

experimental design and basic data interpretation for rheometer.

Date: 28th September 2021, Tuesday

Time: 9AM to 5PM

Format: Livestream event



## Register your interest today by scanning the QR code!

Complimentary for UiTM students and staff, IKM members, IMM members and MIFT members.

## Organized by:







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"Measure what is measurable and make measurable that which is not."

- Galileo Galilei

#### Introduction

This 1-day workshop is designed to educate the users on rheological behavior of polymers or macromolecules, the basics of measurement of these properties, maintenance, and experimental design related to rheometer. Special emphasis will be placed on basic theory, experimental design and data interpretation.



#### Who should attend?

Any new or existing user looking for guidance into experimental design and basic data interpretation for rheometer.



### **Agenda**

9:00 - 9:20am	Participants dial-in to Workshop
9:20 – 9:25am	Welcoming speech of Prof. Dr. Farida Zuraina Mohd Yusof, Dean of FSG
9:25 – 9:30am	Opening remarks of Datuk Dr. Soor Ting Kueh, President of Institut Kimia Malaysia

9:30 – 10:00am	Lecture 1: Thermal properties of
	polymers by Prof. Ts. ChM. Dr. Chan
	Chin Han ECC HITM LOSA

10:4F 11:00cm	Drook
	Anton Paar + Q&A
10:15 – 10:45am	<b>Demo 1:</b> Working with a rheometer. Demonstration by Mr. Nigel Foong,
10:00 - 10:15am	Break
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10.45 – 11.00am	Dieak
11:00 – 11:30am	Demo 2: (Cont.) Working with a
	rheometer. Demonstration by Mr.
	Nigel Foong, Anton Paar + Q&A

11:30 - 11:45am	Break
11:45am – 12:45pm	Hands-on 1: Hands-on on data analysis by Ms. Hairunnisa Ramli, Centre of Foundation Studies, UiTM
	Q&A

12:45 – 2:00pm	Break
2:00 – 2:30pm	Lecture 2: Rheological Characterization of Immiscible
	Polymer Blends by Ms. Nurul Fatahah

2·30 = 2·45nm	Break
	UiTM + Q&A
	Asyqin, Centre of Foundation Studies,
	Polymer Blends by Ms. Nurul Fatahah

2.30 – 2.45pm	Dreak
2:45 – 3:15pm	Lecture 3: Result interpretation I by
	Mr. Thomas G. Mezger, Rheology
	Specialist, Anton Paar + Q&A
3·15 – 3·30nm	Break

3.13 - 3.30pm	Dicak
3:30 – 4:00pm	Lecture 4: Result interpretation II by
	Mr. Markus Nemeth, Rheology
	Specialist, Anton Paar + Q&A
4·00 = 4·10nm	Closing ceremony by the organizing

chairman of Postgraduate Chemistry Club

### **Speakers**



Chin Han CHAN is a professor at the Faculty of Applied Sciences of Universiti Teknologi MARA, Malaysia. Her research interest is devoted to physical properties of macromolecules and polymer blends, specifically to thermoplastic elastomers, solid polymer electrolytes, fingerprinting on polymeric products etc. She was appointed as Visiting Scientist at China University of Petroleum, Beijing, China (2011 – 2012), as Chair Professor at Mahatma Gandhi University, Kottayam, India (2014), She has published more than 150 papers in international and national refereed journals and more than 50 plenary, keynote & invited lectures for international conferences / workshops. She has been leading more than 30 industry grants,

consultancy projects and research grants. She has been one of the editors of Malaysian Journal of Chemistry and Materials Mind of Institute of Materials, Malaysia. She is one of the editors of books published by Royal Society of Chemistry (2013) entitled "Natural Rubber Materials" (2 Volumes), and Apple Academic Press (2014 & 2017) (distributed by CRC Press) entitled "Physical Chemistry of Macromolecules - Macro to Nanoscales" and "Functional Polymeric Composites", respectively. She was appointed as Editorial Advisory Board Member of the Journal of Macromolecular Science, Part A: Pure and Applied Chemistry (Taylor & Francis Group) since 2017, Polymers (MPDI) since 2018 and Polymer International (Wiley) since 2020. She peer-reviews many international journals on polymer sciences. She has been a committee member of the International Union of Pure and Applied Chemistry (IUPAC) Subcommittees on Polymer Terminology since 2016 and Secretary of Polymer Education since 2019 and Associate member (2018-2019) & Titular member (2020-2021) of IUPAC Polymer Division. Since 2016, she has been elected as Honorary Secretary of Institute of Materials, Malaysia, she is the Fellow & Council member of Malaysian Institute of Chemistry and Fellow of Academy Professor Malaysia.



**Ms.** Hairunnisa Ramli received her Master's degree in polymer chemistry from Universiti Putra Malaysia in 2010 under a National Science Fellowship (NSF) scholarship. She works as a Chemistry lecturer at Centre of Foundation Studies, Universiti Teknologi MARA since 2011. At the same time, she is also a PhD candidate at Universiti Teknologi MARA, where her research focuses on solid polymer electrolytes and polymer blends. During her PhD, she participated in several international conferences such as the International Symposium on Advanced Polymer Materials (ISAPM 2016 & 2019), the 25th POLYCHAR of 2017 and the Emerging Material Technologies Summit 2018 (EMTS'18). At EMTS'18, she was awarded with

Bursary Certificate Award by the International Union of Pure and Applied Chemistry (IUPAC). From 2018 until present, she has been appointed as managing editor of Materials Mind, a magazine of Institute of Materials, Malaysia. She is also actively involved in an industry-driven project as a Task Force member of Coating Fingerprinting and as a certified fingerprint quality controller. She and her team had won several university and national awards at exhibitions and innovation competitions related to this project.

### **Speakers**



Ms. Nurul Fatahah Asyqin Zainal is a chemistry lecturer at Centre of Foundation Studies, Universiti Teknologi MARA (UiTM), Malaysia. Currently, she is a PhD candidate at Faculty of Applied Sciences, UiTM. Her research focuses on the physical properties of polymer blends, graft-copolymer and fingerprinting on polymeric materials. She has published more than 10 papers in refereed journals and book chapters. She has been appointed as managing editor of Materials Mind, a magazine of Institute of Materials, Malaysia since 2020. She also has been actively involved in industry-academia joint research projects focusing on the polymeric coating and coating failure analysis. She was appointed as Visiting Academic for 2 months in

University of Hamburg, Germany in 2019.



Mr. Thomas G. Mezger, successfully completed a degree in Chemical Engineering (Process Eng.) at Stuttgart University, Germany. He was working in the field of practical rheology in the Sales and Product Management departments of the rheometer manufacturers Contraves and Physica Messtechnik, today Anton Paar Germany. For many years, he has conducted seminars all over the world for employees of many companies and institutes, covering the basics of rheology and rheometry as well as the useful transfer of this knowledge into industrial practice. He is author of the textbooks "The Rheology Handbook", and "Applied Rheology" (meanwhile available in 8 languages).



**Markus Nemeth** completed a degree in Chemical Engineering at the University of Applied Sciences Esslingen, Germany with the focus on paint and coatings. He has gained a wealth of experience in the field of practical rheology during the last 12 years with the rheometer manufacturer Anton Paar Germany. Meanwhile he has held seminars and trainings for employees of companies and institutes from a wide range of technical branches all over the world. These seminars are giving information on the basics of rheology and rheometry as well as on a useful transfer of this knowledge into industrial practice.



**Mr. Nigel Foong** received his bachelor degree in Chemistry from Universiti Tunku Abdul Rahman with major in Polymer Science and minor in Environmental Science. He worked in the same graduated institute as a laboratory manager in charging the lab management, liaising with lecturers and fellow graduates and a handler of multi-disciplinary instruments such as XRD, thermal analyzers, chromatographers and spectroscopy instruments. He also obtained his license from the Atomic Energy Licensing Board (AELB) as a registered radiation worker prior to handling X-ray machinery. Later, he joined a distributor company selling thermal analyzer and rheometer for a short moment before serving Anton Paar Malaysia on

2015 Q4. Since then, his roles as an application specialist for rheology, particle characterization and surface testing instruments supporting Malaysia in organizing workshops and seminars, supporting sales and service team for technical inquiry and guiding prospective customer in troubleshooting and methodology development.

#### **Contacts**

### Organizing committee:

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#### **Further enquiries**

Please contact the following:

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Registration link and QR code of 1-Day Rheology Workshop on Polymers (Google Form)



https://bit.ly/3ebYOqM

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