## **Materials Lecture Competition 2022**



Prepared by: Dr. Andrew Ng Kay Lup, Xiamen University Malaysia (MLC 2022 Chairperson) Edited by: Dr. Nor Akmal Fadil, Universiti Teknologi Malaysia (Chairperson, IMM-MLC Committee)

> Date: 16<sup>th</sup> June 2022 (Semi-final) & 7<sup>th</sup> July 2022 (Final) Venue: Xiamen University Malaysia (XMUM)

Xiamen University Malaysia (XMUM) has been selected universities as shown in Table 2. The first five as the host for Materials Lecture Competition 2022 (MLC 2022). The MLC 2022 semi-final and final round were held online on 16<sup>th</sup> June 2022 and 7<sup>th</sup> July 2022, respectively by XMUM in collaboration with the Institute of Materials, Malaysia (IMM) and the Institute of Materials, Minerals and Mining UK (IOM3-UK). Both events were held on the Microsoft Teams platform and aired live on the Facebook page of The School of Chemical Engineering, XMUM. Since the year 2020, national and international competitions were held online due to the continued Covid-19 pandemic situation.

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 MLC 2022 semi-final event was officiated by the Assistant President of XMUM, Assoc. Prof. Dr. Zhang Ying. The semi-final dan final judging panels were selected from academia and industry practitioners (Table 1).

The MLC 2022 semi-final competition was aimed to select five finalists from participants of twelve Malaysian

participants in Table 2 are the MLC 2022 top five finalists who won the semi-final round. The top five finalists competed in the MLC 2022 final round hosted online by XMUM. The MLC 2022 Final event was officiated by Prof. Dr. Chen Binghui, the Dean of the School of Energy and Chemical Engineering, XMUM. The half-day competition ended with closing remarks given by Ts. Dr. Chew Khoon Hee (Deputy President of the Institute of Materials, Malaysia, IMM).

Rathosivan Gopal from Universiti Teknologi Malaysia was the winner of MLC 2022, while Ammar Zoheir from Universiti Tenaga Nasional and Natasha Voznyuk Jeevan from Universiti Teknologi Petronas came in second and third place, respectively. The winners received a cash prize of RM 3000, RM 2000and RM 1000 respectively, while the last two finalists received consolation prizes of RM 500-each. The cash prize was sponsored by IMM. Rathosivan Gopal will represent Malaysia in Young Persons' World Lecture Competition (YPWLC 2022) in November, which will be organised by IOM3-UK via an online competition.



Figure 1: MS Teams Screenshot of the twelve MLC 2022 semi-final participants with IMM Representatives, MLC Chairperson, MLC committee members, the judges, and the Assistant President of XMUM, Assoc. Prof. Dr. Zhang Ying.

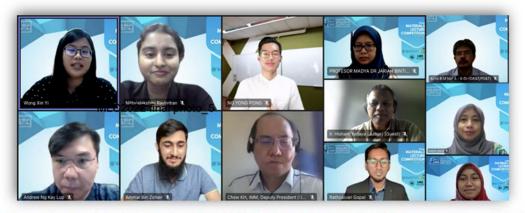


Figure 2: MS Teams Screenshot of the twelve MLC 2022 final participants with IMM representative, MLC Chairperson, MLC committee members, the judges, and the Deputy President of the IMM, Ts. Dr. Chew Khoon Hee.

**Table 1:** The panel of judges for the MLC 2022 semi-final and final.

MLC 2022 Semi-final	MLC 2022 Final
Mr. Kang Kim Ang, CORRTROL Group of Companies (Moderator)     Prof. Ir. Dr. Sapuan Salit, Universiti Putra Malaysia     Assoc. Prof. Ir. Ts. Dr. Wan Sharuzi Wan Harun, Universiti Malaysia Pahang     Dr. Ismail Ibrahim, Department of Minerals and Geoscience Malaysia	Assoc. Prof. Dr. Jariah Mohamad Juoi, Universiti Teknikal Malaysia Melaka (Moderator)     Ir. Dr. Azmi Mohammed Nor, Petronas Research Sdn. Bhd.     Ir. Ts. Noor Hisham Yahaya, Safe Asbestos Solutions Sdn. Bhd.     Prof. Ts. Dr. Mariyam Jameelah Ghazali, Universiti Kebangsaan Malaysia

Table 2: MLC 2022 semi-final participants and the top five finalists.

No.	Name	Title
1.	Rathosivan Gopal, Universiti Teknologi Malaysia (UTM)	Immobilisation of Factor VII through polydopamine grafting on polycaprolactone membrane for cardiac bleeding application
2.	Ammar Zoheir, Universiti Tenaga Nasional (UNITEN)	Graphene: The wonder material in the electronics industry
3.	Natasha Voznyuk Jeevan, Universiti Teknologi Petronas (UTP)	Potato plastic - A solution to single-use Top Five conventional plastic
4.	Ng Yong Pong, Taylor's University Malaysia	Radiation shielding material – An overview and manufacturing of radiation shielding composite
5.	Nithyialakshmi A/P Ravindran, Universiti Malaya (UM)	High performance supercapacitors with hybrid MoS <sub>2</sub> /MXene electrodes
6.	Tan Hui En, Tunku Abdul Rahman University College (TAR-UC)	Extraction of biological hydroxyapatite for biomedical applications
7.	Harivalagan A/L Siva Kumar, Universiti Kebangsaan Malaysia (UKM)	Modified surfaces of quantum carbon dot (QCD) for modern medicine application
8.	Syed Assim Hussain Shah, Universiti Tun Hussein Onn Malaysia (UTHM)	Synthesis, characterisation and adsorption Study of deep eutectic solvent molecularly imprinted polymer for the removal of bisphenol A
9.	Yeow Teck Ann, Xiamen University Malaysia (XMUM)	Your friendly neighbourhood plastic: Glycerol to 1,3-PDO
10.	Muhammad Haziq Bin Noor Akashah, Universiti Teknologi Mara (UiTM)	Blue-fluorescence emission of graphene quantum dots nanoparticles (GQDs) as a new sensing material towards development of rapid fibre optic biosensors
11.	Nafis Syahmi Bin Zainal Azali, Universiti Teknikal Malaysia Melaka (UTeM)	Recycle wood PP composite (r-WoPPC) filament
12.	Muhammad Naziff bin Ahamad Said, Universiti Sains Malaysia (USM)	Surface interaction of particles in emulsion polymerization of PMMA-GO with various surfactant dosages for various applications.



**Figure 3:** FB Live streaming of MLC 2022 semi-final (top) and MLC 2022 final (bottom) events on Facebook page of Chemical Engineering, XMUM.



Materials
Lecture
2022 Lecture
Composition

Winner

Ng Yong Pong
Westerstry

Natasha Voznyuk

Ammar Zoheir

Nithyialakshmi
Ravindran
Winner

Nithyialakshmi
Ravindran
Winner

Natasha Voznyuk

Ammar Zoheir

Consolation Prizes

Figure 4: Winners of MLC 2022.

**Figure 5:** Dr. Nor Akmal Fadil, Chairperson of IMM-MLC Committee handed over a token of appreciation from IMM to the MLC 2022 Organizing Chairperson, Dr. Andrew Ng Kay Lup at Xiamen University Malaysia Campus at Bandar Sunsuria, Sepang, Selangor on 21<sup>st</sup> September 2022.