

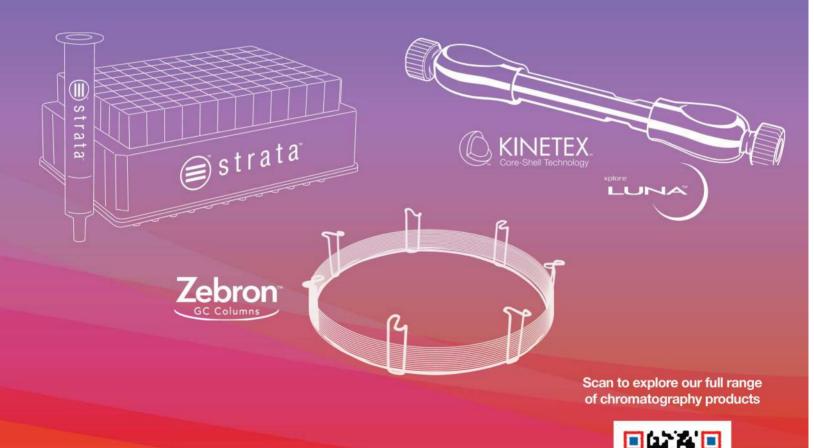
# Berita IKM - Chemistry December 2023 in Malaysia



# LC, GC, and Sample Prep Products



To researchers in - pharma/biopharma, clinical research, environmental, forensic toxicology, food and beverage, chemicals and energy, and academia.





Available in Malaysia, exclusively from LT Resources (M) Sdn Bhd

Tel: 603 - 80638298 Fax: 603 - 80638292

Email: info@ltresources.com.my Website: www.ltresources.com.mv



Kinetex, Luna, Strata, and Zebron are trademarks of Phenomenex FOR RESEARCH USE ONLY. Not for use in clinical diagnostic procedures. © 2023 Phenomenex, Inc. All rights reserved.







### COUNCIL MEMBERS 2023/2024 PRESIDENT

Datuk ChM Dr Soon Ting Kueh

**VICE PRESIDENT** 

Datin ChM Dr Zuriati Zakaria

**REGISTRAR** 

ChM Halimah binti Abdul Rahim

HON. SECRETARY

ChM Chang Hon Fong

HON. TREASURER

ChM Dr Malarvili Ramalingam

HON. ASST. SECRETARY

Prof ChM Dr Juan Joon Ching

HON. ASST. TREASURER

ChM Dr Yang Farina Abdul Aziz

### **MEMBERS**

DCP(R) Assoc. Prof. Dato' ChM Dr Yew Chong Hooi Datin ChM Maimonah Sulaiman ChM Marhayani binti Md. Saad ChM Li Hui Ling

ChM Ts Damien Khoo Yiyuan

Academician ChM Dr Ho Chee Cheong

Asst. Prof ChM Dr Yvonne Choo Shuen Lann
Dato' ChM Dr Hj Mas Rosemal Hakim bin Mas Haris

Prof ChM Dr Rusli Daik

### **CO-OPTED MEMBERS**

ChM Dr Nurul Huda binti Abd Karim Assoc Prof ChM Dr Fatimah Salim

# COOPTED MEMBERS (CHAIRPERSON OF IKM BRANCHES) SARAWAK BRANCH

ChM Dr John Chan Sung Tong

**SABAH & F.T. LABUAN BRANCH** 

ChM Dr Jenny Lee Nyuk Len

**NORTHERN BRANCH** 

Dato' ChM Dr Hj Mas Rosemal Hakim bin Mas Haris

**SOUTHERN BRANCH** 

ChM Yap Fei Ching

**PERAK BRANCH** 

Asst Prof ChM Dr Wong Lai Peng

TERENGGANU BRANCH

ChM Teo Chook Kiong

**PAHANG BRANCH** 

ChM Dr Awis Sukarni Bin Mohmad Sabere

## Advertise in Berita IKM

An invitation to a partnership with IKM in promoting chemistry in Malaysia in "Berita IKM - Chemistry in Malaysia".



We accept requests to publish advertisements, advertorials and congratulatory messages for special events such as the launching of your new line of products or services or celebrating the success of your company and your people. You will have a captivated audience in our readership.

**Note:** IKM reserves the right to refuse advertisements in its magazine if it deems inappropriate.

ADVERTISEMENT PAGE	QUARTERLY Single Issue	GRANDSLAM* 4 Consecutive Issue
Outside Back Cover (Colour)	RM2,400	RM9,600
Inside Back Cover (Colour)	RM1,800	RM7,200
Inside Front Cover (Colour)	RM2,100	RM8,400
Inside Pages (Colour)	RM1,200	RM4,800

Call us if you need further inquiries or for that special event that you want to advertise and share with your clients. Thank you for your support.

### BERITA IKM - CHEMISTRY IN MALAYSIA EDITORIAL BOARD

### Chairperson

Datin ChM Dr Zuriati Zakaria

### **Members**

Datuk ChM Dr Soon Ting Kueh, ChM Dr Yang Farina Abdul Aziz, Prof ChM Dr Juan Joon Ching, Dato' ChM Dr Hj Mas Rosemal Hakim bin Mas Haris, ChM Yap Fei Ching, ChM Dr Aqeel Saravanan

Please address all communications to:
Berita IKM Editorial Board Chairperson
Institut Kimia Malaysia
Wisma IKM, 127B, Jalan Aminuddin Baki, Taman Tun Dr Ismail,
60000 Kuala Lumpur
Tel: 03-7728 3272 Fax: 03-7728 9909

Website: http://www.ikm.org.my Email: zuriatiz@gmail.com / ikmhq@ikm.org.my December 2023 Issue No. 153 in Malaysia

**CONTENTS** Page No.

**BERITA IKM** 

BERITA IKM - Chemistry in Malaysia Editorial Board	1
MESSAGE FROM THE PRESIDENT	3
INTERNATIONAL CONGRESS ON PURE & APPLIED CHEMISTRY (ICPAC) BALI 2023, 12-17 SEPTEMBER 2023	5
16TH ASIAN CONFERENCE ON ANALYTICAL SCIENCES (ASIANALYSIS XVI) 2023	8
EDUCATIONAL VISIT & SOCIAL HIGH TEA GATHERING BY IKM PERAK BRANCH	14
INVITATION TO POLYMER SOCIETY OF KOREA (PSK) FALL MEETING 2023	16
TECHNICAL VISIT TO CERAMTEC INNOVATIVE CERAMIC ENGINEERING (M) SDN. BHD. BY IKM DIVISION OF POLYMERS AND MATERIALS CHEMISTRY	18
YB MOSTI MINISTER'S VISIT TO IKM	20
MALAM KIMIA & PRESENTATION OF IKM AWARDS 2023, 1 DECEMBER 2023	26
NOTICE OF 57TH IKM AGM 2023	30
WEBINAR BY THE DIVISION OF PHYSICAL & THEORETICAL CHEMISTRY ON "ADSORPTION AND CATALYTIC CONVERSION OF $\text{CO}_2$ OVER POROUS MATERIALS"	32
SOUTHEAST ASIA GLOBAL INNOVATION CHALLENGE 2022 (SEA-GIC 2022): PITCHING & POSTER COMPETITION	36
ICPAC MONGOLIA 2024	40
MALAYSIA LEADS GLOBAL EFFORT IN COMBATING ILLICIT DRUGS WITH INNOVATIVE STRATEGIES, INTERNATIONAL COLLABORATION	42
THERMO FISHER SCIENTIFIC KNOWLEDGE EXCHANGE	44
IKM NEW MEMBERS & MEMBERSHIP UPGRADING	46
ADVERTISERS INDEX	
LT Resources (M) Sdn Bhd	IFC
Arachem (M) Sdn Bhd	13
CDD, Lens.org-SEA	15
Waters Analytical Instruments Sdn Bhd	19
Bruker (Malaysia) Sdn Bhd	21
Novatiq Scientific Sdn Bhd	22
Thermo Fisher Scientific Pte Ltd	23
RGS Corporation Sdn Bhd	24&25
Metrohm (M) Sdn Bhd	31
Lab Science Solution Sdn Bhd	33
Inno Lab Engineering	34
Gaia Science (M) Sdn Bhd	35
Orbiting Scientific & Technology Sdn Bhd	38&39
IMM Certification Programs	43
Thermo Fisher Singapore	48
LabWare Malaysia	IBC
Perkin Elmer Sdn Bhd	OBC

**Disclaimers:** The views and opinions expressed in Berita IKM are those of the individual authors and not necessarily those of the IKM Publication Committee or the Malaysian Institute of Chemistry. Whilst every precaution has been taken to ensure the total accuracy of materials contained in Berita IKM, no responsibility for errors or omissions will be accepted.

### MESSAGE FROM THE PRESIDENT



2023 - An eventful & fruitful year for IKM

2023 is coming to the end and we think that it is an exciting and rewarding year for IKM. We have the following major events:

- Forum on IKM Looking Ahead & Moving Forward on 18th March, followed by
- 56th Annual General Meeting on the same day
- 9th Network of Inter-Asian Chemistry Educators (9NICE) Conference from 28 30th July in Kuching, Sarawak
- International Congress on Pure & Applied Chemistry (ICPAC)
   Bali 2023 from 12 17th September in Bali, Indonesia
- Kuiz Kimia Kebangsaan Malaysia (K₃M) 2023 on 5th October
- 16th Asian Conference on Analytical Sciences (ASIANALYSIS XVI) 2023 together with LabAsia 2023 from 9 – 12th October
- Malam Kimia & Presentation of IKM Awards 2023 on 1st December

In addition, IKM also took part in the following international events:

- 3rd Commonwealth Chemistry Annual General Meeting & 2nd Commonwealth Chemistry Congress 2023 from 23 25th May in Trinada & Tobago
- 21st Federation of Asian Chemical Societies (FACS) Annual General Meeting (21AGM) & 19th Asian Chemical Congress (19ACC) from 8 15th July in Istanbul, Turkiye
- 52nd IUPAC General Assembly (52GA) & 49th World Chemistry Congress (49WCC) from 18 25th August in The Hague, The Netherlands
- Polymer Society of Korea (PSK) Fall Meeting 2023 in Jeju Island, Korea from 11 14th October

IKM continues to play an active role in FACS, IUPAC, Commonwealth Chemistry and FAPS.

In addition to the above, the **IKM Professional Centre** carried out 34 training programmes. We also conducted **IKM LMIC Examinations 2023** from 2nd to 4th September and **IKM LMIC Refresher Course 2023** from 8th July to 20th August. 33 candidates passed the Examinations this year and they can be admitted to IKM as Licentiate members.

In term of **Membership Development**, our membership strength has increased from 5474 in 2022 to 5820 in 2023.

We continue to recognise excellence in chemistry. At Malam Kimia & Presentation of IKM Awards 2023, many, including students, graduates, young chemists, academics and senior IKM members were recognised for their excellence and contributions to IKM and advancement chemical sciences in Malaysia. Top of list is the IKM Gold Medal award 2023 which is presented to ChM Dr Mansor Ahmad.

IKM also carried out outreach programmes to the younger generation. We conducted 5 **Karnival Kimia Malaysia** (**K₂M**) **2023**, one each in Perak (Ipoh), Kedah (AIMST), Sabah (Maktab Sabah, KK). Johor (UTM) & Sarawak (Tapis).

Specifically, for IKM members, IKM Divisions & Committees conducted at least 10 hybrid symposia on specific thematic topics in 2023.

IKM also maintain close relationship & communication with other scientific and technological organisations such as ASM, BIM, COSTAM, MSA, IMM, MIFT, MPS, PRIM, IFM, DSM, MMA, MAVMA, IEM, MDA & many others. We

remain a major shareholder of KISM Sdn Bhd.

**BERITA IKM** 

IKM signed MoUs with 12 Malaysian universities including UM, USM, UKM, UTM, UPM, UiTM, UNIMAS, UMS, UMP, IMU, UTP, TAR UMT, to further develop the chemistry profession and advance chemical sciences in Malaysia.

Issue No. 153

We really have an eventful and successful year in 2023. However, we still have two important agendas to be resolved. One is the Amendment to Chemists' Rules which is still with the Attorney General's office waiting for final approval. The other is the **Programme Standards for Chemistry** in Malaysia which is also waiting for final approval from the Malaysian Qualification Agency (MQA). We hope to receive these approvals in the nearest future before the next AGM in March 2024.

We continue to look forward to 2024 to be even better.

I would like to take this opportunity to wish all our Christian friends and colleagues "Merry Christmas & Happy New Year".

**Datuk Dr Soon Ting Kueh** President, Institut Kimia Malaysia

Date: 2nd December 2023



IKM Council with MOSTI Minister, YB Tuan Chang Lih Kang during Malam Kimia 2023

### International Congress on Pure & Applied Chemistry (ICPAC) Bali 2023 12-17 September 2023

Institut Kimia Malaysia (IKM) successfully organized the ICPAC Bali 2023 at the Patra Bali Resort & Villa from 12-17 September 2023. ICPAC Bali 2023 is a major international scientific meeting covering all major areas of pure and applied chemistry. ICPAC was first held in 2016 in Kuching, Sarawak, Malaysia and ever since, it is being held annually in countries like Vietnam, Cambodia, Malaysia and Myanmar. ICPAC Bali 2023 is the seventh of a series of major international scientific meeting covering all areas of pure and applied chemistry including specific themed symposia.

The participants of ICPAC Bali 2023 come from all over the world, but majority are from Asia. For ICPAC BALI 2023, we have a total of 231 delegates coming from 10 countries. The Scientific programmes include 4 Plenary Lectures, 6 Keynotes, 151 Invited/Oral Lectures and 4 poster presentations, making a total of 165 presentations.

IKM would like to record sincere appreciation to the Joint Organizers, namely Himpunan Kimia Indonesia, the Foundation for Interaction between Science and Technology, Japan and Asia Chem Corporation (Japan) for collaborating in jointly organizing ICPAC BALI 2023. The theme 'Advancing Chemical Science for Sustainability & Environmental Protection in Asia and the Pacific' focused on advancing chemistry for meeting the UN Sustainable Development Goals 2030.

ICPAC BALI 2023 comprised the following General Session and Symposia:

- ICPAC Bali 2023 General Session (IGS)
- Symposium on Organic and Biomolecular Chemistry (OBC)
- Symposium on Inorganic and Coordination Chemistry (ICC)
- Symposium on Physical Chemistry and Catalysis (PCC)
- Symposium on Analytical and Environmental Chemistry & Engineering (AEC)
- Symposium on Polymer and Materials Chemistry (PMC)
- Symposium on Analytical Chemistry (ANC)
- Symposium on Biochemistry (BCM)

The main objective of ICPAC BALI 2023 is to promote the advancement of chemical sciences in the Asia Pacific region. The congress also leads to collaboration in research and networking among scientists from this part of the world. In parallel with rapid economic development in this part of the world, we hope that this region will also see significant scientific advancement that will give support to the socioeconomic transformation and elevate the level of science, technology and innovation to be on par with the best in the world.

### OFFICIAL OPENING CEREMONY

Prof Dr Ir H. Muhammad Nurdin, President Elect of Himpunan Kimia Indonesia welcomed the delegates to Bali and ICPAC Bali 2023 during the Opening Ceremony on Tuesday, 12 September. The Congress was officially opened by Datuk ChM Dr Soon Ting Kueh and witnessed by Bapak Dr I Wayan Serinah, Asisten Perekonomian & Pembangunan Sekda Provinsi Bali.





# ICPAC BALI 2023 TECHNICAL PROGRAMME PLENARY SESSIONS

### Plenary Lecture 1

Phenine Nanocarbon Molecules Hiroyuki Isobe, *University of Tokyo, Japan* 

### **Plenary Lecture 2**

N-Confused Porphyrinoids: Directional Evolution from Porphyrin Isomer to Functional NIR Dyes Hiroyuki Furuta, *Ritsumeikan University*, *Japan* 

### **Plenary Lecture 3**

Strategies for Highly Electrophilic and Stable Zinc and Magnesium Cations: Synthesis, Structure and Use in Catalysis

Samuel Dagorne, CNRS, France

### Plenary Lecture 4

Mesoporous Materials for Sustainable Environment and Energy

Joon Ching Juan, University of Malaya, Malaysia

### ICPAC Bali Welcome Reception

The welcome reception for the delegates were held at the Patra Bali & Resort poolside. The delegates got a feel of Bali's stunning sunset view with combination of delicious seafood and live music.

### **ICPAC Bali Banquet**

The Congress Banquet held on Friday, 15 September, was a grand occasion. About 150 delegates attended the Banquet. Datuk ChM Dr Soon Ting Kueh gave the Welcome Address to invite all delegates to sample the local dishes and enjoy the entertainment provided. A number of guests including Prof Takahashi and Datuk ChM Dr Soon also took to the stage with karaoke singing. All in all, it was a fun filled evening.

### **Congress Tours**

IKM organized 3 tours for the delegates with a local tour company. Delegates were allowed to choose one from the three tour packages offered.

Tour A started with visit to Pura Taman Ayun and Tanah Lot followed by lunch at De Jukung Restaurant. Taman Ayun Temple is one of the most attractive and most visited temples in Bali. This temple is declared as part of the world cultural tourism site by UNESCO as it holds a very strong and sophisticated architectural design. To many people, Tanah Lot epitomizes the romantic island of Bali. Tanah Lot

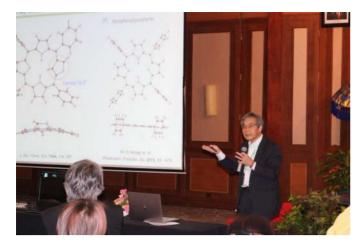


















means Land in The Sea, a perfectly fit name for its unique offshore settings. The silhouette of Pura Tanah Lot is one of the most popular iconic features of Bali. Tanah Lot temple was built to worship Bhatara Segara, or the sea God.

Tour B started with visit to The Blooms Garden and Ulun Danu Temple followed by lunch at Secret Garden Restaurant. The Blooms Garden Bali is a new tourist destination in the central Bali area, which has become the largest flower recreation park in Bali with a garden area of 4.5 hectares. Ulun Danu Beratan Temple is located at Candikuning Village, Baturiti Subditrict, Tabanan regency in Bali, Indonesia. The temple is one of nine "Kahyangan Jagat Temple" which are surrounding Bali Island, that makes it become one of the most important Temple for the Balinese, especially for Hindu.

Tour C started with visit to Gunung Kawi Sebatu, Saraswati Temple and Ubud Market followed by lunch at Bale Udang Ubud Restaurant . The Temple of Gunung Kawi Sebatu was built during the 11th century and is dedicated to Vishnu, the Hindu God of Water. Built on a natural spring this water temple has been used for centuries for purification rituals, and is still being actively used to this day. Saraswati temple is dedicated to honour the Hindu Goddess Saraswati, the goddess of learning, literature and art. This temple is very beautiful and artistic, so many tourists who come to see its charm, but for purposes of worship. Ubud Market is one of Bali's best markets, selling a variety of authentic and artisanal goods by the locals. All in all, the delegates enjoyed the excursion tours very much.

### **Conclusion and Appreciation**

ICPAC BALI 2023 was a successful and memorable event. On behalf of the Organizers, IKM would like to record our sincere appreciation to Himpunan Kimia Indonesia, the Foundation for Interaction between Science and Technology (Japan) and Asia Chem Corporation (Japan) for the support and collaboration in making ICPAC BALI 2023 a great success. We would also like to thank all ICPAC BALI 2023 Plenary and Keynote Speakers, all Invited, Oral and Poster Presenters, and all Session Chairpersons for contributing to the success of ICPAC BALI 2023. To all Members of ICPAC BALI 2023 Organizing Committee and all those who have contributed in one way or another in making ICPAC BALI 2023 a success, we would like to record our utmost appreciation.

Report by: **Datuk ChM Dr Soon Ting Kueh** Chairman, ICPAC BALI 2023 5 December 2023 The 16th Asian Conference on Analytical Sciences, ASIANALYSIS XVI 2023, was successfully organised at the Kuala Lumpur Convention Centre, Malaysia from 9-12 October 2023, leaving a profound mark on the field of analytical sciences. This prestigious event held in conjunction with LabAsia 2023, brought together leading experts, scholars and professionals from around the globe. This year's theme "Advancing Analytical Sciences for Sustainable Development," encapsulated our commitment to pushing the boundaries of analytical research for the betterment of our communities and the world. The conference also incorporated the 19th Asia-Pacific International Symposium on Microscale Separations and Analysis 2023 (APCE 2023), Symposium on Forensic Science and Symposium on Halal Testing and Authenticity. It was a joint effort of Malaysian Institute of Chemistry (IKM) with the Department of Chemistry Malaysia (JKM) and the Forensic Science Society of Malaysia, allowing us to harness the collective expertise of multiple organizations and broaden the range of insights shared at the event. It was a testament to the power of collaboration in advancing analytical sciences.

The event's sponsors, including Malaysia Convention & Exhibition Bureau (MyCEB), Radius Exhibits & Interior Sdn Bhd/Agilent Technologies, CLMO Technology Sdn Bhd, Thermo Fisher, Waters Analytical Sdn Bhd, Orbiting Scientific & Technology Sdn Bhd, Interscience Sdn Bhd, Lab Science Solution (LSS), and Inno Lab, played a pivotal role in making this conference a reality. Their generous contributions made a significant impact on the success of ASIANALYSIS XVI 2023. The international scope of

ASIANALYSIS XVI 2023 was evident in the participation of 311 attendees from 22 countries, including Bangladesh, China, the Czech Republic, Germany, Hong Kong, India, Italy, Japan, Jordan, the Netherlands, Pakistan, the Philippines, Poland, Russia, Singapore, South Korea, Switzerland, Taiwan, Thailand, United Arab Emirates, Vietnam, and, of course, Malaysia. This diverse representation contributed to the richness of discussions and knowledge exchange throughout the conference.

The ASIANALYSIS International Advisory Board Meeting took place on 8 October 2023 providing a platform for strategic discussions and decision-making. This gathering of esteemed advisors and experts in the field of analytical sciences marked a pivotal moment in shaping the future direction of the ASIANALYSIS conference series. The meeting served as an opportunity to exchange insights, share experiences and set the course for upcoming conferences, reinforcing the commitment to excellence and innovation in analytical sciences. This was followed by registration process the next day with attendees from around





the world eagerly signing in to embark on a journey of scientific discovery and collaboration. The welcome reception provided a warm and convivial atmosphere for participants to network, share insights, and establish connections. It was an opportunity for everyone to connect, exchange ideas, and set the stage for several days of fruitful discussions during the conference.

On 10 Oct 2023, the day kick-off with the Joint Opening Ceremony of ASIANALYSIS XVI, APCE 2023, and LABASIA 2023. It was a momentous occasion that marked the convergence of scientific excellence and innovation. The event commenced with a warm welcome address by ChM Dr. Malarvili Ramalingam, the Chairperson of ASIANALYSIS XVI 2023, setting the stage for an exciting day ahead. Professor ChM Dr. Juan Joon Ching, Chairperson of APCE 2023, shared his insights, followed by a significant address from Ms. Geonice Chong, Lab Asia Event Manager, emphasizing the importance of such collaborative endeavors. ChM Halimah binti Abdul Rahim, the Director General of the Department of Chemistry Malaysia, shared her perspective, and the grand moment arrived with the Opening Address by Datuk ChM Dr. Soon Ting Kueh. President of Institut Kimia Malaysia and Advisor of ASIANALYSIS XVI 2023. The ceremony continued with two engaging Plenary Lectures. Plenary Lecture 1, titled "The Road to New Frontiers: A Sustainable Future Opened by OptoBioanalysis" by Prof. Takeaki Ozawa from the University of Tokyo, Japan, showcased the latest advancements in opto-bioanalysis. Plenary Lecture 2, presented by Prof. Mohd Rafie Johan from the Nanotechnology and Catalysis Research Center, Malaysia, explored the innovative "7-in-1 Halal PCR Test Kit." These lectures paved the way for fruitful discussions and knowledge sharing throughout the conference. Following this, the programme culminated with the ribbon-cutting ceremony of LABASIA 2023, symbolising the beginning of an exciting and knowledge-rich conference. The day continued with poster session and oral presentation Session I Theme: Sensor Technologies; Keynote Lecture 1: From Local Wisdom to Initiatives in Employing a Natural Reagent and Ngs-Index for Sustainable Analytical Chemistry presented Assoc. Prof. Dr Wong Pei Mun from University Malaya on behalf of Prof. Kate Grudpan of Chiang Mai University, Thailand; Session II Theme: Sensor Technologies &

Microscopy and Imaging Technology and finally Session III: Microscopy and Imaging Technology, Green Analytical Chemistry & Cosmetic and Pharmaceutical Analysis. The diverse range of sessions provided a holistic view of the analytical sciences landscape.

On the third day, the programme started with a keynote lecture by Prof. Janusz Lipkowski, Poland, about Clathrate Chromatography: Past and Present, followed by two plenary lectures delivered by Prof. Heesun Chung from Sungkyunkwan University, South Korea, and Prof. Uday Maitra from the Indian Institute of Science, Bengaluru, India. The lectures presented on October 11, 2023 were as follows: (i) Plenary lecture 3: The Role of Forensic Science Societies on the Development of Forensic Science. In her keynote lecture, Prof. Heesun Chung presented the historical and first developments of the forensic technology working group. (ii) Plenary lecture 4: A General Photo-Luminescent Sensor Platform for Specific Drugs, Hydrolases, and Small Molecules. Prof. Uday highlighted the impact of photoluminescence on multireactions in chemistry.

After plenary lectures completion, the next session focused on oral presentation sessions with various research themes:

- i) Chromatography and Separation Techniques, Green Analytical Chemistry & Mass Spectrometry
- ii) CE/LC-Mass Spectrometry
- iii) Electrophoretic Separation and Sample Pretreatment
- iv) Questioned Documents, Fire Investigation, Human Identification, Seized Drugs & Disaster Victim Identification
- v) Green Analytical Chemistry & Computational and Chemometric Approach
- vi) Mass Spectrometry Techniques and Miniaturized Devices
- vii) Polymer Nanotechnology & Polymer and Materials Science

A significant portion of the presenters shared their research findings, with the majority emphasizing advancements in analytical methods and the utilization of Mass Spectrometry (MS) for the detection of food and environmental samples. Notably, the conference also shed light on how lon Chromatography (IC) and MS detection techniques can be enhanced for more accurate results. Topics such as electrophoresis, titration, separation processes, and cutting-







December 2023

Issue No. 153



edge instrumentation garnered substantial attention. Additionally, the conference delved into the realm of Green Analytical Chemistry and Computational and Chemometric Approaches, highlighting the use of nanostructured materials in liquid-liquid extraction, synthesis, and catalysis, along with noteworthy advancements in the synthesis and characterisation of Schiff bases as potential anti-malarial agents.

The thematic areas of Electrophoretic Separation and Sample Pretreatment and Mass Spectrometry Techniques and Miniaturized Devices continued to focus on innovative electrophoresis methodologies and analytical strategies utilizing MS technology. In the domain of polymer nanotechnology and materials science, the majority of

researchers in this session concentrated their efforts on developing advanced polymer materials derived from natural rubber, with applications ranging from CO2 capture to biocomposites. Furthermore, some noteworthy discoveries in fundamental chemical bonding within polymer studies were unveiled, adding depth and significance to the field.

On the evening of Wednesday, October 11, 2023, we had the pleasure of hosting a delightful dinner for both our esteemed participants and members of our delegation at the Impiana KLCC Hotel. As the evening unfolded with a sumptuous meal and refreshing drinks, it created the perfect backdrop for an engaging exchange of ideas and warm social interactions among all in attendance.



Issue No. 153 December 2023









The final day of the conference, Thursday, October 12, 2023, started with several keynote lectures presented by researchers from Japan, Malaysia, Vietnam, and Thailand and one plenary lecture by Prof. Doo Soo Chung, Seoul National University, Korea. The plenary lecture presented by Prof. Doo Soo Chung is Assisting Electrophoresis and Exploring Photophoresis. In his lecture, Prof. Doo Soo Ching presented the deep research related to fundamental capillary electrophoresis and photophoresis that has been explored in his working group.

After the completion of the plenary lecture session, the next session focused on various themes as follows:

- Food Safety and Authenticity & Spectroscopy and **Applications**
- Spectroscopy and Applications
- Environmental Science
- Electrophoretic Separation
- Applications in Pharmaceutical and Chemical Analysis
- Applications in Biomedical and Environmental Sciences







Issue No. 153 **December 2023** 

As the event drew to a close, the atmosphere gradually settled, and the Chair of the 16th Asian Conference on Analytical Sciences (Asianalysis XVI) 2023, Dr. Malarvilli, extended her heartfelt appreciation. She expressed her gratitude to the dedicated committee members for their tireless efforts, acknowledged the presence of esteemed honorary guests, and thanked the valuable participants who had traveled from across Malaysia and overseas to attend and support this remarkable event. The evening concluded with a memorable photo session, capturing the spirit of collaboration and knowledge-sharing that had defined the conference.























Conference banquet at Impiana KLCC hotel

# <u>Arachem</u>

# **IDEXX Automated Water Microbiology Testing System**



Can be operated by **ANYONE** 



APPROVED by U.S. SEPA



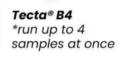


Step 1. Pour 100 mL sample into testing cartridge.

E. coli & total coliforms

Fecal coliforms

Step 2. Place cartridge in instrument and use control panel to start test.



Step 3. Results sent via email as soon as 2 hours for positive results.



Mobile Lab

### Tecta® B16 \*run up to 16 samples at once

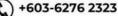
## **IDEXX Tecta**

- A complete, self-contained automated microbiology testing system capable of providing quantitative results on-site with unprecedented time-to-result performance.
- Full automation of test analysis and interpretation eliminates the need for subjective, visual interpretation of results.
- A written email is produced for each sample tested.
- Enhanced ease of use means that even non-technical personnel can initiate testing and perform all required quality-assurance procedures to ensure laboratory-grade test results.

For more details









December 2023

**BERITA IKM** 

### **EDUCATIONAL VISIT & SOCIAL HIGH TEA GATHERING** BY IKM PERAK BRANCH

The Educational Visit by IKM Perak Branch to Sibelco Tinex Kaolin Sdn Bhd (Tapah) was held on 20th July 2023. About 16 participants joined this visit. The tour started with an introduction of the company by Ms Farhana, Factory Operation Manager. After the introduction, we were separated into 2 groups to visit the factory. We visited the Quality Control Laboratory, Warehouse and Production Process Equipment premises. The visit ended around 12.15 pm. We had a photo session with the staff. The participants were provided lunch at the factory.



IKM Perak Branch held the annual Social Gathering on Sunday, 24th September 2023 at MH Hotel, Ipoh. The High Tea was attended by 38 people comprising 28 IKM Perak Branch members and 10 family members. We enjoyed catching up with old friends and making new ones while enjoying tasty food. The relaxed atmosphere was conducive for networking informally. We look forward to next year's gathering.



# **Discover more with CDD Vault**

CDD Vault is a complete platform for drug discovery informatics, hosted through an intuitive web interface.



Helps your project team manage, analyze, and present chemical and biological entities and assay data.

# Smart Software Saves Time®



Capture, Search, Protect & Work Together

CDD Vault is the ultimate electronic lab notebook, integrated directly with the chemical and biological assay data repositories and our full analysis and visualization environment. Designed for project teams, you can archive and search all of your experiments with ease and collaborate securely.

### **Inventory**

Keep track of compounds

Debit, Track & Locate

CDD Vault is an integrated inventory system for your compounds and reagents. Stay informed of the current status of your inventory whether in-house or shared externally.

### Activity and Registration Store & organize your data

Store, Search, Analyze & Report

CDD Vault is a modern web application for your entity registration, assay data management and SAR analysis. It lets you organize drug discovery data and collaborate across project teams. It is simple to use and extremely secure.

### Visualization

Plot data sets & mine them

Interact, Calculate, Compare & Publish

CDD Vault is a dynamic analysis tool for drug discovery data. It lets you plot and analyze large data sets to find interesting patterns, activity hotspots and outliers. With publication quality graphics, it is easy to illustrate and share results across project teams.





It is our great pleasure to be invited to attend the 2023 Annual Fall Meeting of the Polymer Society of Korea (PSK). This is the largest academic polymer conferences in Korea held on 11 – 14th October 2023 at Jeju International Conventional Center (ICC Jeju), Jeju, Korea. An inspiring and eye-opening visit to ICC Jeju, led by the IKM President (Datuk ChM Dr Soon Ting Kueh) and joined by IKM Division of Polymers and Materials Chemistry members, Prof ChM Dr Rusli Daik (UKM) and Prof ChM Dr Phang Sook Wai (TAR-UMT). Besides presenting the invited lectures, the purpose of this visit is to build up good relationship between Polymer Society of Korea (PSK) and IKM as well as to seek for the potential collaboration between IKM and PSK in MACRO 2026.

The conference consists of 8 regular sessions. In addition, there are 12 special sessions such as (1) Exploring the Frontiers of Polymer Science and Technology: From Fundamentals to Applications I, II, (2) LOTTE Chemical Symposium: Every Step for Batteries, (3) LG Chem Symposium: Materials for Carbon Reduction: CCU & Renewable Energy, (4) KRICT Symposium: Advanced Materials Technologies of KRICT. (5) Advanced Materials Technology for Next-Generation Energy Storage/Conversion, (6) Current Status and Issues in Microdisplay, (7) Synthesis and Application of Functional Polymer Networks, (8) Polymer Synthesis: Essential Tool for Our Future, (9) Soft Robotics, (10) Quantum Dot-based Next-generation Display Materials/ Devices, (11) Advanced Functional Materials and Applications for The Future Industries (MOTIE), and (12) Symposium on Future Materials (MSIT).

This was a huge meeting with about 2,000 participants including 1,100 oral and poster presentations. PSK members and special guests from various countries including Malaysia, Australia and Taiwan, were welcomed in a Gala



Dinner at ICC Jeju on 11th October 2023. In a brief overview that was presented by the Chairman of PSK Past Presidents Council, Prof Dr Jung-II Jin (Emeritus Professor of Korea University), Prof Dr Jin traced the history and introduction of PSK and how the society was conceptualized in 1977 in Korea by the founders.

PSK invited the top polymer researchers from several countries including Australia, Taiwan and Malaysia to present the invited lectures under the session "Exploring the



Frontiers of Polymer Science and Technology: Fundamentals t o Applications". Prof ChM Dr Rusli Daik presented his invited lecture on "Polymer Organogel and Electroactive Polymers" on 12th October 2023. On 13th October 2023, Prof ChM Dr Phang Sook Wai presented her invited "Binary lecture o n Photocatalyst of Leaf Shape Polyaniline-TiO2 Nanocomposites for Photodegradation of Toxic









Organic Dyes". It is really a golden platform for polymer scientists from various countries to share their research experience as well as research culture at this conference. Last but not least, the Organizing Chair of PSK 2023 presented each of the invited speakers with a traditional Korean souvenir and certificate of appreciation.

The PSK Annual General Meeting was held on 12th October 2023 at ICC Jeju. At the end of the meeting, IKM President, Datuk ChM Dr Soon Ting Kueh was invited to give a brief introduction about IKM as well as promoting ICPAC Mongolia





2024, IUPAC 2025 and MACRO 2026 to all PSK members. Datuk ChM Dr Soon also presented Sarawak pepper as souvenir and brochures of conferences organized by IKM to PSK Acting President, Prof Dr Yun-Hi Kim from Gyeongsang National University.

IKM teams including Datuk ChM Dr Soon, Prof ChM Dr Rusli and Prof ChM Dr Phang felt highly appreciated by the warm hospitality shown by the PSK Organizing Committee, especially Prof Dr Daewon Sohn from Hanyang University and Prof Dr Myung-Han Yoon from Gwangju Institute of Science and Technology (GIST). We hope to maintain good friendship with PSK members and also polymer scientists from different countries through this kind of beneficial conference in the near future.

Report by Datuk ChM Dr Soon Ting Kueh, Prof ChM Dr Rusli Daik & Prof ChM Dr Phang Sook Wai

# Technical Visit to CeramTec Innovative Ceramic Engineering (M) Sdn. Bhd. by IKM Division of Polymers and Materials Chemistry

To many of us who could make it to the Visit at CeramTec Innovative Ceramic Engineering (M) Sdn. Bhd. in Senawang Negeri Sembilan on 27th September 2023, it has been an eye-opening event since this is the first official visit to a hand glove dipping former manufacturer. There were thirteen of us including a few members from the glove industries who attended the visit. As soon as the team arrived, they were greeted by the sales executive headed by Mr Shankar who started the programme with a corporate video of the company which headquarters is in Germany. All in all, the company has a total of eight other group headquarters all over the world and-one in Senawang Negeri Sembilan namely CeramTec Innovative Ceramic Engineering (M) Sdn. Bhd. It-specialises in manufacturing dipping formers for various types of hand gloves. CeramTec has been the world's most advanced manufacturer of hand glove dipping formers that developed its special materials for manufacturing the formers. CeramTec quality dipping formers come with the following material properties that have low and constant Coefficient of Thermal Expansion, High Flexural Strength and a very fine and uniform microstructure that resists corrosion. CeramTec guarantees its customers with a uniform and tight wall thickness tolerance of +/-0.5mm from its fully automated slip-casting machines. A few other standards are also observed within the predetermined standard tolerance. Glove height is defined as less than 400 +/- 4mm and 400-555 +/- 1.5%, and glove circumference as +/-2% of nominal values and +/-3% of fingers. On request, a tighter consumer tolerance can also be offered by CeramTec.

To ease the visit, the participants were required to follow a process flow that started with a briefing on a Model, followed by a Master Mould and a demonstration on a

Working Block; Casting Mould and finally a Hand Former is manufactured following a customer's specification and needs. Certain processes have been mechanized to ease and shorten the overall processes flow. No matter how important mechanization are to ease the manufacturing processes of the hand former, the Modelling is still done manually at its Modelling Department as it requires imagination of ideas and creative thinking when it comes to creation of a Model following customer's requirements, specifications, and needs.

With decades of experience in the factory's modelling department, its specially trained and highly experienced personnel can produce models to customer's specifications and needs on a very short notice. By means of special modelling techniques, exact reproduction and pattern uniformity are assured on a long-term basis. Although CeramTec develops exclusive models following the design of its customers; they also have in their possession many standards model available.

The company in Senawang is planning to automate all the processes involved in manufacturing the dipping formers, in time to come, to be more efficient and sustainable. The visit ended with a thank you speech by the Division's Chairman Professor Dr Rusli Daik to CeramTec for permission to visit the dipping formers manufacturing plant in Senawang, Negeri Sembilan. To mark our appreciation, a special glass plaque was handed over to CeramTec Innovative Ceramic Engineering (M) Sdn. Bhd. by Professor Dr Rusli Daik to Mr Shankar and his team.

### Report by

Muhammad Syaarani Danya, Dr Kartini Alias & Dr Faridah Hanim Ab Hanan













The pace of innovation in current day biological research demands the highest levels of reproducibility and traceability. Andrew Alliance has developed an intelligent cloud-based **software environment** called OneLab within which experiments can be intuitively designed, repeatably executed, and tracked through a rapidly evolving ecosystem of **connected devices** and accessories that it is building together with partner organisations. Andrew Alliance has developed the Andrew+ Pipetting Robot and the Pipette+ Intelligent Pipetting System, both of which seamlessly connect with OneLab. Andrew Alliance is an eco-friendly CO<sub>2</sub>-Neutral Certified Company, dedicated to developing sustainable solutions.

### Better Experiment, Better Data, Better Science



### OneLab

Andrew Alliance is connecting users to devices with freely available software (https://onelab.andrewalliance.com). OneLab enables the intuitive design of experiment protocols, that can be executed and tracked on connected devices. Protocols can be easily shared with other users via the Cloud.



### Andrew+

Andrew Alliance develops intelligent robots that allow scientists to exploit universal protocols, without any robotics knowledge. Andrew+ executes OneLab protocols enabling fully automated, traceable, and highly repeatable pipetting, in addition to an expanding range of more complex manipulations.



### Pipette+

Andrew Alliance is reinventing manual pipetting by adapting electronic pipettes to connect by Bluetooth to an intelligent stand, which is networked to OneLab by WiFi/Ethernet. The resulting 'system' is called Pipette+, and ensures the most repeatable pipetting on the market, through guided, fully traceable pipetting.



Red Herring Award for the Top 100 Most Innovative European Companies



Robobusiness Game Changer Award



IBO Laboratory Equipment Industrial Design Award



MIPTEC New Product Innovation Award



SLAS New Product Award









### YB MOSTI Minister's Visit to IKM

YB Minister of Ministry of Science, Technology and Innovation (MOSTI), Tuan Chang Lih Kang, paid a visit to IKM on 24th October 2023. IKM Council, led by the President, Datuk ChM Dr Soon Ting Kueh, welcome the Minister and his entourage of 8 persons at the Taman Tun Dr Ismail office at 2.30 pm. A Welcome Reception was held for the Honourable Minister and his team.

Datuk ChM Dr Soon briefed the Minister and his team with a powerpoint presentation on "IKM 2023 and beyond". He traced the development of IKM since its inception in 1967 to present days with close to 6,000 members and 7 branches all over Malaysia. Over the years, IKM has developed into a well-established professional scientific organization, recognized by the science and technology fraternity in Malaysia and the chemistry community all over the world. IKM also plays a very active role in promoting the chemistry profession and advancing chemical sciences in Malaysia.

The Honourable Minister was impressed with IKM's development and achievements. He expressed the support of the Ministry of Science, Technology and Innovation in strengthening the chemistry profession and advancing chemical sciences in Malaysia. He hoped that IKM will continue to play a key role in making chemical sciences as an enabler in the socio-economic and sustainable development in Malaysia.

Regarding the future directions of IKM, Datuk Dr Soon highlighted the following major thrusts in the near future:

- Professional Development Continuous Professional Development (CPD) Programmes starting 2027
- Advancing chemical sciences in Malaysia Establishment of the National Science Council under MOSTI
- Younger generation STEM, chemistry education & outreach, public understanding & appreciation of chemistry programmes
- National & International collaboration IUPAC 2025, MACRO 2026 & 21ACC 2027

He hopes that MOSTI will give support to these initiatives of IKM and making chemistry a strong component in national sustainable development. The Honourable Minister replied that MOSTI will definite support these IKM programmes in making chemistry as a key enabler in the sustainable development of Malaysia.

The Honourable Minister also accepted IKM's invitation as the Guest-of-Honour at Malam Kimia and the Presentation of IKM Awards 2023 on 1st December 2023.













# Modern Quality Control and Failure Analysis of Rubber and Plastics







### ■ Quality Control

Verify the chemical identity of raw materials and products: Polymer pellets, elastomers, monomers, fillers, additives, plastic products

### ■ Failure Analysis

Determine the chemical reason behind product failure: Identify contaminations and detect wrong compositions

### ■ Product Development

Increase the knowledge about your product's composition: Check the distribution of components in complex materials and investigate laminates

### ■ Reverse Engineering

Identify the composition of competitor products.

Bruker's FTIR spectrometer ALPHA provides a quick, reliable and universally applicable identity control of your incoming raw materials.

The FTIR microscope LUMOS allows the selective analysis of contaminations and of individual components in complex materials. This makes the LUMOS a powerful analytical tool for effective failure analysis and product development.

BRAVO makes Raman analysis accessible to everybody. New technologies especially designed for BRAVO provide an efficient verification of the widest range of materials.

Bruker FM, available for the new INVENIO R&D spectrometer, is an FTIR technology capable of covering the FIR/THz and MIR spectral ranges in a single scan. This unique functionality once again demonstrates Bruker's leadership and expertise in continuing to improve the use of infrared analysis and to meet new challenges in various application fields.

Contact us for more details: www.bruker.com/optics

FTIR





# **TESCAN RISE MICROSCOPY**



World's first fully-integrated Raman Imaging and Scanning Electron Microscope

Correlative microscopy on a new level – Complementing ultra-structural SEM with molecular Raman imaging

The RISE Microscope combines all features of a standalone SEM and a top-class confocal Raman imaging microscope within one instrument.

Quick and convenient switching between Raman and SEM measurement.

Automated sample transfer from one measuring position to the other.

Integrated software interface for user-friendly measurement control.

Correlation of the measurement results and image overlay.

# **IMAGING SERVICES**

- Scanning Electron Microscope with EDX (SEM-EDX)
- Field Emission Scanning Electron Microscope (FESEM)
- Dual Beam FIB-SEM (Galium source)
- Plasma FIB-SEM (Xenon source)
- Raman/AFM SEM

- 3D CT Scan
- 2D X-ray Imaging
- Ion Milling for SEM and TEM sample preparation
- Fourier Transform Infrared Spectroscopy (FTIR)

**NOVATIQ SCIENTIFIC SDN BHD (1269613-H)** 

Mobile: +6018-3219989 Email: enquiry@novatiqs.com Website: www.novatiqs.com



Mass spectrometry

# Rethink what is possible

Orbitrap Astral mass spectrometer

Science isn't limited by ideas but by the ability to realize them. That is the inspiration behind the novel technology of the Thermo Scientific™ Orbitrap™ Astral™ mass spectrometer: to redefine what is possible for discovery and translational research. Faster throughput, deeper coverage, and higher sensitivity to empower you to accomplish your aspirations.





Learn more at thermofisher.com/OrbitrapAstral

thermo scientific

For Research Use Only. Not for use in diagnostic procedures. © 2023 Thermo Fisher Scientific Inc. All rights reserved.

All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. AD001724-EN 0423M

# Do you know your soil of your for





# Malam Kimia & Presentation of IKM Awards 2023 1 December 2023

Institut Kimia Malaysia (IKM) successfully organized the Malam Kimia & Presentation of IKM Awards 2023 on 1 December 2023 at One World Hotel, Petaling Java, Selangor. YB Tuan Chang Lih Kang, Minister of Science, Technology & Innovations was the Guest-of-Honour at this event. Malam Kimia is an annual gala event where we recognise excellence in chemistry and contributions to IKM and the development of chemistry in Malaysia. The awards presented were as follows: K<sub>3</sub>M Top Scorer Awards, IKM Merit Awards, IKM Special Merit Awards, IKM Graduate Chemistry Medals, IKM Research Prize in Polymer & Materials Science, IKM/RSC-Synthomer Award in Polymer Science, Tan Sri Datuk Ong Kee Hui Postgraduate Chemistry Medal, Outstanding Young Chemist Awards, IKM Citation Awards, New Fellows of IKM, IKM Gold Medal and IKM Laboratory Excellence Awards.

This year we presented IKM Licentiate Examination Certificates to those who passed the IKM LMIC Part 1 Examination in 2023. A total of 33 candidates passed the examination in 2023. Malam Kimia 2023 managed to attract a total of 663 guests comprising IKM members, S&T organizations, universities and industries as well as well-wishers. The event was a great success. On behalf of the Organizers, IKM would like to record our sincere appreciation to Ministry of Science, Technology and Innovation (MOSTI), IKA Works (Asia) Sdn Bhd, Trienekens (Sarawak) Sdn Bhd, SugarBomb Worldwide Sdn Bhd, Mirror Gifts Resources, Anton Paar Malaysia Sdn Bhd, Scot Printers, Inno Lab Malaysia Sdn Bhd, all IKM Branches and and all those who have contributed to the success of Malam Kimia & Presentation of IKM Awards 2023.



Award	Recipient	
IKM Gold Medal	ChM Dr Mansor Bin Ahmad @ Ayob	
New Fellow of IKM	Prof Dato' ChM Dr Mohd Jamil Bin Maah, ChM Teo Chook Kiong, Prof ChM Dr Zainab Binti Ngaini, Assoc Prof ChM Ts Dr Cheng Sit Foon	
IKM Citation Award	ChM Aishah Binti Abdul Aziz, ChM Dr Chong Mun Hwa, ChM Jocelyn Agnes Lazarus, ChM Mohd Shafizi Bin Ab Aziz, Assoc Prof ChM Dr New Siu Yee, ChM Ng Choon Heng, ChM Dr Sheela Chandren	
IKM Outstanding Young Chemist Award	Academic - Assoc Prof ChM Dr Gan Chee Yuen Industry - ChM Ts Dr Yeoh Beng Hoong	
Tan Sri Datuk Ong Kee Hui Postgraduate Chemistry Medal	Dr Wan Hafizi Bin Wan Ishak	
IKM/RSC – Synthomer Award in Polymer Science sponsored by Synthomer Sdn Bhd	ChM Dr Eleen Dayana Binti Mohamed Isa	
IKM Research Prize in Polymer and Materials Science sponsored by HARPS Holdings Bhd and Synthomer Sdn Bhd	Chia Min Rui, Dania Adila Binti Ahmad Ruzaidi, Junaid Mohammad Khan, Mhonishya Krishnamoorthy, Mohd Faridzuan Bin Majid, Nur Fattima' Al-Zahara' Binti Tuan Mohamood	
IKM Graduate Chemistry Medals	Chan Kai Qing, Chang Wei Jin, Izzhan Zafri Bin Haron, Lau Thorng En, Nuratiqah Ramadaniah Binti Mohammad, Tan Yi Ying, Tay Chia Pao	



MALAM KIMIA
&
PRESENTATION OF IKM AWARDS 2023

December 2023

K3M Top Scorer Award Winners 2023			
O Level			
Ngian Li Jue	SMK Tung Hua		
Oh Keng Yong	SM Pay Fong		
Er Zhi Xuan	SMK Damansara Jaya		
Chris Law Meng Jin	SMK Tung Hua		
A Level			
Bernice Chew Ching Siew	SMK Tung Hua		
Tiffany Ting Fen Ni	SMK Tung Hua		
Wong Ching Shuen	MCKL College (Penang, PYKETT Campus)		
David Luk Ku Chian	Lodge International School		
Kuok Jun Ling	SMK Tung Hua		

The IKM Merit Award Recipients		
Recipients	Parent	Examination
Abner Ju Jing Kui	Petronella G Ah Tung @ Petronella Gerald	SPM 2022
Adila Fasiha Binti Pauzer	Pauzer Bin Ahmad / Azlina Binti Shafawi	SPM 2022
Chua Heng Kok	Tan Hui Choo	SPM 2022
Izzah Masturina Binti Khairul Hadi	Khairul Hadi Bin Hj. Abd Raof	SPM 2022
Lee Yen Nee	Poon Poh Fong	SPM 2022
Tay Zi Qing	Tay Meng Guan, Assoc Prof ChM Dr	SPM 2022
Tee Yan Qi	Tee Kai Ming	SPM 2022
Amir Firdaus Bin Mohd Hasnain	Zainab Binti Ngaini, Prof ChM Dr	Foundation 2022

IKM LMIC Part I Examination 2023 Certificates Recipients		
Aa'ishah Binti Abd Gafar	Nur Liyana Bt Ruslan	
Aimi Aishah Binti Arifin	Pasilatun Adawiyah Binti Ismail	
Aqilah Nabihah Binti Omar	Rafiq Farhat Bin Abdul Razak	
Chia Vi Vien	Rozilawati Binti Mohamad Achil	
Haziqah Binti Norazmi	Samsiah Binti Sahap	
Jamilahtul Hayati Binti Ahmad Nadzeri	Siti Khadijah Binti Zainal Abadin	
Kalaivaani Devi A/P Shanmugam Pillai	Siti Nur Izati Binti Azmi	
Leela A/P PV Poul	Dr Tan Chu Shan	
Mazria Haslina Binti Md Akir	Tan Jing Lin	
Mohamad Fauzi Bin Hussin	Tan Ying Hui	
Mohamed Helmi bin Shari	Teh Kheng Liong	
Muhamad Ahnaf Fudhail Bin Maznun	Teng Cai Sze	
Dr Muhammad Fauzi Bin Abd Jalil	Teoh Qiao Yi	
Muhammad Zulhusni Bin Mohmad	Tung Xiao Dan	
Dr Norliza Binti Abdul Latiff	Uyun Norohmah Binti Mohd Ali	
Nur 'Afini Binti Abdul Rauf	Wan Noorfazliana Umirah Binti Wan Yusoff	
Nur Ashikin Binti Ab Rahman		

# 2023 IKM PRESIDENT LABORATORY AWARD Category 2: Quality Assurance / Quality Control Laboratories from Industries

PETRONAS PENAPISAN (TERENGGANU) SDN BHD, ANALYTICAL TECHNOLOGY SERVICES

Category 3: Commercial Testing Laboratories
UNIPEQ SDN BHD

### IKM LABORATORY EXCELLENCE DIAMOND AWARD

(25 consecutive years of IKM Laboratory Excellence Award) SIME DARBY PLANTATION RESEARCH SDN BHD, LS LABORATORIES CAREY ISLAND, PULAU CAREY, SELANGOR

### IKM LABORATORY EXCELLENCE PLATINUM AWARD

(20 consecutive years of IKM Laboratory Excellence Award) FOREST RESEARCH INSTITUTE MALAYSIA (FRIM), WOOD COMPOSITE TESTING LABORATORY, KEPONG, SELANGOR

### IKM LABORATORY EXCELLENCE GOLD AWARD

(15 consecutive years of IKM Laboratory Excellence Award)

- \* EUROFINS NM LABORATORY SDN BHD, NILAI, NEGERI SEMBILAN
- \* MALAYSIAN REFINING COMPANY SDN BHD, SUNGAI UDANG, MELAKA
- \* PENGURUSAN AIR SELANGOR SDN BHD, SOUTHERN REGIONAL LABORATORY, SG. SEMENYIH WATER TREATMENT PLANT, PUTRAJAYA

### IKM LABORATORY EXCELLENCE SILVER AWARD

(10 consecutive years of IKM Laboratory Excellence Award)
PETRONAS GAS BERHAD, ANALYTICAL TECHNOLOGY

- \* PETRONAS GAS BERHAD, ANALYTICAL TECHNOLOGY KERTIH, KERTIH, KEMAMAN, TERENGGANU
- PETRONAS GAS BERHAD, ANALYTICAL TECHNOLOGY KERTIH, UTILITIES KERTIH, KERTIH, KEMAMAN, TERENGGANU
- PETRONAS GAS BERHAD, ANALYTICAL TECHNOLOGY UTILITIES GEBENG, KUANTAN, PAHANG
  - SIME DARBY PLANTATION RESEARCH SDN BHD, LS LABORATORIES SABAH, TAWAU, SABAH

### **Chemistry**

BERITA IKM December 2023 Issue No. 153 in Malaysia

### IKM LABORATORY EXCELLENCE AWARD 2023

ALS Technichem (M) Sdn Bhd, Johor Bahru, Johor
ALS Technichem (M) Sdn Bhd, Shah Alam, Selangor
ASEAN Bintulu Fertilizer Sdn Bhd, Bintulu, Sarawak
Asiatest Laboratory Service Sdn Bhd, Kota Kinabalu, Sabah
Bio Synergy Laboratories Sdn Bhd, Petaling Jaya, Selangor
Borneo Samudera Sdn Bhd, Central Laboratory, Tawau,
Sabah

Chemsain Konsultant Sdn Bhd, Kota Kinabalu, Sabah Chemsain Konsultant Sdn Bhd, Shah Alam, Selangor Eurofins NM Laboratory Sdn Bhd, Nilai, Negeri Sembilan

ExcelVite Sdn Bhd, Chemor, Perak
Fedmas Assay Office Sdn Bhd, Georgetown, Pulau Pinang
FGV Agri Services Sdn Bhd, FGV Analytical Laboratory,
Bandar Jengka, Pahang

FGV Agri Services Sdn Bhd, FGV Analytical Laboratory, Lahad Datu, Sabah

FGV Johor Bulkers Sdn Bhd, FJB Testing Laboratory, Pasir Gudang, Johor

Forest Research Institute Malaysia (FRIM), Natural Product Quality Control Laboratory, Kepong, Selangor

Forest Research Institute Malaysia (FRIM), Soil Chemistry Laboratory, Kepong, Selangor

Forest Research Institute Malaysia (FRIM), Wood Composite Testing Laboratory (WCTL), Kepong, Selangor

Forest Research Institute Malaysia (FRIM), Wood Preservative Analytical Laboratory, Kepong, Selangor Indah Water Konsortium Sdn Bhd, Central Laboratory Services. Kuala Lumpur

Indah Water Konsortium Sdn Bhd, Northern Laboratory Services, Ipoh, Perak

Indah Water Konsortium Sdn Bhd, Penang Laboratory Services, Bukit Mertajam, Pulau Pinang

Indah Water Konsortium Sdn Bhd, Selangor Laboratory Services, Klang, Selangor

Indah Water Konsortium Sdn Bhd, Southern Laboratory Services, Ayer Keroh, Melaka

Jabatan Kimia Malaysia Cawangan Bintulu, Bintulu, Sarawak Jabatan Kimia Malaysia Jalan Sultan, Petaling Jaya, Selangor Johor Plantations Berhad, Central Analytical Laboratory, Kota Tinggi, Johor

Kualiti Alam Sdn Bhd, Bukit Pelanduk, Negeri Sembilan
Lotus Laboratory Services (M) Sdn Bhd, Johor Bahru, Johor
Malaysia LNG Sdn Bhd, Main Laboratory, Bintulu, Sarawak
Malaysian Agricultural Research and Development Institute
(MARDI), MARDILab, Serdang, Selangor

Malaysian Refining Company Sdn Bhd, Sungai Udang, Melaka

Malaysian Timber Industry Board (MTIB), Fibre and Biocomposite Center (FIDEC), Banting, Selangor

National Institute of Occupational Safety and Health (NIOSH), Chemical Hazardous to Health Laboratory (CHL), Bandar Baru Bangi, Selangor

National Poison Centre, Toxicology Laboratory, Minden, Pulau Pinang

Pengurusan Air Selangor Sdn Bhd Northern Regional Laboratory, Sg. Selangor Phase 2 Water Treatment Plant, Bestari Jaya, Selangor

Pengurusan Air Selangor Sdn Bhd, Southern Regional Laboratory, Sg. Labu Water Treatment Plant, Sepang, Selangor

Pengurusan Air Selangor Sdn Bhd, Southern Regional Laboratory, Sg. Semenyih Water Treatment Plant, Putrajaya Perbadanan Bekalan Air Pulau Pinang (PBAPP), PBA Central Laboratory, Sungai Dua Treatment Plant, Sungai Dua, Pulau Pinang PETRONAS Chemicals Ammonia Sdn Bhd, Kerteh, Terengganu

PETRONAS Chemicals Derivatives Sdn Bhd, Kerteh, Terengganu

PETRONAS Chemicals Ethylene Sdn Bhd, Central Laboratory, Kerteh, Terengganu

PETRONAS Chemicals Fertiliser Kedah Sdn Bhd, PCFKSB Laboratory, Gurun, Kedah

PETRONAS Chemicals Fertiliser Sabah Sdn Bhd, PCFSSB Laboratory, Sipitang, Sabah

PETRONAS Chemicals LDPE Sdn Bhd, Kertih, Kemaman, Terengganu

PETRONAS Chemicals Methanol Sdn Bhd, W.P. Labuan

PETRONAS Chemicals MTBE Sdn Bhd, PC MTBE Laboratory, Kuantan, Pahang

PETRONAS Gas Berhad, Analytical Technology Export Terminal, Kemaman, Terengganu

PETRONAS Gas Berhad, Analytical Technology Kertih, Kertih, Kemaman, Terengganu

PETRONAS Gas Berhad, Analytical Technology Kertih, Utilities Kertih, Kertih, Kemaman, Terengganu

PETRONAS Gas Berhad, Analytical Technology Santong, Gas Processing and Utilities, Paka, Dungun, Terengganu

PETRONAS Gas Berhad, Analytical Technology Utilities Gebeng, Kuantan, Pahang

PETRONAS Penapisan (Terengganu) Sdn Bhd, Analytical Technology Services, Kertih, Kemaman, Terengganu

PETRONAS Refinery and Petrochemical Corporation Utilities & Facilities Sdn Bhd, PRPC UF Centralised Laboratory Services, Pengerang, Johor

PETRONAS Research Sdn Bhd, Kajang, Selangor Petrotechnical Inspection (M) Sdn Bhd, Miri, Sarawak

Petrotechnical Inspection (M) Sdn Bhd, Port Klang, Selangor

Prisma Laboratory (M) Sdn Bhd, Johor Bahru, Johor

Ranhill SAJ Sdn Bhd, Central Laboratory, Batu Pahat, Johor

SaniChem Resources Sdn Bhd, Bandar Enstek, Negeri Sembilan

SGS (Malaysia) Sdn Bhd, Kuching, Sarawak SGS (Malaysia) Sdn Bhd, Port Klang, Selangor SGS (Malaysia) Sdn Bhd, SGS Sakura Onsite Laboratory,

Bintulu, Sarawak

SGS (Malaysia) Sdn Bhd, Shah Alam, Selangor Shell MDS (M) Sdn Bhd, Shell MDS (M) Laboratory,

Bintulu, Sarawak

Sime Darby Plantation Research Sdn Bhd, LS Laboratories Sabah, Tawau, Sabah

Sime Darby Plantation Research Sdn Bhd, LS Laboratories Sarawak, Bintulu, Sarawak

Sime Darby Plantation Research Sdn Bhd, LS Laboratories Carey Island, Pulau Carey, Selangor Trienekens (Sarawak) Sdn Bhd, Kuching, Sarawak

UMW Lubetech Sdn Bhd, Pulau Indah, Selangor
UNIPEQ Sdn Bhd, Bangi, Selangor

Universiti Teknologi PETRONAS, Environmental Laboratory, Bandar Seri Iskandar, Perak



### Issue No. 153 *in* Malaysia

#### SPEECH

### THE HONOURABLE TUAN CHANG LIH KANG MINISTER OF SCIENCE, TECHNOLOGY & INNOVATION

#### IN CONJUNCTION WITH

### **MALAM KIMIA & PRESENTATION OF IKM AWARDS 2023**

### Good Evening and Salam Malaysia MADANI,

First and foremost, I would like to thank Institut Kimia Malaysia for inviting
me to be the Guest-of-Honour at your Malam Kimia and Presentation of
IKM Awards 2023. I am deeply honoured to accept your invitation and be
part of this very prestigious and meaningful function.

### Ladies and Gentlemen,

- 2. National Science, Technology and Innovation Policy (NSTIP) 2021-2030 introduces the concept of STIE to highlight the importance of STI development as a basis in supporting economic growth. To strengthen the role of STIE, the need for coordination, understanding and development in various fields of science and technology across various sectors is vital as it can create and strengthen the foundation to innovate and the application of science and technology in driving the nation's economy, thus propelling Malaysia to become a high-tech nation.
- 3. Chemistry has often been called the central science due to its role in connecting the physical and biological sciences. It is so important to other fields of sciences covering almost everything including energy and environment, food and nutrition, health and medicine, polymers and materials, water and natural resources, and many other areas. Among the 17 UN Sustainable Development Goals (SDGs), 7 priority SDGs and 5 additional SDGs were found to be foundational to the work of the chemistry community.
- 4. It has been made known to me that IKM is very much involved in promoting the importance of the profession of Chemistry and also activities (K2M and K3M) which aim to increase public awareness and appreciation with regards to the field of Chemistry. With Chemistry developing at a significant pace under the governance of IKM, we hope that in the near future, Malaysian chemical sciences will be on par with the best in the world.

### Ladies and Gentlemen,

- 5. Chemistry is vital in developing green and sustainable energy, protecting the environment, and mitigating climate change effects. Therefore, the Ministry of Science, Technology and Innovation (MOSTI) is committed to robustly supporting chemical research and innovations that contribute to these critical areas.
- 6. MOSTI is very proud of IKM's achievements and would like to take this opportunity to once again congratulate IKM for winning the bids to host the 53rd IUPAC General Assembly and 50th World Chemistry Congress (IUPAC 2025) in Kuala Lumpur in 2025, 51st World Polymer Congress (MACRO 2026) in Kuching and 21st Asian Chemical Congress (ACC 2027) in Kuala Lumpur.
- 7. MOSTI fully supports and look forward to welcoming chemists from around the world to gather and have fruitful scientific exchange which could bring forth, potential collaborations and help connect Malaysia with the world. In addition, MOSTI will work closely with IKM, universities, research institutions and private sectors to further develop and expand capacity in

chemical research and innovations in these key areas for economic growth and social well-being. We believe Malaysia has the necessary human resources and research capability to contribute to a greener and more prosperous world.

#### Ladies and gentlemen,

- 8. Malam Kimia is an esteemed annual gala that celebrates outstanding achievements in chemistry and significant contributions to the IKM and the field's growth in Malaysia. It is heartening to see that students, representing the next generation of chemists, are among the honorees. These young talents are our future researchers who will significantly enhance our research capabilities and ensure ongoing advancements in our country's scientific endeavors.
- 9. I am also informed that IKM will be honoring chemical laboratories with the IKM Laboratory Excellence Awards 2023 for their exceptional testing and analytical services. High-quality laboratory services are crucial for superior quality control and product development. As Malaysia stands among the world's top 20 trading nations, it is imperative that our products, technologies, and services meet the highest international standards and quality in this global marketplace.
- 10. Congratulations to all the IKM award winners; tonight is a celebration of your achievements, and you've truly earned this honor. I wish each of you continued success in all your future endeavors and professional journeys.
- 11.1'd also like to extend special congratulations to ChM Dr. Mansor bin Ahmad, the recipient of the IKM Gold Medal Award for 2023. Recognized for his outstanding contributions to polymer chemistry research, as well as his commitment to educating and training the next generation of chemists in Malaysia, ChM Dr. Mansor is a deserving awardee of IKM's highest accolade.

Here's to an enjoyable and memorable Malam Kimia 2023. Thank you.





# **INSTITUT KIMIA MALAYSIA**

MALAYSIAN INSTITUTE OF CHEMISTRY

(Inaugurated on 8 April 1967, incorporated under Chemists Act 1975 on 1 November 1977)

1st NOTICE

127B, JALAN AMINUDDIN BAKI, TAMAN TUN DR ISMAIL, 60000 KUALA LUMPUR
TEL: 603-7728 3272 FAX: 603-7728 9909

EMAIL: ikmhq@ikm.org.my WEBSITE: http://www.ikm.org.my FACEBOOK: Institut Kimia Malaysia

President: Datuk ChM Dr Soon Ting Kueh

5 December 2023

To: All IKM members.

### NOTICE OF 57th AGM 2023

Notice is hereby given that the 57th Annual General Meeting of the Institute will be held as follows:

Date: Saturday, 30 March 2024

Time : 2.00 p.m.

Venue : Ballroom 2 (LG Level), EASTIN HOTEL KUALA LUMPUR

13 Jalan 16/11, 46350 Petaling Jaya, Selangor

### Agenda:

1. Presidential Address.

- 2. To adopt the minutes of the 56th AGM held on Saturday, 18 March 2023.
- 3. Matters Arising.
- 4. To receive and consider the Annual Report of the Institute for 2023/2024.
- 5. To receive and consider the Annual Statement of Accounts of the Institute and the Auditor's Report for 2023.
- 6. To consider amendments to IKM Gold Medal Award.
- 7. To elect 5 Council members and to fill vacancies in the Council created by the retirement of the following Council members by rotation:
  - i. Datin ChM Dr Zuriati Zakaria
  - ii. ChM Dr Malarvili Ramalingam
  - iii. DCP(R) Assoc. Prof. Dato' ChM Dr Yew Chong Hooi
  - iv. Datin ChM Maimonah Sulaiman
  - v. Prof ChM Dr Rusli Daik
- 8. To appoint qualified auditor(s) and determine his/her or their remuneration.
- 9. To consider any other matters of which notice in writing has been given to the Honorary Secretary by a member at least 14 days before the Meeting.

Yours Sincerely, ChM Chang Hon Fong Honorary Secretary

### Note:

- a) The Annual Report and Statement of Accounts 2023/2024 will be uploaded at IKM Website for members' access. Please refer to IKM Website (http://www.ikm.org.my/) in early March 2024 for updates. Hardcopy documents will be made available to members during the AGM.
- b) Lunch is provided for non-Muslims starting 12.00 pm at Swez Brasserie (Lobby Level), EASTIN HOTEL KUALA LUMPUR. Please confirm your attendance for lunch & the AGM to Mrs Siti or Mr Azizi (Tel: 03-77283272 or email: siti@ikm.org.my / azizi@ikm.org.my).



# **Metrohm Ion Chromatography**

Instruments for routine use and research applications: flexible, reliable, and easy to use

### Whatever your requirements - we have the right Ion Chromatograph for you

Our range of ion chromatography (IC) instruments covers cost-effective, compact, and stand-alone options for routine analysis as well as modern, fully automated, and hyphenated systems for advanced applications. Our IC portfolio includes detectors, columns, sample preparation and automation solutions. Use the filters to refine your search and find the perfect ion chromatography system for you.

### New Anion Columns:

Metrosep A Supp 17- good separating efficiency and short separation times at room temperature

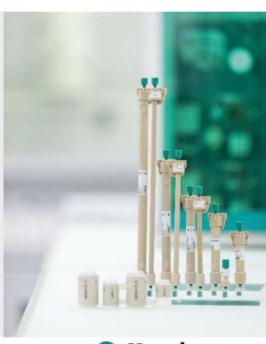
 Economic entry level column for determination for standard 7 anions in room temperature

### Metrosep A Supp 18 - new possibilities with hydroxide eluents

- ✓ High resolution between chlorite, bromate, and chloride
- Determination of 5 haloacetic acids (HAA5), monochloroacetic acid (MCA), monobromoacetate (MBA), dichloroacetate (DCA), and more...

**Metrosep A Supp 19** - Outstanding separation properties and high-capacity for standard anions and organic acids

 Determination of standard anions and organic acids in complex sample matrices, e.g. environmental or food samples;





The Division of Physical & Theoretical Chemistry recently organized a webinar on 19 September 2023 focused on the crucial topic of "Adsorption and Catalytic Conversion of CO2 Over Porous Materials". This topic was presented by Prof. Dr. Yuni K. Krisnandi, from Inorganic Chemistry Division, Department of Chemistry, Faculty of Mathematics and Natural Sciences, Universitas Indonesia. The webinar aimed to provide a platform for researchers, academicians, industry professionals, as well as undergraduate and postgraduate students to discuss and exchange insights on the advancements in the field of carbon dioxide capture and conversion using porous materials. This webinar was made possible by the Malaysian Institute of Chemistry (IKM) in collaboration with Universiti Kebangsaan Malaysia (UKM) as co-organisers. Prof Yuni started the sharing session with the worldwide concern greenhouse gases that contributed to global warming, specially associated with CO<sub>2</sub>, CO<sub>2</sub> has high global warming potential (GWP) due to its quite high concentration in the atmosphere, stays for longer time, and absorbs high energy. Then, Prof Yuni delved into the latest advancements in porous materials designed for effective CO<sub>2</sub> adsorption and CO<sub>2</sub> conversion. The presentation

WEBINAR

Divicior of Physical and Theoretical Chemistry

ADSORPTION AND CATALYTIC CONVERSION
OF CO., OVER POROUS MATERIALS
Invited Speaker
Associate Professor Dr. Yuni K. Krisnandi
Group Leader, Soird Inorganic Framework-Research
Group (SISH-RO), Department of Chemistry, Faculty of
Mathematics and Natural Science, Universitat Indonesia

Mederator
OH. Dr. Teh Lee Peng
Universit Kebangsaon Malaysia

19 September 2023.

10.00 - 11.00 AM (Malaysia time)
Google Meet
https://meet.google.com/zmik-rejn-iphttps://meet.google.com/zmik-rejn-ip-

covered various types of functionalised solid materials and their potential applications in CO<sub>2</sub> adsorption, such as mesoporous carbon, periodic mesoporous organosilica, and metal frameworks -organic (MOFs). Several related studies have been conferred with emphasis on the results and discussion part. The presentation also highlighted recent breakthroughs in the

development of catalysts for transforming CO2 into valuable products, with a focus on CO2-to-Methane (Sabatier reaction) and hydrogenation of CO<sub>2</sub> to methanol. Following the presentations, a lively and interactive Q&A session took place. Attendees had the opportunity to pose questions to the speakers, fostering a dynamic exchange of ideas and knowledge. Discussions ranged from the practical applications of the research presented to potential challenges and future directions for the field. The webinar on "Adsorption and Catalytic Conversion of CO<sub>2</sub> Over Porous Materials" organized by the Division of Physical & Theoretical Chemistry proved to be a valuable platform for knowledge dissemination and collaboration. The event successfully brought together experts and enthusiasts in the field, fostering a collaborative environment for the advancement of research in carbon capture and conversion technologies. The insights gained from this webinar will undoubtedly contribute to the ongoing efforts to mitigate the impact of CO<sub>2</sub> emissions on the environment.

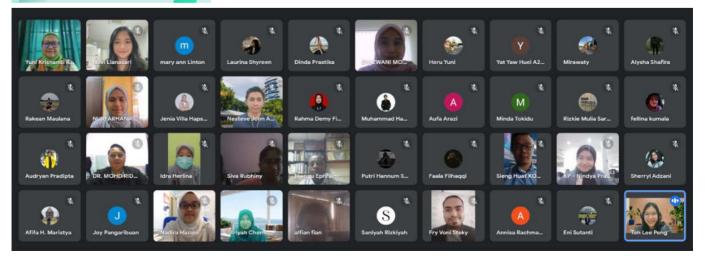
### Key Takeaways:

- 1.  $CO_2$ , a potent greenhouse gas, exhibits high global warming potential. Functionalized porous materials offer a viable solution for  $CO_2$  capture and storage.
- 2. The imperative to convert and utilize CO<sub>2</sub> has grown in significance to reduce its concentration in the atmosphere. The transformation of CO<sub>2</sub> into value-added chemicals represents a highly promising yet challenging field.
- 3. It is anticipated that highly efficient new catalysts can be designed and new approaches to chemical synthesis are to be discovered, by employment of less-active substrates, reduced waste generation and milder reaction condition.

Once again, thank you to Division of Physical & Theoretical Chemistry IKM for the opportunity in organising this webinar, Prof Yuni as invited speaker and participants for making this a successful webinar.

### Report by

ChM Dr. Teh Lee Peng, Universiti Kebangsaan Malaysia



### **OUR NEW SUPPLIER**

We are pleased to announce that Lab Science Solution is now the

# rheotek

Designed and manufactured in England. From the glass viscometer on the glassblower's bench, to the electronics designed in the R&D department, all PSL RHEOTEK focus on is viscosity measurement.

### **RPV-3 Automated Polymer Viscometer**



The Rheotek Polymer Viscometer RPV Generation 3 provides a reliable and precise method for measuring dilute solution viscosity.



Three levels of system automation, Standard RPV. **RSS and Auto Systems** 



**Optional Integrated Sample** Preparation available.

Sample Dissolution can be

carried out in a standalone

8 station reaction block.



More Products

EVS - Standard **Viscometer Bath** 

NEXOPART



## analytikjena

- PlasmaQuant MS High sensitive, robust and reliable ICP-MS Instrument
- PlasmaQuant MS Elite Ultimate sensitivity for target research applications
- PlasmaQuant MS Elite S High sensitivity and flexibility for efficient analysis
  - PlasmaQuant MS Q For sensitive and robust high throughput analysis

### BINDER



### Constant Climate Chamber **KBF 1020**



- Safe
- Reliable
- Smart
- Economical

Temperature range: 0 °C to +70 °C Humidity range: 10 % to 80 % RH



The NEXOPART EML 200 Series offers you a highperformance, state-of-art solution, setting new standards in precision, functionality, and reliability. Suitable for various application and particles sizes.

# stakpure

### Stakpure OmniaTap XS Touch

The compact system, featuring intuitive touchscreen control, extracts both pure and ultra-pure water from a single unit connected directly to a drinking water pipe, with a flexible dispenser enabling easy extraction of category I ultra-pure water at the push of a button.





### Skalar SP2000 series BOD

The most flexible BOD platform, with a modern design and the latest technological innovations, can be configured for use with 18 up to 198 BOD bottles. It complies with all major national and international regulations, including EPA 405.1, ISO 5815-1, EN-1899-1/2, Standard Methods 5210 B, DIN 38409, and customer-specific methods.





### **Tosoh HLC-8420 GPC EcoSEC**

The EcoSEC GPC System, a dedicated GPC instrument developed for fast polymer analysis, delivers top performance, reliability, and superior results. Time and solvent can be saved when coupled with our extensive line of highly efficient, semi-micro TSKgel columns.



Offers ISO/IEC 17025 SAMM Accredited Calibration Services for every brand of UV-Visible **Spectrophotometers and Analytical Balances.** 

**CONTACT US AT:** 

27, Jalan Anggerik Aranda C31/C, Kota Kemuning, 40460 Shah Alam, Selangor D.E. Tel: +603 5124 8299; Email: customer care@labsciencesolution.com





































# Measuring chlorine for Early, Easy and Rapid Detection of 3-MCPDE Precursor in Palm Oil and Other Edible Oils



XOS Clora 2XP MWD-XRF

### **XOS Clora 2XP MWD-XRF**

- Compatible with traditional techniques without the additional requirements of acids, gasses, and heating elements
- Low maintenance and operating costs
- Easy to use and decreases turnaround times
- LOD: 0.07 mg/kg (ppm)
- Compliant with ASTM D7536 and D4929 standards

### MOSH MOAH ANALYSERS

# A Fully Automated MOSH/MOAH Workflow for Reliable Results More Easily

Sample offers various solutions, tailor made to the needs of the laboratory

- Based on the LC-GC FID or
- Based on GCxGC-MS or
- · Based on LC GCxGCMS
- With heated LC compartment for optimal robustness
- With full control out of one single software
- With automated sample prep and clean up

Use an easy and proven plug-and-play method for the determination of MOSH/MOAH.

Place your sample in the autosampler, press start and get a complete analysis for MOSH/MOAH according to the EN 16995:2017 method.



MOSH MOAH ANALYSERS



### Inno Lab Engineering Sdn Bhd

No. 3 Level 1 & 2, Jalan USJ 1/31, 47600 Subang Jaya, Selangor, Malaysia.

Tel: +603-8023 1108 | Fax: +603-8021 7108

Email: <u>sales@ilab.com.my</u>
Website: <u>www.ilab.com.my</u>



# **Battery Production Solutions**

Industry Process Made Simple

# Rapid Solid-State Synthesis and Refinement



Solid-state Synthesis | Calcination | Sintering | Annealing

## Phoenix BLACK™

Microwave Muffle Furnace.

# Robust Solids Analyzer with Precise Temperature Control



Electrode Binders | Dried Slurry Coatings | Anode & Cathode Slurries | Conductive Additives

### SMART 6™

Microwave + Infrared Moisture & Solids Analyzer.



## **Efficient Digestion for Trace Metals Analysis**

Mined Metals & Ores | Cathode & Anode Materials | Electrolyte Solutions Membranes | Recycled Materials



#### BLADE™

Sequential, R&D, Method Optimization Microwave Digestion System.



### MARS 6™

Parallel, High Throughput Microwave Digestion System.



### pH Measurement and Liquid Handling of Cathode Material

Cathode-active material | Cathode Slurry | Carbon black (ag) | Polymer Binder



## FiveEasy™ Ph Meter

Wide Range of pH & Conductivity Meters for Laboratory & Field Use.



## Rainin™ Pipettes

Available in both electronic and manual versions, with both offering LTS & universal tip compatibility.

Contact: 03-8065 3889 | Email: marketing@gaiascience.com.my | Web: www.gaiascience.com.my

# SOUTHEAST ASIA GLOBAL INNOVATION CHALLENGE 2022 (SEA-GIC 2022): PITCHING & POSTER COMPETITION

Ts. ChM Dr. Kumuthini Chandrasekaram, *Universiti Malaya*Assoc. Prof. ChM Dr. Fatimah Salim, *Universiti Teknologi MARA*Prof. ChM Dr. Phang Sook Wai, *Tunku Abdul Rahman University of Management and Technology* 

Southeast Asia Global Innovation Challenge (SEA-GIC) is an annual flagship programme of the American Chemical Society (ACS) Malaysia Chapter. The main objective of this programme is to promote innovativeness among ASEAN young minds in solving real-world problems. With the spirit to strengthen international networking, Malaysian Young Chemists Network-Malaysian Institute of Chemistry (MYCN-IKM) is proud to be the co-organiser of the SEA-GIC 2022 together with ACS Malaysia Chapter and ACS Student Chapter of Universiti Malaysia Pahang through the following setting.

Modernization nurtures new communicative technologies to immerge and grow rampantly but unscrupulous individuals misuse the advancement to spread fake news and pseudoscience at accelerated lightning speed. To eradicate the problem and create awareness many efforts are being taken by the government and many non-governmental organizations. The question posed is what is the role of youths in helping to combat this issue? How could our youths chip in to eradicate the spread of miscommunication and discommunication? Do our youths realize their potential and the value they stand to provide by sharing their knowledge effectively? SEA-GIC 2022 set a platform for our youths to address all the questions by setting a theme on increasing awareness of pseudoscience and its implications on society.

The program setting was divided into two main components. pitching and poster competitions. The themes for both components were aligned with the intended objective of the program 'Combating pseudoscience using science'. The pitching competition was in a form of recorded video and targeted a group of three (plus an advisor) participation from undergraduate students with theme "Chemistry Values for Combating Misinformation and Disinformation". All entries were screened during the Preliminary Round and 10 teams were shortlisted as finalists to present their ideas during the Final Round. The finalists were evaluated to decide on the First, Second and Third Place (one team each) and Consolation Prize (two teams) winners. The poster competition aim for individual participantion opened for two categories: 1) school and 2) university. Both university and school students were themed "Unravelling the Chemistry of Foods".

SEA-GIC 2022 received the patronage of participants from Malaysia, Singapore, Indonesia, Philippines, and Thailand with 30 posters and 40 pitching competitors. The struggle of pandemic recovery and the slow culmination of normalization hampered our best-laid efforts nonetheless our spirited

youths most definitely and defiantly withstood the challenge. As modes of travel were still pretty much restrained for students, the event was conducted wholly online. Hence the utilization of social media platforms, namely Facebook (https://www.facebook.com/SEAGIC22) was crucial in garnering support and participation. The final round of SEA-GIC 2022 was broadcasted from Universiti Malaysia Pahang (UMP) on 15th Dec 2022. There were 42 participants from both high school and degree level evaluated by six judges in two parallel sessions coordinated by Assoc. Prof. ChM. Dr Fatimah Salim (MYCN-IKM). Session 1, ChM. Dr. Kumuthini Chandrasekaram (Chief judge, MYCN-IKM), Dr. Hasrinah Hasbullah (ACS Malaysia) and ChM. Dr. Aini Norhidayah Mohamed (UMP); Session 2, Prof. ChM. Dr. Phang Sook Wai (Chief judge, MYCN-IKM), Dr. A.K.M Moyeenul Hug (UMP) and ChM. Dr. Nazikussabah Zaharudin (UMP).

The closing ceremony was attended by representatives VIPs from ACS Malaysia, IKM and FIST UMP, finalist and SEA-GIC 2022 secretariat. We thank Datuk ChM. Dr. Soon Ting Kueh, the President of IKM for joining with us in this memorial closing. SEA-GIC 2022 hopes to set the platform for our youths to recognize their potential, explore their talents and grow both aesthetically and holistically. Herewith we hope such needful endeavours will be further explored by all to help cultivate our future generations. MYCN-IKM would like to thank ACS Malaysia Chapter for the opportunity and we look forward to future SEA-GIC challenges to bring impactful changes to our youths and society. Thank you and cheerios till we set motion again!





BERITA IKM December 2023

Issue No. 153

### *<sup>in</sup>* Malaysia

#### SEA-GIC 2022 ORGANIZING COMMITTEE

Advisor:

DR. MOHD FIRDAUS ABDUL WAHAB (ACS MALAYSIA)

Chair I:

DR. MOHD FADHLIZIL FASIHI BIN MOHD ALUWI (FIST, ACS-UMP)

Chair II:

TS. DR MUHAMMAD HAFIZ MAZWIR (FSTI, SCITEXS)

DR FATIMAH SALIM (MYCN-IKM)

Program Manager I: ANG YON JIE (ACS)

Program Manager II: CHLOE CHEN SZE YUN (SCITEXS)

Secretary I: NURUL NADIAH BIT HAMIDON (FIST, ACS-UMP)
Secretary II: NABILAH LEYANA BINTI MOHD RADZUAN (BSK)

Treasurer I: DR SITI UMAIRAH MOKTAR (FIST)

Treasurer II : SHARIFAH NUR 'AIN BINTI SYED AHMAD (FIST)

Secretariat:

Program Unit:

TAN SU-EN (ACS)

LAI YUN HAN (ACS)

LOOSHINIE A/P KUMARAVELU (SCITEXS)

SHARIFAH NURADILA BINTI SYED AZAHAR (SCIETXS)

AUBILLY FRANCIS SAMSAR (FIST)

**Public Relation Unit:** 

HEIDI TAN YUN HAN (ACS)

DANIA IRDEENA BINTI ZUHAIMEE (SCITEXS)

TUAN NOR MAITASHA BINTI TUAN RAZMAN (FIST)

Media and Promotion Unit:

LAW ANN GIE (ACS)

PREMIY A/P RAMASAMY (ACS)

HARNITA HARSHINI A/P KRISHNAH RAO (SCITEXS)

WONG WEN YEW (SCIETXS)

Secretariat (continued...):

Judges Panel Unit:

PROF. DR. PHANG SOOK WAI (MYCN-IKM)

DR. FATIMAH SALIM (MYCN-IKM)

TS. DR. KUMUTHINI CHADRASEKARAM (MYCN-IKM)

Protocol Unit:

ANG PEI YIN (ACS)

DEVITHERA A/P SARAVANAN (SCITEXS)

Technical and Special Task Unit:

TEOH CHUN KEAT (ACS)

THATCHAINI A/P KRISHNAN (SCIETEXS)

MUHAMMAD AATHIF IZZYAD BIN FRANKIE PILANG

(FIST)

TECHNICAL STAFFS (FIST)











# **Anti-corrosive Graphite Digestor**

## **GREEN | SAFETY | RELIABLE | EFFICIENT**





#### **HOMOGENEOUS HEATING**

Isostatic pressing graphite body enable uniform temperature between the digestion holes and longer service life



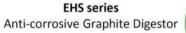
#### ANTI-CORROSION & DURABLE

Independently sealed electronic system with heat insulation and corrosion protection



#### **SAFE & EASY TO OPERATE**

Temperature program up to 20 stages. Built-in WIFI communication module for remote control





#### **AUTOMATIC LIFT SYSTEM**

Samples automatically lifted for cooling once heating procedure ended to prevent samples destroyed by graphite residual heat

Auwii Instrument Anti-corrosive Graphite
Digestor available in various models to
support the following digestion requirements:

- ✓ Acid digestion for heavy metal analysis
- Urinary iodine digestion
- Acid evaporation
- ✓ Soil organic digestion
- Special Graphite Digestor for human hair













Contact us for more information:



# **RA-7000A**

# Discrete Direct Purge (DDP) Reducing Vaporization CVAAS Mercury Analyzer



## **Easy Modular System**

#### RA-7000A CVAAS Detector

- Detection limit down to 0.5ppt
- When the sample volume is 5mL Linear range: ~40ppb Measure range: ~400ppb

#### SANPRA™ (Autosampler)

- Autosamplers with different functions and capacities available.
- SANPRA™ 3/5/7 are available as options.

#### **Types of SANPRA**

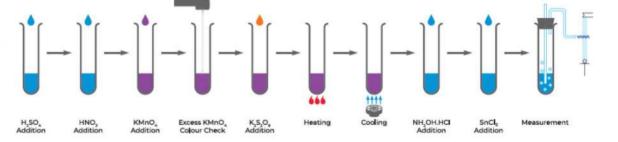
#### SANPRATM 3

- 80-Positions Liquid Autosampler
- Compatible to use with Glass, Disposable Glass, Polypropylene Centrifuge Tubes

#### SANPRA™ 5

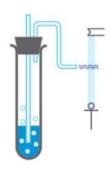
- 80-Positions Liquid Autosampler (Glass/Disposable Glass Tubes)
- Equipped with Fully Automated Acid Digestion Functions & Operation

Mercury Analysis in Aqueous Matrices is accomplished in 10 Fully Automated Steps using RA-7000A SANPRA™ 5



# With DDP Technique, Mercury Memory Effect Is Not A Concern

Discrete-Direct-Purge (DDP) technique extracts and transfers the reduced Hg<sup>0</sup> from each sample tube into the detector for measurement. Only mercury vapor flows and contacts the flow path, sample-to-sample memory effects and carryover from over-range samples are virtually eliminated.



Contact us for more information:







28 Aug - 1 Sept 2024

International Congress on Pure & Applied Chemistry Ulaanbaatar, Mongolia



"Promoting Excellence in Chemical Research and Innovation"



Organized by:



In Collaboration with:







ACC



## International Congress on Pure & Applied Chemistry

Institut Kimia Malaysia (IKM), together with the Mongolian Chemical Society, Foundation for Interaction between Science & Technology (FIST) Japan and Asia Chem Corporation (ACC) Japan are jointly organising the International Congress on Pure & Applied Chemistry (ICPAC) Mongolia 2024 from 28<sup>th</sup> August – 1<sup>st</sup> September 2024 in Ulaanbaatar, Mongolia. ICPAC Mongolia 2024 is the eighth of a series of major international scientific meeting covering all areas of pure and applied chemistry including specific themed symposia. The theme, "Promoting Excellence in Chemical Research and Innovation", means that the Congress will focus on advancing chemistry for meeting the UN Sustainable Development Goals 2030. ICPAC Mongolia 2024 will comprise the following General Session and Symposia:

#### ICPAC Mongolia 2024 General Session (IGS)

Symposium on Organic and Biomolecular Chemistry (OBC)

Symposium on Inorganic and Coordination Chemistry (ICC)

Symposium on Physical Chemistry and Catalysis (PCC)

Symposium on Analytical and Environmental Chemistry & Engineering (AEC)

Symposium on Polymer and Materials Chemistry (PMC)

Symposium on Analytical Chemistry (ANC)

#### REGISTRATION FEE AND PAYMENT

Those interested to participate or make oral or poster presentation are required to register at the ICPAC Mongolia 2024 website: https://icpacmongolia2024.org/. Please submit your REGISTRATION and ABSTRACT ONLINE. Only those who have paid their Registration Fees are considered as delegates to ICPAC Mongolia 2024.

For participants from the Japanese side, please go to the Japanese website: (to be announced)

Participants	Type of Registration	Early Bird (before or on 31st May 2024)	Regular (from 1st June 2024)
MALAYSIAN Participant	IKM members	RM1300	RM1400
	Non IKM members	RM1600	RM1700
	Postgraduates Students (full-time)	RM1050	RM1200
INTERNATIONAL Participant	International Participant	USD870	USD970
	Postgraduate Student	USD570	USD670
Congress Banquet (additional guest)		USD120	USD120
Tour (additional guest)		USD100	USD100

The deadline for Early-Bird Registration is 31st May 2024. Registration fee entitles the ICPAC Mongolia 2024 delegates to the following: Attendance at all ICPAC Mongolia 2024 scientific sessions and All ICPAC Mongolia 2024 documents and materials. All delegates MUST pay their registration fee by 30th June 2024.

Abstracts MUST be submitted online via congress website, https://icpacmongolia2024.org. The deadline for abstract submission is 31st May 2024.

#### ICPAC Mongolia 2024 LECTURE AND STÜDENT LECTURE AWARDS (for JAPANESE participants

ICPAC Mongolia 2024 will be presenting Lecture and Students Lecture Awards for oral presenters. Each Award will comprise a Certificate and a Cash of ¥50,000 for Lecture Award and ¥25,000 for Student Lecture Award. If you want to join the Lecture Award Programme, please go to the Japanese website (to be announced) and pay the Lecture Award Programme fee ¥10,000 along with submission of abstracts, registration and payment through the Japanese website. This Award programme and others are organized by Asia Chem Corporation.

#### **ACCOMMODATION**

Please refer to congress website for updates - https://icpacmongolia2024.org/.

#### MORE INFORMATION / CONTACT US

ICPAC Mongolia 2024 Secretariat c/o Institut Kimia Malaysia

127B, Jalan Aminuddin Baki, Taman Tun Dr Ismail, 60000 Kuala Lumpur, Malaysia

Email: secretariat@icpacmongolia2024.org website: https://icpacmongolia2024.org/

# Malaysia Leads Global Effort in Combating Illicit Drugs with Innovative Strategies, International Collaboration

In a significant stride towards global drug control, Malaysia has been implementing comprehensive strategies in combating the international drug menace.

Dr Saravana Kumar Jayaram, a leading Senior Forensic Chemist specialising in Analytical Chemistry and Illicit Drug Profiling at the Department of Chemistry Malaysia (KIMIA Malaysia), said that this multifaceted approach has been highly successful. He was representing Malaysia at the 23rd Triennial Meeting of the International Association of Forensic Sciences in Sydney, Australia held last week. "Malaysia's approach includes a blend of rigorous law enforcement and advanced rehabilitation programs, underlining Malaysia's prominent role in the global fight against illicit drugs," said Saravana.

"Our country's law enforcement agencies are well-equipped and trained, specialising in disrupting drug trafficking networks and preventing the entry of illegal substances into the country," he said adding that the Royal Malaysia Police ('PDRM' or the Polis Diraja Malaysia) are among the best police forces in the world. "Our police's efforts are complemented with a strong legal framework that includes severe penalties for drug trafficking, aiming to deter involvement in the drug trade," said Saravana, who is also Visiting Professor (Online) at Prince of Songkla University, Thailand.

"Additionally, Malaysia has been actively involved in international collaborations, working with neighboring countries and global organisations to curb the transnational drug trade. These efforts not only focus on enforcement but also on sharing intelligence and best practices in drug interdiction." Apart from enforcement, Malaysia has made significant strides in treating drug addiction as a public health issue. "The government has implemented comprehensive rehabilitation programs, offering medical and psychological support to individuals battling drug addiction. These programmes aim to reintegrate recovering addicts into society as productive individuals, reducing the likelihood of relapse. Furthermore, Malaysia has been exploring harm reduction strategies, such as needle exchange programmes, to minimise the spread of diseases among drug users," he explained.

"This balanced approach highlights Malaysia's commitment to addressing both the supply and demand aspects of the drug problem, acknowledging the complexity of the issue and the need for a holistic response." He also shared insightful information about drug trends, synthesis techniques and regional expertise in illicit drug production. Saravana emphasised the importance of collaboration and expanding research networks to address these evolving challenges effectively. His presentation focused on various types of drugs that are clandestinely manufactured, including synthetic drugs like methamphetamine and ketamine.



Detailed explanations were given on the production processes, shedding light on the specific chemicals and precursors used in these clandestine operations. Notably, the practice of mixing or cutting drugs in labs, particularly with substances like benzodiazepines, was highlighted as a growing concern. He also delved into the future plans to tackle the problem of illicit drug production and distribution.

"A significant part of the strategy involves enhancing scientific methodologies and equipping laboratories with advanced instrumentation for better detection and analysis of these drugs. By improving detection capabilities, authorities can more effectively identify and intercept illegal drug manufacturing and trafficking activities," said Saravana. "The development of new methods for drug detection is crucial, as the constantly evolving nature of synthetic drug production often outpaces current detection technologies." He closed his presentation by stressing on the critical need for continued research and collaboration in combating the illicit drug trade.

"By combining scientific innovation in drug detection with robust law enforcement strategies, there is potential to make significant strides in addressing this global issue. "The international drug problem is a highly complex one and the multifaceted approach required to effectively tackle it encompasses blending science, law enforcement and international cooperation," said Saravana, who is today one of Asia's subject matter experts on this subject.

Republished from Business Today, November 29, 2023 https://www.businesstoday.com.my/2023/11/29/malaysialeads-global-effort-in-combating-illicit-drugs-with-innovativestrategies-international-collaboration/



# **CERTIFICATION PROGRAMS**

Discover opportunities in our

Success Ahead

**Career Path Elevation** 

**Programs** Recognized by



## **SCHEMES OFFERED**

**Coating Certification Schemes Coating Fingerprint Certification Schemes Corrosion Certification Schemes Mechanical Joint Integrity Certification Schemes** 

**Thermal Insulation Certification Schemes Vibration Certification Schemes Welding Certification Schemes** 









and many more...

Competency certificate will be issued to personnel who qualify via our certification assessments

For the most up-to-date information,

**Institute of Materials, Malaysia** 



www.iomm.org.my

secretariat@iomm.org.my



+60 18-911 3480



Institute of Materials Malaysia

# Thermo Fisher Scientific Recognised by R&D 100 Awards for Innovations in Science and Technology

Established in 1963, the R&D 100 Awards is the only science and technology awards competition that recognises new commercial products, technologies and materials for their technological significance. Sponsored by R&D World Magazine, the R&D 100 Awards recognise and celebrate the 100 most innovative technologies of the previous year.

The Thermo Scientific™ Orbitrap™ Ascend Tribrid™ Mass Spectrometer, recognised by the R&D 100 Awards in the Analytical/Test category, provides a single versatile platform with single-cell sensitivity for proteomics and metabolomics.

Launched in late 2022, the Orbitrap Ascend Tribrid mass spectrometer offers new capabilities for multiplexed proteomics and native protein characterisation.

The mass spectrometer enables improved sample throughput, versatility, and ease-of-use — producing high-quality data with simplicity. More samples can be analysed at lower concentrations, enabling faster, more sensitive analysis, and macromolecule experiments, that were not possible before, can now be achieved. The new Auto-Ready ion source for calibration maximises convenience, allowing the user to spend more time on the results, and less time on instrument set-up.



Thermo Scientific™ Orbitrap™ Ascend Tribrid™ Mass Spectrometer

Learn more about Thermo Scientific Orbitrap Ascend Tribrid Mass Spectrometer here:



### Case study: Authenticity Analysis of Honey

Learn more about food integrity testing, especially for honey, in this conversation with Dr. Kurt-Peter Raezke, Managing Director/Head of Residue Testing and Mrs. Uta Johanna Peters, Head of Authenticity Testing LC-IRMS, who are part of the Eurofins Food Integrity Control Services (EFICS) based in Germany.

EFICS is an independent business unit of the Eurofins Food and Feed Testing Network, specialising in food authenticity and integrity verification.

In this conversation, the key questions asked include:

- How did food integrity develop over the past decades to become such an important factor for both producers and users?
- · How do you see the future of food integrity testing?
- · What are the challenges of honey fraud testing?
- Can you give us an overview of the technologies you are using and how they are tackling honey fraud?
- Can you give us examples of the new features and technological advancements that enhanced honey analysis in your laboratory?
- Honey fraud analysis is just a part of the large food integrity testing industry.
   Being at the forefront of isotope ratio mass spectrometry (IRMS) applications in food integrity, how do you see this field developing further?



Download the case study here:







#### Knowledge Sharing

Thermo Fisher Scientific invites scientists, researchers, chemists, and other laboratory professionals in Malaysia to connect, learn and exchange knowledge with experts worldwide in our virtual learning sessions.

### Measuring PFAS in Water and Soil: Top Questions and Challenges

From non-stick pans to water-repelling clothing and more, Per- and polyfluoroalkyl (PFAS) compounds are commonly found in many products and tools used in modern homes and workplaces today. Unfortunately, the production and use of these items can leave a lasting, negative impression on our health and affect our water, air and soil qualities.

In this article on Analyte Guru, laboratory professionals can learn more about how leading experts in PFAS analysis are addressing key questions raised by laboratories as they move forward in effective PFAS recovery. Analyte Guru is a free educational resource by Thermo Fisher Scientific for biopharma, pharma, environmental, food and agriculture, industrial, and clinical laboratories using chromatography and mass spectrometry.

#### Learn more here:



## On-demand Webinar: Comprehensively Profile 10,000+ PFAS Compounds Using HRAM



PFAS substances, which are chemicals widely used in various industrial and consumer products, are of concern due to their persistence and potential adverse health effects. Having a comprehensive understanding of PFAS profile in environmental matrices is crucial.

Learn how high-resolution accurate mass (HRAM) Thermo Scientific Orbitrap technology and Thermo Scientific Compound Discoverer software enable the detection and identification of over 10,000 PFAS compounds in a single analysis.

#### Register for this on-demand webinar here:



## On-demand Webcast: Out-of-the Box Solutions for Fast, More Confident Pesticide Residues Analysis



There are many analytical challenges with pesticide residue analysis, as it involves an ever-growing list of chemically diverse compounds. Given the variety of solutions available, choosing the best workflow to fit your laboratory's unique needs can present another challenge.

Learn how to overcome these challenges and drive efficiency in your laboratory with the new Pesticide Smart Kit from Thermo Fisher Scientific.

The Pesticide Smart Kit contains seven high-performance workflows. Using recommended configuration, these predefined workflows enable robust analysis of pesticide residues in food with LC-MS/MS and/or GC-MS/MS systems controlled by a single software platform.

#### Register for this on-demand webcast here:



December 2023

Issue No. 153 in Malaysia

### IKM NEW MEMBERS & MEMBERSHIP UPGRADING

New Members (MMIC)

Adam Bin Haris M/6528/10446/24

**BERITA IKM** 

Angela Shalini A/P V.Muneeswaran

M/6555/10493/24 Anis Liana Binti Mokhtar M/6503/10128/24 Aw Ee Ling M/6542/10462/24

Farah Amira Binti Shahrul Effendi

M/6536/10455/24 Gan Hui Yee M/6553/10486/24

Ganapaty A/L Manickavasagam

M/6559/10511/24

Haizal Amri Bin Abdul Halim

M/6558/10510/24 Lawrance Kimin M/6533/10452/24 Liw Sue Ching M/6535/10454/24 Low Jo Ring M/6510/10410/24

Lugmanul Hakim Bin Mohd Idrus

M/6515/10420/24

Maryam Aisyah Binti Abdullah

M/6557/10498/24 Maznah Binti Mahmud M/6544/10465/24 Mildred Eklip M/6550/10476/24

Mohammad Fauzul Azim Bin Mohd Khairudin

M/6506/10404/24 Mohd Akhir Bin Ahmad M/6554/10491/24 Mohd Fadlly Bin Jumadi M/6511/10411/24 Mohd Fairus Bin Awang M/6549/10473/24 Mohd Hisyam Bin Maing M/6540/10460/24

Mohd. Faridzuan Bin Majid

M/6514/10417/24

Muhammad Fikri Bin Samsul Anuar

M/6525/10441/24

Muhammad Khairul Aziemi Bin A. Aziz

M/6561/10516/24

Muhd Nabeel Hilmi Bin Ahmad Latfi

M/6519/10426/24 Nabila Hanan Binti Zulkifli M/6532/10451/24 Nabilah binti Othman M/6529/10448/24 Ng Rou Chian, Dr. M/6538/10458/24 Noor Farahin Binti Bain M/6543/10464/24

Noor Hafizah Binti Mohd Amin

M/6504/10401/24

Noor Shahirah Binti Raiihan

M/6556/10495/24

Nor Suzariana Binti Samuri

M/6537/10457/24 Noramalina Binti Hassan M/6523/10434/24 Norhaiza Binti Othman M/6509/10409/24 Norshafriza Binti Salleh M/6522/10430/24

Norsyafida Binti Mohmmad Zin

M/6546/10468/24

Nur Amalina Binti Ghazali M/6516/10422/24

Nur Hidayah Binti Abdul Latif

M/6531/10450/24

Nur Iffah Izzati Binti Mohd Subki

M/6518/10425/24

Nur Ruzaina Binti Abdul Rahman

M/6513/10415/24

Nur Syamimi Binti Mohamad, Dr.

M/6548/10472/24

Nurdiyana Binti Abdul Rashid

M/6517/10424/24

Nurul Farhana Binti Ahmad Aljafree

M/6552/10484/24 Nurulizzati Binti Husin M/6524/10438/24 Ramzul Nasri Bin Osman M/6539/10459/24

Riza Asma'a Binti Saari, Dr.

M/6547/10469/24

Santush A/L Suras Kumar

M/6527/10444/24 See Sim Lee M/6530/10449/24 Seng Jo Ann, Dr. M/6508/10408/24

Siti Nor Zulaiha Binti Zakariya

M/6541/10461/24 Siti Nurdalili Binti Idris M/6526/10443/24

Siti Qurratu' Aini Binti Mahat, Dr.

M/6505/10403/24

Siti Shahirah Binti Mat Daud

M/6534/10453/24 Suriani Binti Haji Yaakob M/6507/10407/24 Tan Chee Hao M/6521/10429/24

Wan Nur Syahira Binti Ab Rahman

M/6560/10512/24

Yamunaah A/P Krishnanmurty

M/6512/10413/24 Yong Hwee Chin M/6520/10427/24

Yuhanis Binti Mhd Bakri, Dr.

M/6551/10480/24 Zaihasra Binti Razis M/6545/10467/24

**New Licentiates (LMIC)** 

Aa'ishah Binti Abd Gafar L/3528/10487/24 Aimi Aishah Binti Arifin L/3540/10503/24

Aisyah Syazwani Binti Rosazlan

L/3530/10489/24

Akmal Alif Bin Awang Mali

L/3498/10406/24 Alea Izyani Binti Azaham L/3497/10405/24

Amelia Karenina Yusuf L/3505/10423/24 Amira Shikin Binti Seruji L/3494/10399/24 Chia Vi Vien. Dr.

L/3529/10488/24 Deborah Yun L/3511/10436/24 Dzulfagar bin Joll Kipli L/3490/10302/24 Eustance Anak Juan L/3512/10437/24

Farah Adibah Binti Abdul Latif

L/3514/10440/24

Fazzirah Binti Mohamad Hanafiah

L/3519/10466/24 Haziqah binti Norazmi L/3535/10497/24

Intan Syazwani Binti Mohd Noor

L/3516/10445/24 Izzah Liyana Binti Tahir L/3495/10400/24

Jamilahtul Hayati Binti Ahmad Nadzeri

L/3504/10421/24

Kalaivaani Devi A/P Shanmugam Pillai

L/3533/10494/24 Leela A/P PV Poul L/3536/10499/24 Liew Zhi Syn L/3520/10471/24

Mazria Haslina Binti Md Akir

L/3539/10502/24

Muhamad Ahnaf Fudhail Bin Maznun

L/3542/10505/24

Muhamad Higwan Bin Norais

L/3502/10418/24

Muhammad Alif Fahimi Bin Mohamad Khairuddin

L/3546/10513/24

Muhammad Faizal Bin Mohamed Kassim

L/3517/10456/24

Muhammad Fauzi Bin Abd Jalil. Dr.

L/3534/10496/24

Muhammad Hafiz bin Kamarozaman

L/3491/10367/24

Nabil Asyraf Bin Mohd Rosli L/3506/10428/24

Naziatul Huda Binti Kamaluddin

L/3537/10500/24

BERITA IKM December 2023 Issue No. 153 in Malaysia

Nik Nur Mazni Binti Md Zin L/3547/10514/24

Nor Athirah Binti Yusof L/3492/10395/24

Norsafiqah Binti Mohd Saat

L/3543/10506/24

Nur 'Afini Binti Abdul Rauf

L/3525/10481/24 Nur Afiqah Binti Adnan

L/3503/10419/24 Nur Alyssa binti Faizal Mahyuddean

L/3510/10435/24 Nur Fatiah Binti Mohd L/3507/10431/24

Nur Syazwani Binti Muhammad Yazid

L/3500/10414/24

Nurhanisah Binti Othman, Dr.

L/3496/10402/24

Nurhazimah Binti Md Zaini

L/3527/10483/24

Nurul Noor Izzati Binti Mohamad Sharif

L/3515/10442/24

Pasilatun Adawiyah Binti Ismail

L/3532/10492/24

Rozilawati Binti Mohamad Achil

L/3545/10508/24 Samsiah Binti Sahap L/3548/10515/24

Shya Athiera Ilma Binti Mohamad Sopi

L/3541/10504/24

Siti Khadijah Binti Zainal Abadin

L/3523/10478/24

Syed Farizuan Bin Tuan Mat Rosli

L/3513/10439/24 Tan Chu Shan, Dr.

L/3526/10482/24

Tan Jing Lin L/3544/10507/24

Tan Ying Hui L/3538/10501/24

Te Kheang Xiong L/3508/10432/24

Teng Cai Sze L/3531/10490/24

Thean Mei Yean L/3509/10433/24

Thurgathevy A/P Murugan

L/3499/10412/24 Tung Xiao Dan

L/3521/10475/24 Ummi Liyana Binti Mohamad Rodzi

L/3493/10397/24

Wan Nur Afiqah Binti Wan Khairuddin L/3524/10479/24

Yasirah Binti Yusoff L/3522/10477/24

Zachary Alden Henry L/3501/10416/24

Zuyyin Sim Siew Yen L/3518/10463/24

#### **Upgrade to Member (MMIC)**

Adilah binti Hazan M/6574/8062/18/23

Charles Rolend Richard M/6576/9624/22/23

Cheng Pui Wah M/6567/6037/11/23

Ch'ng Yung Sing M/6570/8845/20/23

Ezy binti Marangkil M/6571/8923/21/23 Fazrizal bin Dolkafri

M/6572/8281/19/23 Izyan Hanis binti Ramlan

M/6566/7570/16/23 Lay Mee Ping M/6568/7021/15/23

Ler Lien Jia

*M*/6575/9541/22/23 Mayrlliza Ng Hui Ni *M*/6564/9324/22/23

Mohd Hairudin bin Haryadi *M*/6573/9463/22/23

Nor Fatimah binti Abdullah Kidal *M*/6562/7805/17/23

Siraj bin Muhamad Ridzuan Nasaruddin *M*/6569/9619/22/23

Syafiqah binti Saupi *M*/6563/8292/19/23

Wong Ru Sheong M/6565/8070/18/23

#### Upgrade to Fellow (FMIC)

Halimah Binti Abdul Rahim *F/0144/2501/95/23* 

Mohd Sani bin Sarjadi, Assoc. Prof. Dr. *F/0143/7204/15/23* 





# **FTIR** microsocpy

Thermo Scientific
Nicolet RaptIR+ FTIR Microscope
Answers in minutes and microns









# Laboratory Information Management System Electronic Lab Notebook

#### Barcode & QR Code

- Sample Registration
- Sample Reception
- Chain of Custody
- ...





#### **Workflow Automation**

- Job Assignment
- Work Instruction
- Inventory Management
- Instrument Performance
- · ...

#### Instrument Integration

- Instrument Interface
- Lab Automation
- System Interface
- ...





#### **COA Report & Dashboard**

- Automated COA Generation
- Real Time Dashboard
- LabWare Analytics
- ...

# Regulatory & Compliance Support

- ISO 17025
- GAMP 5
- FDA 21 CFR Part 11



LabWare Malaysia
Level 6, B-06-07, Sky Park, One City, Jalan USJ25/1, Subang Jaya,
47650 Selangor, Malaysia
Phone: +603 5022 1717 Email: infoAP@labware.com

LabWare® www.labware.com



For analytical testing laboratories performing trace-elemental analyses, the NexION® 2200 ICP-MS builds on a strong tradition of reliable, easy-to-use, low-maintenance instrumentation, delivering uncompromised performance, accuracy, and repeatability. Its unique three-quad design, combined with novel and proven technologies, come together to offer:

#### NexION® 2200 ICP-MS

- Outstanding sensitivity
  - Superior interference removal
  - Excellent stability

- Unmatched matrix tolerance
- High throughput/greater uptime
- Sustainability and low cost of operation

For more information visit www.perkinelmer.com/nexion2200



Scan QR Code to Contact Us.

