration Committee in 2018 was a seminar to create awareness programmes and educate the audience on the importance of vibration technology and its significant benefits to health, safety and environment. This conference was attended by a total of 98 participants which comprised of various industry players, Royal Malaysian Navy and academicians.

In the morning session, **Tuan Mohd Syukri and Ir. Mohamad Afif who are Rotating Equipment Lead and Senior CPBM Engineer respectively from Sarawak Shell Berhad** jointly presented a topic entitled **Technology and Big Data Analytics for Turbomachinery Analysis**. They explained how it all started during a compressor failure in 2016, its root causes and lessons learnt before describing Shell's proactive technical monitoring and remote monitoring and diagnostic centre including justifications to implement these two solutions.

Figure 1: Mr. Mohd Azmi Mohd Noor, President of IMM delivered his opening speech

Next, **Asso. Prof. Dr. Rahizar from the Department of Mechanical Department, Faculty of Engineering at University of Malaya** presented a topic entitled, **Application of Acoustic Emission Technique in Reciprocating Machines**. He shared a case study on a valve failure in reciprocating compressors and how to classify a defective valve by implementing Artificial Intelligence (AI). He also pointed out several key challenges such as identification of valve defect employing Acoustic Emission (AE) technique as a non-intrusive method and severity of defects which requires more information (variation of loading, speeds and pressure affecting the energy emitted from the defective valves) before concluding that the use of AI can significantly improve diagnostic capabilities.

Juarez Salih Lowe, Corporate Consultant from VROC (M) Sdn Bhd compared several advantages between 'with AI and without AI' in plant maintenance such as predicting failures before it occurs, maintenance personnel have time to outsource expertise and order parts, and maintenance personnel perform repairs as scheduled without significant loss of productivity. He also shared a case study of one of analytical engines developed by VROC to address the outstanding issue of centrifugal compressor tripping every 48 hours over the last 2 years. The analytical engine was able to zoom into the root cause of its failure within 90 minutes much faster than 8 engineers which took more than 10 weeks to reach the same conclusion.

Figure 2: Dato' Dr. Ir. Mohd Abdul Karim Abdullah presented an interesting topic entitled "Synergy Between Industry 4.0 and Vibration Technology".

During afternoon session, **Tuan Shaharuddin Hamid Mustapha, Head of Integrated Operations, Centre of Excellence Upstream Business, Petronas** explained that Industry 4.0 has forced Petronas' personnel to embrace the digitalisation for its entire operations. Starting from the smallest equipment in the plants to monitoring their daily operations, he humbly said that despite all these efforts, PETRONAS is still at Industry 2.0 and they have been striving very hard to achieve Industry 4.0 as soon as possible.

Dato' Paduka Udani Dato' Seri Mohamed Daud, the Group Executive Chairman from MaxEnergy Group presented **A Case Study of Loss of Primary Containment (LOPC) and Vibration Impact**. He reminded the audience that despite the advancement of technology in the era of Industry 4.0, the competency level of maintenance personnel is still crucial to reduce the incidents of LOPC. He also presented a research carried out by Malaysian Petroleum Management (MPM) which reported that most LOPC incidents were found in three areas such as small bore and vibration piping, valve and joint flanges.

Figure 3: Participants from industry, Royal Malaysian Navy and academia

Dato' Abdul Karim, the President/Group CEO of Serba Dinamik Holdings Berhad presented a topic entitled **Synergy Between Industry 4.0 and Vibration Technology**. He explained the fundamental theory of vibration technology and relates it to Reliability Centred Maintenance (RCM). Then, he described generated factors of **Stress Corrosion Cracking (SCC)** caused by stress, material and environment. He also explained industry 4.0, the historical of industrial revolutions, role of big data and analytics, pillars of industry 4.0 and its impact, ecosystem of industry 4.0, examples of industry adoption, current scenario, why it is important and job disruption. He also shared Asset Integrity Management System (AIM), its components and key benefits, Conditioned Based Monitoring (CBM) technologies, Risk Based Inspection (RBI) Non-Destructive Testing (NDT) technologies and samples technologies for AIM services.

Tuan Megat Shamsul Ariff Megat Khamaruddin, Senior Development Manager from Trisystem Engineering Sdn Bhd presented a topic entitled **Turbomachinery Digitization Implementation Experiences**. He presented an overview of digitization from Systems Integrator (SI) perspective followed by sharing his experiences in digitizing turbomachinery assets such as vibration data to historian systems, predictive analytics and digital twin. He ended his presentation by emphasising that in the era of Industrial 4.0, it is essential to benefit from data analytics which can result in higher productivity, more cost savings, better profit margin and improved quality services.

Inaugural Symposium on Railway Infrastructure and Engineering

Reported by: Prof. Dr Andy Chit Tan , Chairperson (Centre for Railway Infrastructure and Engineering)

Date: 24th January 2018
Venue : UTAR Sungai Long Campus

UTAR Centre for Railway Infrastructure and Engineering (CRIE) organised the Inaugural Symposium on Railway Infrastructure and Engineering on 24 January 2018 at the UTAR Sungai Long Campus.

Present attendance at the symposium were UTAR President Ir. Prof. Academician Dato' Dr. Chuah Hean Teik, Serba Dinamik Group Berhad President Dato' Dr. Ir. M. A. Karim Abdullah, Prasarana Malaysia Berhad President and Group Chief Executive Officer Masnizam Hisham, UTAR Vice President Prof. Ir. Dr. Lee Sze Wei, UTAR Lee Kong Chian.

Figure 1: A MoU was signed among UTAR, Serba Dinamik Sdn Bhd and Luhang Rail Transportation Technology Co. Ltd by (from left) Prof. Lin, Prof. Chuah and Dato' Abdul Karim

In conjunction with the symposium, a memorandum of understanding (MoU) was signed among UTAR, Serba Dinamik Sdn Bhd and Luhang Rail Transportation Technology Co. Ltd, Changzhou, China to promote research, training, education and innovation in railway. The event also saw the launch of the new research centre, UTAR - Centre for Railway Infrastructure and Engineering, with its initial founding members, Southwest Jiaotong University, Serba Dinamik Sdn Bhd and Doshin Rubber Sdn Bhd.

Prof. Andy remarked, "The one-day symposium was set to congregate practitioners, owners, operators, researchers and academics to share and promote research activities of the railway industry. It also aimed to support the new initiatives of expanding the rail network in Malaysia and China's One Belt One Road initiative in the region. Besides, the symposium also served as a networking platform to encourage the exchange of ideas among researchers, universities, practitioners and owners from various expertise. Among the areas of expertise included railway infrastructures; safety and standards; operation safety, reliability and maintainability; social, environmental and economic issues; education and training; and transportation and optimisation of traffic control."

On behalf of UTAR, Prof. Chuah welcomed the guests and the participants. He said, "The spinoff of rail network expansion into education is expected to carry great momentum. With its expansion and educational opportunities, it is timely for the University to establish a research centre to promote interdisciplinary research in various areas such as railway infrastructure, engineering and socio-economics, education, training and services. I am glad that our initiative has been well received by the industry. I would like to thank the sponsors, exhibitors and supporters for your support and commitment. I would also like to urge the engineers who are also the consumers to contribute to the field of railway."

The symposium encompassed two keynote addresses, two sessions of invited presentations and a forum.

Figure 2: From left: Dato' Abdul Karim and Prasarana President Masnizam were the keynote speakers for the inaugural symposium

The first keynote speaker was Dato' Abdul Karim who spoke on "Rail Traction Technology Getting Momentum in Malaysia". He emphasised, "All the developments, constructions and maintenance activities in the rail industry will require governance by a central agency to address many issues. Hence, it is necessary for the Malaysian government, industry players and academics to work together to strengthen our capabilities and competitiveness in the rail technology and eco -system."

On the other hand, the second keynote speaker, Prasarana President Masnizam spoke on "Pursuing Operations Excellence". She highlighted on the milestones achieved by Prasarana since 2015 and some of the organisation's present and future plans. She said, "In view of the many developments and projects that will be carried out in the foreseeable future, we need more talents to join the workforce and contribute to the field. Therefore, we need support from the universities to train more skillful graduates to help improve the operations of the whole system."

Figure 3: The inaugural symposium saw more than 170 participants

The keynote addresses were followed by the first session of invited presentations. It was chaired by Assoc. Prof. Dr. Rahizar Ramli from Universiti Malaya. It commenced with the speech by Luhang Rail Transportation Technology Co. Ltd Deputy General Manager Luo Wencheng on behalf of Southwest Jiaotong University Traction Power State Key Laboratory and Changzhou Institute of Rail Transport Director Prof Lin Jianhui on "Health Monitoring and Early Warning of High-speed Rail Based on Vibration and Temperature". The subsequent speaker was Mass Rapid Transit Corporation Sdn Bhd GIS Manager Aswadi Yusof who spoke on "Building Information Modelling and Geographic Information System in Mega Construction Project – A Sharing from Klang Valley Mass Rapid Transit Sungai Buloh-Serdang-Putrajaya Line Project".

Chaired by Aswadi Yusof, the second session consisted of three presentations. It began with a lecture by the Director of The Smart Engineering Asset Management Laboratory and Croucher Optical Nondestructive Testing Laboratory, Prof. Peter Tse Wei Tat. He spoke on "Novel Techniques in Guided Wave for Performing Quality Inspection on Building Pipes and Train Rails." It was followed by Doshin Rubber Engineering Products (M) Sdn Bhd Dr. Patrick Tiong who presented on behalf of his Director Or Tan Teng on "Rubber as an Excellent Engineering Material for Vibration and Seismic Control in Civil Engineering Structures". Also speaking at the symposium was Prof Mohd Salman Leong, Director of the Universiti Teknologi Malaysia Institute of Noise and Vibration HiCoE. He presented on "Noise and Vibration Environmental Impact in Malaysian Railway Schemes – Issues and Mitigation from Past and Current Lines".

The symposium forum was chaired by Prof. Andy, with the panel consisting of the invited speakers for a panel discussion. The symposium adjourned with closing remarks by Dato' Abdul Karim. He said, "The symposium has provided a platform for the experts, researchers, government sectors, industry and academia to interact and keep them abreast of the latest information in this area. I hope the future symposium could be held at an international level to allow broader exchanges and learning opportunities."

In view of China's One Belt One Road initiative which encompasses South East Asia, Asia and nations all the way to Europe is already drawing enormous attention in the region and abroad. The connectivity and cooperation between those countries will be a major step forward in terms of trade, cultural and scientific exchanges in the new century. Meanwhile, in Malaysia, the government is embarking on this new initiative and is expanding its rail network throughout the country. The introduction of the first MRT line in the Klang Valley and the commencement of the East Coast Rail Link are examples of the Government's plan to continue the improvement of the transportation network. Besides, agreements have been established to develop the high speed rail (HSR) from Singapore to Peninsular Malaysia.

Figure 4: The forum was chaired by Prof. Andy (middle) with the invited speakers

As such, an opportunity arose for UTAR to establish a research centre to promote interdisciplinary research in railway infrastructure, engineering and socio-economics, and railway engineering related courses and services. It will serve the ongoing rail transport services in Malaysia as well as the new ECRL and MRT.

The Inaugural Symposium on Railway Infrastructure and Engineering was supported by the Institute of Engineers, Malaysia (IEM) and Institute of Materials, Malaysia (IMM). It was sponsored by Serba Dinamik Sdn Bhd, Doshin Rubber Product (M) Sdn Bhd and Getzner Co. Ltd.

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Technical article 1

Assessment of Code Compliance of Proximity Welds and Weld on Weld Practice in Offshore Steel Structures

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Welding is an important fabrication technique for joining of steel members in an offshore installation. Fundamentally it is a multidisciplinary subject that requires knowledge of physics, chemistry, metallurgy, electrical and mechanical engineering for a sound outcome. With the advance of the technology the welding equipment are becoming more efficient producing desirable outcome if practiced within set of specified parameters defined by welding specification procedure (WPS). WPS is prepared from international standards, technical specifications and recommended practices to meet the technical criteria set by engineering projects as well as companies and local authority requirements. Each code contains a set of specific practices providing directions for fabrication of the welds, which is required to be followed to achieve the production of an engineering sound weld. Sometime in the fabrication stage however, due to the fabrication misconducts or space limitation some of these requirements are not fully adhered to. Example of this is the required minimum distance between two adjacent welds. Most international standards and specifications require a minimum distance between two adjacent welds during fabrication of offshore structures. If the minimum distance is not practiced the new weld is placed in the vicinity of or on the existing weld joint, it results in Locally Intensified Welded Joint and the phenomenon is termed as proximity welds or weld on weld. This results in a noncompliance joint as per design code.

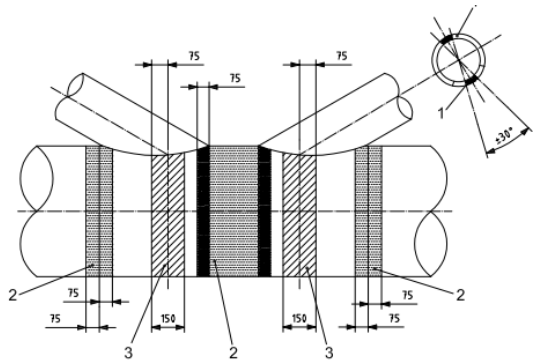

Figure 1: Prohibited Location (1, 2 and 3) for Circumferential Welds on Cord and Longitudinal Seams on Stubs, After ISO 19902

Most international codes and specifications require a minimum distance between two adjacent welds. That is, welding of two adjacent joints are required to be carried out with a specified distance from each other. Most of these codes however, have not provided a technical justification and explanation of the requirement for the minimum distance between the welds. It is stipulated that if the weld on weld practice is not envisaged in the WSP at the design or fabrication stages it may adversely affect the in-service performance of the joint. It is envisaged that the minimum distance is recommended in order to avoid any possible adverse effect on mechanical performance of the welded joint. Amongst these mechanical properties, fatigue and ultimate strength to a larger extent and fracture and cracking performance (especially in the zone where it is protected by CP (Cathodic Protection)) to some extent are affected.

Fatigue properties and performance of the joint is an important parameter in engineering design. The importance of minimum required distance for fatigue is threefold; effect of stress concentration from each weld proximity, effect of residual stress, and imbedded defect generated during welding. Concern over ultimate strength seems to be more of change in the microstructure of HAZ (Heat Affected Zone) to a hardened microstructure with reduced toughness. The change in the microstructure of the HAZ also has a profound effect on the environmentally assisted cracking performance of the joint in the submerged section, where hydrogen generation from CP application may potentially affect the joint performance. Drawing from above, weld on weld and proximity welds joints has implications both on the integrity of in-service structures as well as the new tubular structure in the fabrication stage.

As such, the ability to make an informed decision on the integrity of the noncompliance joint and the possible course of action upon the identification of the joint during the inspection both at the fabrication stage and in the service is of most importance.

Review on a number of offshore structure cases revealed that weld on weld and proximity welds though are a noncompliance with some design codes however it might not be an integrity threat and requires systematic assessment. In the several offshore case studies, where the fatigue performance of a weld on weld joint was subjected to engineering analysis, the result has indicated the performance of some of critical joints are acceptable with reference to the design life.
With focus on fatigue performance of joints containing weld on weld and weld proximity as a part of ongoing investigation in

Figure 2: Weld on W and Weld Proximity Identified During Inspection

PETRONAS it has been possible to propose a three level assessment methodology to assess the code compliance of the offshore structure joints containing weld on weld and weld proximity. These methodologies are in three levels, where the assessment starts from high level global analysis in level 1 and progresses to local modeling using Finite Element Analysis (FEA) and mechanical testing in Level 2. Level 3 is an assessment methodology for a scenario when weld on weld or proximity weld joint contains a sizable flaw.

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Received an Offer as Vibration Specialist with a Monthly Salary of RM 50,000 to Work in the Middle East!

An interview with:
Razaman Maydin
RZF Eng. Services Sdn Bhd, Shah Alam
Committee member of the IMM Vibration Committee

Interviewed by:
Dr. Zulkarnain Kedah
Serba Dinamik Group

Edited by:
Dr. Yoga Sugama Salim
Norimax Sdn Bhd

CORPORATE INTERVIEW

1. What is the best offer in your career?
I did not believe when I was offered RM 50,000 a month based in the Middle East, to set-up the new department, handle and monitor vibration of all the rotating machineries in the plant including to carry out in-situ balancing, laser alignment and also overhauling of machines. At the same time, I have to move around to other countries in the Middle East to monitor vibration level of machineries for the group of companies. However, I declined this offer because at that time, I was very busy running my own business in vibration monitoring field and was committed to deliver quality services to my clients.

2. Starting of my career since 1993
Regarding my involvement in vibration field, I started as Sales and Service Executive in 1993, being responsible for carrying out project management and servicing of various types of rotating machineries. During that time, I took the opportunity to deepen my knowledge in this field with Dr. Abdul Ghaffar Abd. Rahman who was a Senior Lecturer in Mechanical Engineering at the University of Malaya (1994-1998), who was one of the founders for Conditioned Based Monitoring or CBM since early 1980's. I started this business in 2007 with a capital of RM 60,000 to cover the company operations in the first few months and to buy on-site balancing equipment.

Figure 1: Vibration analysis of motor & fan impeller at Shah Alam, Malaysia

Based on my experience in this field for more than 25 years, I find that vibration monitoring is a specialised skill under mechanical rotating engineering which is still open to any interested individuals especially for those who have a background in mechanical, civil, electrical, IT and other technical fields. After several years, I have successfully secured a number of high value projects and long-term contract's. I have travelled to countries such as Indonesia, Brunei, Thailand and Papua New Guinea.

Figure 2: Troubleshoot abnormal high vibration of steam turbine and alternator at Indonesia

3. What is your advice for those who are interested in this field of vibration?
To become specialist as your career in this field, never stop asking questions and keep on learning from everyone.

Even the technician who dismantles and installs the equipment has something to teach us. We must always be involved in doing machine repair work and not be afraid to dirty our hands. From there we can understand the machine better to enable vibration troubleshooting and diagnosis of vibration problem in rotating machinery. With this specialised skill, vibration practitioners or specialists can choose to run their own business or work with others in Malaysia or abroad.

4. What are the challenges when troubleshooting vibration at site?
Most the vibration troubleshooting for rotating machineries would require input from maintenance record, machine operator, methods / techniques of inspection and technology. Taking the measurement is easy but to interpret the data or spectrum requires deep thinking with lots of challenges, especially when the problem originates from other sources such as the floor / building structure and others.

Figure 3: Laser alignment shaft to shaft

IMM Participated in Offshore Technology Conference Asia 2018

Edited by: Assoc. Prof. Dr. Chan Chin Han, Universiti Teknologi MARA

Date: 20th to 23th March 2018
Venue: Kuala Lumpur Convention Centre

Institute of Materials, Malaysia (IMM) participated in the 3rd Offshore Technology Conference Asia 2018 (OTC-Asia 2018) which was held from 20 to 23 March 2018 at Kuala Lumpur Convention Centre. The OTC-USA has been the largest oil & gas conference & exhibition in the world for many years and it was brought to Asia in Kuala Lumpur in 2014 for the first time. The OTC events were organized by the Society of Petroleum Engineers (SPE).

4 IMM Council Members volunteered to be committee members in the OTC-Asia 2018 Conference Programme Committee. They were Assoc. Prof. Dr. Melissa Chan Chin Han, Ir. Max Ong Chong Hup, Dr. Andrew Spowage and Ir. Ong Hock Guan. Over 1,000 delegates attended the 4-day conference.

This exhibition involved many Oil & Gas Operators, EPCC contractors, fabricators, engineering consultants and vendors including corrosion companies & paint manufacturers to exhibit their products, technologies and services. It was a good opportunity for IMM to showcase its educational and technical certification programs to the industry at the IMM Exhibition Booth. Over 10,000 visitors visited the OTC-Asia 2018 Exhibition Booths over the 4 days.

Figure 1: IMM committee members during the technical session of Materials, Corrosion, Insulation and Inspection at OTC-Asia 2018.

Figure 2: IMM booth at OTC-Asia 2018

Figure 3: Brian Lim at OTC-Asia 2018 exhibition hall

CHECK YOUR IMM MEMBERSHIP STATUS ON WEBSITE

IMM regularly upload the latest membership listing on the IMM website www.iomm.org.my.

Members should check their name on the listing. If your name is not listed, it is likely you have moved address or have not paid your annual subscriptions.

Please send an email to the IMM Secretariat (secretariat@iomm.org.my) and provide your membership number and latest contacts (address, email & mobile number), to verify your membership status.

If your name is on the listing and you have not paid your annual subscription, please pay in order to active your membership.

ANNOUNCEMENT

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FALSE IMM Blaster & Painter Certificates and IMM Coating Inspector Certificates detected and a police report has been initiated. Anyone with knowledge or information pertaining to the issuer or persons purchasing such false IMM certificates are requested to notify the IMM Management Committee through email address < **secretariat@iomm.org.my** >

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A One-Day Hands-On Cutting and Welding Technology Awareness Workshop Training for Curtin-IMM Student Chapter Members

Reported by: Victoria Siaw Wei Yah, Curtin-IMM Student Chapter

Date: 26th April 2018
Venue : Senadin Industrial Estate, Miri

Figure 1: Group photo with all student participants and AMW management team

On 26th April 2018, a group of 13 undergraduate engineering students from Curtin-IMM Student Chapter participated in a one day "Hands-On Cutting and Welding Technology Awareness Workshop Training" that was conducted by Advanced Metallurgy and Welding (AMW) Technology Sdn Bhd in Senadin Industrial Estate in Miri.

The workshop was basically divided into two sessions, with one session in the morning and another session in the afternoon. The participants who are Curtin-IMM Student Chapter were picked up from the Curtin bus stop at 8.30 a.m. and arrived at AMW at 9.00 a.m. The morning session was started by welcoming the Curtin students to AMW management team by introducing the AMW staff to our student members, a health and safety (HSE) briefing and introduction of the background of AMW by an AMW Senior Engineer, Mr. CT Chang. Then, it was then followed with an hour sharing session on welding technology awareness that was conducted by Ir. Dr. Edwin Jong Nyon Tchan who is the AMW executive director. During the lecture, Ir. Dr. Edwin clearly explained the importance, essence and applications of welding technology as well as ways to prevent the various types of welding defects. This session has also prepared all of us on why and how to get started during the hands-on practices. The morning session was finally completed with a technical tour to witness all welding fabrication activities around AMW training workshop until 12.00 pm.

Figure 3: Welding Lecture by Ir Dr Edwin Jong, AMW Executive Director

Figure 4: Technical Tour to witness all welding fabrication activities ound AMW training workshop

The afternoon session started immediately after the lunch break at 1.00pm. The IMM Student Chapter Members/ participants were guided by the certified welder trainer, Ibas, and five (5) welder trainees of AMW during their hands-on experiences of cutting of the test samples using the semi-automatic oxy-acetylene cutter and welding of the test samples by using shielded metal arc welding SMAW) process.

Figure 5: Participants performing oxy-cutting and SMAW process under the guidance from AMW technical staff

Figure 6: Result of some of the participants' cutting and welding of test samples

After the hands-on activities, the one-day hands-on programme was completed with the ceremony of handing over of participation certificates to all participants and giving away of our appreciation to AMW management for their willingness to allocate valuable time and training facilities. During the ceremony, each participant received a "Certificate of Participation" from AMW management. AMW management was given a gift as a token of appreciation from Curtin-IMM Student Chapter. The hands-on training ended at 4.00pm with a photo-taking session.

Figure 7: Handing over of certificates and appreciation gift

In conclusion, the workshop has really provided all Curtin-IMM student members with greater awareness and deeper understanding on welding technology. The Curtin-IMM Student Chapter committee would like to sincerely thank AMW Management for their effort and time in educating students on welding technology.

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INSTITUTE OF MATERIALS, MALAYSIA

Updated on 20th September 2017

Institute of Materials, Malaysia (IMM) is a non-profit professional society that promotes honourable practice, professional ethics and encourages education in materials science, technology and engineering. Engineers, academicians, technicians, skilled workers and professionals are amongst its members exceeding 6800.

Registered with the Registrar of Societies on 6th November 1987, the Malaysian Materials Science & Technology Society (MMS) changed its name to the Institute of Materials, Malaysia (IMM) on 16th June 1997. The objectives of the IMM include the training and development of individuals and companies in Malaysia to attain professional recognition in various fields of materials science, technology and engineering.

IMM is administered by a council of 30 members, with volunteers leading 18 materials committees, and 5 regional chapters, and supported by a secretariat with full time staffs.

IMM Vision
To be internationally recognised leading institution in Materials Science and Technology.

IMM Mission
(1) To be the technical authority on material science and technology
(2) To develop an enhance competency and skills for all categories and practitioner
(3) To become an internationally recognized certifying body
(4) To be the forum for industry and academia collaboration
(5) To positively contribute to society and quality of life

The IMM membership is categorised into 6 different grades and open to anyone above the age of 17 years - individuals and companies keen in developing and contributing towards the growth of materials science, technology and engineering in Malaysia.

Over the years, IMM have conducted courses on coatings, coatings fingerprinting, corrosion, welding, vibration etc in support of the oil and gas industry in Malaysia. Over 600 Coatings Inspectors have been trained and certified as well as 2500 Blasters & Painters, Supervisors, Corrosion Technician and Vibration Practitioners. Its certification programmes are recognized by PETRONAS and all oil & gas operators. Since January 2011, 72 Associate Welding Engineers, 80 Welding Engineers, 20 Senior Welding Engineers and 24 Coating Fingerprint Quality Controllers were trained and certified.

IMM has also organised 10 International Materials Technology conferences (IMTCE) on a biennial basis, and numerous technical seminars, educational programmes, technical visits, and materials awareness programmes since 1988.

Public courses, such as Microbiologically Influenced Corrosion (MIC) and Welding Technology for Non-Welding Personnel, are been offered occasionally. Training on materials awareness has also been conducted in public listed companies.

The courses and programmes are being organised by Authorized Training Body/Bodies and Authorized Event Organizer/Organizers.

Collaborations with the Asian Welding Federation, The Society for Protective Coatings, US (SSPC), Sabah Skills Technology Centre (SSTC), and local universities continue to be part of IMM's vision and long term mission to educate, train and serve the materials fraternity.

GENERAL INFORMATION ON MEMBERSHIP

The IMM Membership is opened to all individuals and companies in developing the contribution of Materials science, technology and engineering towards industrial growth in Malaysia. The technology of materials is advancing day-to-day throughout the world. Membership to the IMM will enable networking and exchange of knowledge from a very wide variety of specialised areas of expertise. Please feel free to download or print a copy of the application form together with the IMM regulations. If you have any doubt, please do not hesitate to contact our secretariat through the phone; +603-4256-2286 or email to secretariat@iomm.org.my

Annual subscriptions shall be payable in advance on 1st January of each year. Those admitted into the IMM between 1st July and 31st December in any year shall pay only half the annual subscription. Seniors (above 55 years old) get 50% discount off their annual subscriptions.

We have an online application for membership for selected grades. Membership application forms in document format can be accessed from www.iomm.org.my.

Kindly fill the form and email to secretariat@iomm.org.my or fax it to: +603-7880 1753 or send it to :

IMM SECRETARIAT

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IMM MEMBERSHIP BENEFITS

(1) IMM activities offer members to interact and network with representative from the industry, academia and government related to the Materials profession.

(2) Members will gain knowledge on career opportunities for their children, friends etc as IMM offers certification courses in skilled trades e.g. Welding, Painting, Inspection, Corrosion etc.

(3) IMM-JWES Welding Engineer Certification program leading to a Welding Engineer Certification which offers great employment opportunities in the oil & gas, heavy industry, marine and energy sectors.

(4) IMM publications – quarterly magazine plus annual conferences offer presenters an opportunity for their technical research or industry-academia papers to be published in ISI- and Scopus-index journals.

(5) IMM organizes many free technical events for members to acquire new knowledge and networking opportunities. Participants to these events will also receive Certificate of Attendance for their Continuing Professional Development records.

IMM MEMBERSHIP FEES SCHEDULE AS PER BELOW:

Description	Amount			
	Entrance Fee	Processing Fee	Transfer Fee	Annual Subscription
Fellow (F.I.M.M)	-	RM 300.00	RM 10.00	RM 150.00
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Associate (A.M.I.M.M)	-	RM 150.00	RM 10.00	RM 80.00
Company	RM 50.00	-	-	RM 200.00
Ordinary	RM 20.00	-	-	RM 40.00
Student	RM 10.00	-	-	RM 10.00
Ordinary/ Company for affiliates	RM 40.00/ RM 50.00	-	-	NIL

INSTITUTE OF MATERIALS, MALAYSIA

Updated on 20th September 2017

REGULATIONS GOVERNING ADMISSION AND TRANSFER OF MEMBER GRADES

The Council shall establish a Memberships Committee which will be responsible for review of applications for transfer of membership grades. The Memberships Committee shall recommend transfers for Council approval at Council Meetings. All grades of memberships are awarded at the discretion of the Council and may be withheld or withdrawn in the event of conduct likely to prejudice the standing of the Institute. Every member shall receive a membership certificate.

The Memberships Committee shall be responsible for drafting the "Regulations Governing Admission and Transfer of Member Grades" for Council approval. These regulations may be changed from time to time subject to Council approval.

Every application for membership shall be proposed and seconded according to these regulations and shall be forwarded to the Honorary Secretary who shall, at the first convenient opportunity, submit it to the Council for approval the Council may at its discretion reject any application without assigning any reason thereof.

Each company on admission shall be entitled to nominate one representative to exercise all rights of membership. Only representatives of Company membership, Fellows (F.I.M.M.). Professional Members (M.I.M.M.) and Ordinary members shall have the right to vote and to hold office in IMM.

Only Malaysian Citizens, and Blue Identity Card Holders can become Ordinary Members, Associate Members (A.M.I.M.M.), Professional Members (M.I.M.M.) and Fellow Members (F.I.M.M.) with voting rights. Foreigners can join similar grades but shall have no voting rights.

MEMBERSHIP GRADE & REQUIREMENT

Honorary Fellow (Hon. F.I.M.M.)
The Council shall have the power to elect Honorary Fellows who shall be persons of eminence in science or industry. The election shall be based on a majority vote within the Council. Honorary fellows shall enjoy such privileges as may from time to time be determined by the Council.

Fellow (F.I.M.M.)
A person at least 35 years of age with approved academic qualifications, training and 8 years relevant responsible experience who has made significant contributions to the science and practice of profession of Materials Science and Engineering or has given distinguished service to industry or education.

Professional Member (M.I.M.M.)
A person at least 25 years of age, with approved academic qualifications and training, having at least 3 years responsible experience in Materials Science and Engineering, or a person at least 40 years of age, with at least 15 years of experience with practical responsibility, as demonstrated by thesis/dissertation or report and interview.

Associate Member (A.M.I.M.M.)
A person at least 25 years of age, who possesses an interest in Materials Science and Engineering but have not acquired the necessary experience or obtained the qualification, governing entry to Member grade. An Associate Member, on obtaining the necessary qualifications, may apply for transfer to Member grade.

Company Member
Any company that is involved or has interest in Materials Science and Engineering will be qualified to join as a company member.

Ordinary Member
Any Malaysian Citizen and above the age of 18 years engaged in activities related to research, development and applications in Materials Science and Engineering shall qualify for Ordinary Membership. Only Ordinary Members who meet the necessary minimum requirements may apply for transfer to membership grades of Fellow, Member and Associate Member and may use the abbreviated titles upon transfer.

Student Member
A student member shall be a person not under 17 years of age who at the time of application satisfies the Council that he has received a good general education and is studying subjects related to Materials Science or Engineering. A student member shall transfer to the grade of Ordinary Member after graduation provided he or she is suitably qualified and as soon as he or she is earning a full-time salary. A Student shall not become member of the IMM without the prior approval of the Vice-Chancellor or Head of Department of the university or relevant authority concerned.

LOPC 2017

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FREE Ordinary Membership for Affiliates:

The Institute of Materials, Malaysia will recognize various professional institutions and societies for **free membership** at "Ordinary Grade". Members of the recognized professional institutions and societies can become Ordinary Members of the IMM without any annual subscriptions. The Council of the IMM approved the proposal in accordance to IMM Rules clause no. 3.2.3 and the members at its 21st Annual General Meeting unanimously approved the proposal on 19th March 2011.

Members of following institutions and societies are welcome to apply.

(1) American Welding Society
(2) Asian Welding Federation
(3) Board of Architects Malaysia
(4) Board of Engineers, Malaysia
(5) Engineering Institutes under the Engineering Council of UK
(6) Geological Society of Malaysia
(7) Institut Kimia Malaysia
(8) Institute of Corrosion UK
(9) Institute of Materials Singapore
(10) Institute of Physics Malaysia
(11) Institution of Engineers, Malaysia
(12) Jabatan Minerals & Geoscience
(13) Malaysian Medical Association
(14) Malaysian Nurses Association
(15) Malaysian Society for Non-Destructive Testing
(16) Malaysian Welding & Joining Society
(17) National Association of Corrosion Engineers USA
(18) Persatuan Arkitek Malaysia
(19) Plastics & Rubber Institute of Malaysia
(20) Singapore Welding Society
(21) Society of Petroleum Engineers
(22) Steel Structures Painting Council USA
(23) The Welding Institute UK

FREE Company Membership for Affiliates:

The Institute of Materials, Malaysia will recognize various professional institutions and societies for free membership at "Company Grade". Company Members of the recognized professional institutions, societies & associations can become Company Members of the IMM without any annual subscriptions. The Council of the IMM approved the proposal in accordance to IMM Rules clause no. 3.2.3 at its Penultimate Council Meeting on 10th January 2014 which was endorsed at the 24th Annual General Meeting held on 21st March 2014.

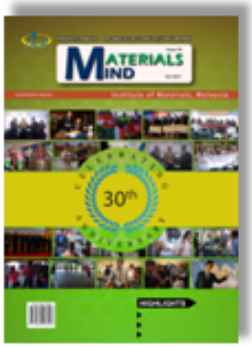
List of Free Company Memberships for Trade Associations:-

(1) Federation of Malaysian Manufacturers (FMM)
(2) Malaysian Offshore Contractors Association (MOCA)
(3) Malaysian Oil & Gas Engineering Council (MOGEC)
(4) Malaysian Oil & Gas Services Council (MOGSC)

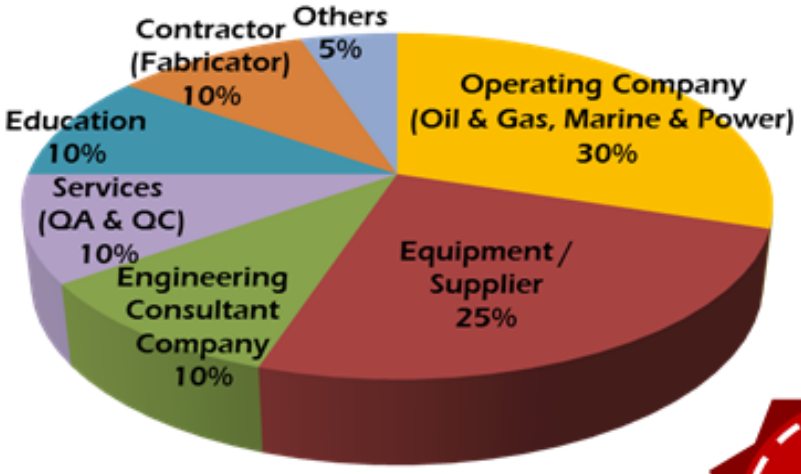
Email : secretariat@iomm.org.my Website : www.iomm.org.my

MATERIALS MIND

Quarterly Magazine of Institute of Materials, Malaysia



Our Readers



General Information

Frequency: Quarterly Magazine
Format: Print & Online Editions
Reader: ~ 8000
ISSN: 2289-9030

Magazine Content

Event & Activity Reports, Conference Information, Technical Papers, Information on IMM, IMM Course Details, Advertorial, IMM Supporting Events and many more…..

DIGITAL EDITION FREE

Advertisement Rates

Code	In Print (Book Format)	Online (Webpage)	Price / Duration
A	**Standard Full Page** Size: A4 210 (w) × 297 (h) mm	**Bottom right side bar** * Size: 305 × 54 pixel	**RM 600** / 3 months *
B	**Standard Full Page** Size: A4 210 (w) × 297 (h) mm	**Bottom right side bar** * Size: 305 × 54 pixel	**RM 2,000** / 1 year *
C	**Back Outside Cover** Size: A4 210 (w) × 297 (h) mm	**Central banner** * Size: 1000 × 400 pixel	**RM 1,000** / 3 months *
D	**Back Outside Cover** Size: A4 210 (w) × 297 (h) mm	**Central banner** * Size: 1000 × 400 pixel	**RM 3,000** / 1 year *

* Introductory price, advertisers enjoy 50% discount on IMM Materials Mind homepage

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Institute of Materials Malaysia

MATERIALS MIND

Invitation to Advertise in Materials Mind, published by Institute of Materials, Malaysia for in Print and Online

Please tick your preferred date, write the year and preferred code for advertisement.

☐ 1st Quarter – **January** ☐ 2nd Quarter – **April**

☐ 3rd Quarter – **July** ☐ 4th Quarter – **October** of the **year**: _____

Preferred **code**: _____ (refer front page of this leaflet)

Technical Requirement

- JPG / Ai / PDF / PSD Format
  Ai / Illustrator – Text must be outlined and saved together with high resolution picture embedded.
- Image quality should be at least 150 pixel per inch.
- Artwork prepared by the customer.

Payment

Full payment to be made 2 weeks before date of the advertisement.

Cancellation

10-day notice before the advertisement date, otherwise deposit will be forfeited.

PAYMENT NOTE

1) Payment can be made by cheque, telegraphic transfer & bank draft as follows:

Account Name: **Institute of Materials, Malaysia**
Account No: **8009055156**
Swift Code: **CIMBMYKL**
Bank Name: **CIMB BANK**
Country: **Malaysia**

Cheque can be sent to
Suite 515, Level 5, Block A,
Kelana Center Point, No. 3 Jalan
SS 7/19, Kelana Jaya, 47301
Petaling Jaya, Selangor
via post/mail or direct bank-in.

2) Payment can also be made by IBG, GIRO or Cash Deposit Machine (CDM) as follows:

Account Name: **Institute of Materials, Malaysia**
Account No: **8009055156**
Bank Name: **CIMB BANK**

Please email your bank-in slip as your payment proof to **secretariat@iomm.org.my**

IMM TRAINING & CERTIFICATION PROGRAM

Coating Certification Scheme

1. Certified Protective Coating Technician (Blaster and/or Painter) Level 1 & Level 2
2. Certified Blasting and Painting Supervisor
3. Certified Coating Inspector Level 1 & Level 2
4. Certified Coating Quality Control Technician
5. Corrosion Control by Protective Paints
6. Certified Thermal Spray Coating Applicator
7. Basic Knowledge on Corrosion Protection for Technicians and Engineers
8. Certified IMM-SSPC C6 Surface Preparation and Paint Application for Power Tool Cleaning Operators and Brush and Roll Paint Applicators
9. Certified IMM-SSPC C7 Abrasive Blasting [a]
10. Certified IMM-SSPC C12 Spray Application [a]
11. Certified IMM-SSPC CAS L1 Coating Applicator Specialist Level 1 [a]
12. Certified IMM-SSPC CAS-L2 Coating Applicator Specialist Level 2 [a]
13. Certified IMM-SSPC CAS L3 Coating Applicator Specialist Level 3 [a]
14. Certified IMM-SSPC C7 (Blasting) & C12 (Painting) Instructor [a]

Materials Courses

1. Materials Selection & Corrosion
2. Metallurgical Failure Investigation
3. Basic Course on Operation of Mobile Air Compressor

Coating Fingerprint Certification Scheme

1. Coating Fingerprint Foundation Course
2. Certified Coating Fingerprint Quality Controller
3. Certified Coating Fingerprint Trainer
4. Refresher Course of Certified Coating Fingerprint Quality Controller

Welding Certification Scheme

1. Certified Welding Inspector
2. IMM-JWES Welding Engineers Certification Courses (AWE/WE/SWE) [b]
3. Repair Welding of Pressure Equipment in Refineries & Chemical Plants
4. Welding & Joining Technology for Non-Welding Personnel
5. Steel Technology for Non-Technical Personnel

Flange Integrity Certification Scheme

1. Certified Flange Integrity Technician

A.P.I Courses

1. A.P.I 510 Pressure Vessel Inspector
2. A.P.I 570 Piping Inspector
3. A.P.I 653 Above Storage Tank Inspector

Vibration Certification Scheme

1. Certified Vibration Practitioner Category 1 [c]
2. Certified Vibration Practitioner Category 2 [c]
3. Certified Vibration Specialist Category 3 [c]
4. Certified Vibration Specialist Category 4 [c]

Corrosion Certification Scheme

1. Certified Corrosion Technician Level 1 & Level 2
2. Certified Cathodic Protection Technician Level 1 & Level 2
3. Certified Cathodic Protection Engineer
4. Corrosion Control by Cathodic Protection
5. Basic Corrosion & Coating Course
6. Certified Cathodic Protection Technologist

Thermal Insulation Certification Scheme

1. Introduction to Thermal Insulation
2. Certified Thermal Insulation Installer

Thermal Analyst Certification Scheme

1. Thermal Analyst Foundation Course
2. Certified Thermal Analyst
3. Certified Thermal Analyst Trainer
4. Refresher Course of Certified Thermal Analyst

and many more !!

[a] non-IMM course; certification scheme of the IMM in collaboration with The Society for Protective Coatings (SSPC) based on SSPC certification requirements.

[b] non-IMM course; certification scheme of the IMM in collaboration with the Japan Welding Engineering Society (JWES).

[c] based on ISO 18436

Updated on 23rd Mar 2018