



AOAC SEA Executive Committee and Past President

2022 AOAC SEA 1st Annual Conference recaps:

- Talks on *Food Safety: Regulation and Analytical Science*
- AOAC SEA's internal stakeholders: Reasons for success
- AOAC SEA's external stakeholders: Foundations for further achievements

Advertisement corner:

- AOAC SEA programs
- Become AOAC SEA's external and internal stakeholders

Food Safety: Regulation and Analytical Science

"When Erik and I met 3 years ago about the possibility of setting up a section in this region, I was not quite sure how the journey would be. But I was sure that this would be something the local analytical community was looking for, and I was one of them," Dr. Xinping Hou, President of AOAC SEA Section, said in the Opening Speech to 2022 AOAC SEA 1st Annual Conference in Singapore on Oct 12-13, 2022.

Mr. David Schmidt, Executive Director of AOAC INTERNATIONAL (AOACI), continued to share, "AOAC is a very old organization. It was founded in 1884 and was a government agency for most of its history under the USDA and then the US FDA. It became an independent, non-profit organization in the 1970s and has been through many periods of evolution."

One of the recent developments in the analytical community is the proposal to revoke the method of analysis regulation by the US FDA. AOAC commented that the act of revoking "could undermine the standing of thousands of methods of analysis used by industry and government worldwide," as all AOAC-approved methods have to undergo scientific scrutiny to make them reliable and defensible in court worldwide.

Without using validated methods of analysis, the costs would be transferred to producers and consumers. Likewise, removing these legally defensible methods would make it hard to surmount international trade barriers as well as create major implications across industry sectors.

As a leader in validated methods of analysis, AOAC horizon scans issues coming up in the world of analytical science; have regular meetings to formally synthesize various issues to move them into working groups and help stakeholders; have domestic and international regulatory perspectives through meetings with international regulators; and contributes to the One Health Initiative that looks at all aspects of human health, animal health, and ecosystems.

Playing an important role around the world, AOAC has global resources available to regulators around the world to lead to methods harmonization.



During the Section update, Dr. Hou reminded the objectives of the 4 Working Groups (WGs): Harmonization of Methods, Emerging Issues, Capacity Building, and Training of Young Scientists. She pointed out key results and gaps obtained from the section-wide survey to set up priorities for the WGs of AOAC SEA. Such responses from AOAC SEA members also served as the reference points for the Conference Organizing Committee to choose topics for AOAC SEA 1st Annual Conference.

As the objective of the Section is to serve its members, the President emphasized the importance of member engagement and urged people sign up, volunteer, and participate in activities of AOAC SEA so that their voices can be heard, their needs can be identified, and their works can be contributed to the greater good -- if they decide to volunteer but it is not compulsory.

Dr. Hou also stated that AOAC SEA Section will participate in AOACI initiatives when relevant. Many of such programs were addressed by Ms. Mary Kay Krogull, President-Elect of AOACI, in her talk titled *AOAC INTERNATIONAL Global Program Update*.

At the conference, attendees gained in-depth knowledge about food regulatory science developments. Ms. Angela Li, Director of the Research and Exposure Science Department, Singapore Food Agency (SFA), gave a very informative talk about the role of the SFA in ensuring food safety under global and local challenges and threats. She also talked about the role of the National Centre for Food Science (NCFS) in supporting SFA to ensure a supply of safe food with functions including: Provide comprehensive range of testing services for regulatory and surveillance purposes; Develop capabilities for new

and emerging hazards; Conduct food safety research, monitoring and risk assessment; and Capability building. Ms. Li also shared about food safety science development covering both the ongoing and new areas of work. Overall, NCFS supports opportunities for scientific collaborations.

The President of AOAC Thailand Section, Dr. Pravate Tuitemwong, Associate Professor at King Mongkut's University Thonburi (KMUTT) gave an engaging talk on *Local regulatory authority requirements on food safety and impacts on analytical methods*. He shared about the food safety control legislation in Thailand, the pulling and pushing forces of the market and global regulation, and the need to have rapid and accurate testing technologies. Dr. Tuitemwong identified the lack of international guidelines for the validation of rapid methods and proposed collaborations with AOACI and AOAC Sections to address this.

Also on the same note of food safety regulation and science, Dr. Chai Lay Ching, Associate Professor and Head of Center for Research Services at University of Malaya (UM), talked about *Microbiological risk analysis: How safe is safe?* She talked about how the World Trade Organization (WTO) pushed the Sanitary and Phytosanitary (SPS) Agreement to adopt the risk-based approach to food safety management. Besides talking about microbiological risk assessment and the next generation of microbial testing in food using NGS, Dr. Chai explained obstacles in implementing this while the majority of countries are still using hazard-based food safety metrics. She is currently working on an APEC project titled *NGS-based microbial testing for probiotics products: Guidelines development and laboratory capacity building*, with core project committee including people from AOACI, ILSI SEA Region, US FDA, and International Trade Administration.



Food Safety: Regulation and Analytical Science (cont.)

Being around for 138 years, AOAC is renowned for its premier Official Methods of Analysis (OMA). The approved methods have to go through rigorous, systematic scientific scrutiny to ensure that they are highly credible and defensible. Stakeholders around the world including industry, research organizations, testing laboratories, academic institutions, and regulatory agencies reference and use AOAC methods.



activities to drive alignment / harmonization of analytical methods, besides partnering with government and non-government organizations in the development of standards for analytical methods.

Dr. Konings talked about *Measurement uncertainty in chemical analysis*. He emphasized that measurement uncertainty is of utmost importance in physical and analytical testing and subsequent decision-making. In accordance with ISO/IEC 17025, measurement uncertainty should be reported to allow for a decision as to whether a laboratory sample meets a specification based on an analytical result.

Speakers at 2022 AOAC SEA 1st Annual Conference also covered other important, crucial topics in analytical analysis including:

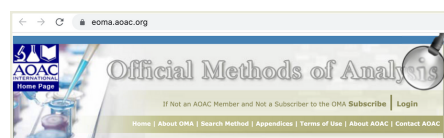
- *Reference materials for food testing - Requirements and uses* (Dr. Tran Cao Son, Deputy Director, National Institute of Food Control, Vietnam)
- *Achieving comparability on determination of veterinary drug residues in food to support realization of metrological traceability* (Ms. Cheow Pui Sze, Consultant Analytical Scientist, Health Sciences Authority, Singapore)

Hot and highly interested topics presented at the conference included the followings:

- *Simultaneous mycotoxin testing and method harmonization* (Dr. Martien Spanjer, Senior Inspector, Dutch Food and Consumer Protection Authority)
- *Towards harmonised methods for determining MOSH/MOAH in challenging food matrices* (Dr. Stefanka Bratinova, Scientific Project Officer, JRC, European Commission)
- *Mineral oil hydrocarbon analysis in food* (Dr. Lei Bao, Senior Expert, Nestlé China Food Safety Institute)
- *How 3-MCPD and GE enter food supply chain and mitigation actions - Voices from vegetable oil producers* (Mr. Mark Alton, Special Nutrition Category APAC Lead, Cargill)
- *AOAC First Action Methods for 3-MCPD and GE - Implementation in testing laboratories* (Dr. Qi Lin, Senior Lead, Abbott Nutrition)
- *Introduction of AOAC Per- and Polyfluoroalkyl Substances (PFAS) Initiative* (Dr. Erik Konings)

2022 AOAC SEA conference sponsors brought in scientific talks on updated topics such as:

- *Expect the unexpected - Food trends influencing food contaminant trends* (R-Biopharm AG)
- *Rapid identification of bacteria, yeast and molds starting from colony material with the MALDI Biotyper* (Bruker)
- *Taking forever to analyze forever chemicals? Let's make it simple* (Waters)
- *New applications sharing: Dioxin extraction and milk analysis* (Gerhardt Malaysia)
- *Improving mycotoxin testing methods using ISO17034 certified reference materials* (Romer Labs Asia Pacific)



Mr. Darryl Sullivan is AOACI Past-President, Chair of AOAC SPIFAN, and Chief Scientific Officer of Eurofins Scientific, who acts as a consultant for companies that need help meeting scientific and regulatory requirements and is often called upon as an expert witness for litigation and dispute resolution. Mr. Sullivan gave a talk on *AOAC INTERNATIONAL method validation process and the development and use of Standard Method Performance Requirements (SMPR's)*.

In his talk, Mr. Sullivan outlined each of the steps in the AOAC method validation process. He also emphasized on the importance of having stakeholders from *all* of the geographies where these important standards are used.

Another AOACI Past-President is Dr. Erik Konings who acts as a mentor to several AOAC Sections including AOAC SEA Section. He is the Program Manager at the Nestlé Institute of Food Safety and Analytical Sciences in Lausanne, Switzerland and provides leadership to global quality, laboratory and regulatory teams to engage in strategic local



Food Safety: Regulation and Analytical Science (cont.)

- *Precise testing of pesticides with SCIEX 7500 (SCIEX)*
- *Food provenance by elemental profiling by Agilent ICP-MS (Agilent)*
- *Comprehensive solutions to protect our food supply (Thermo Fisher Scientific)*
- *Validation of a screen method: A comparison of current guidelines and gaps for automation (Eurofins Technologies)*



One important topic that was echoed throughout several talks and stays mainstreamed and very active in AOAC SEA's activities is Training of young scientists.

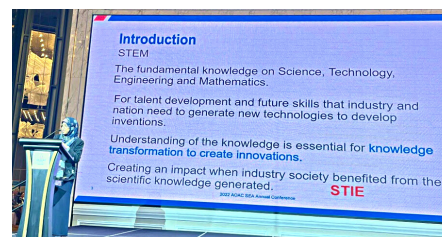
Half a day of the conference was dedicated to young scientists and recognized excellent students winning the Student Awards, under the leads of Dr. Qi Lin, Chair of Training of Young Scientists Working Group; Ms. Amelia Cheng-Quek, the Co-chair; and Ms. Hui Key Lee, the Student Awards Program Leader.



To encourage and appreciate students' work in the area of food safety and analytical science, AOAC SEA offered the Student Awards and provided a platform for the student winners to showcase their works. The high-quality research presented at the conference were:

- *Polymer Inclusion Membrane (PIM) sampling probe for electric field driven extraction of drug analytes from biological fluids (Ms. Tey Hui Yin, Universiti Teknologi Malaysia)*
- *Spinning liquid marbles for the amplified and portable colorimetric detection of total aflatoxin content in food products (Ms. Veronica Pereira, Nanyang Technological University)*
- *Surface-Enhanced Raman Scattering (SERS) Taster: A machine learning-driven multireceptor platform for multiplex profiling of wine flavors (Mr. Yong Xiang Leong, Nanyang Technological University)*

At the conference, Dr. Zaiton Abdul Majid, Professor and Dean of Faculty of Science, Universiti Teknologi Malaysia (UTM) was invited to talk about *Nurturing and building the future of STEM talents: Issues, challenges and way forward.*



* STEM stands for Science, Technology, Engineering and Mathematics

Starting with the necessity to secure high quality pool of future scientists and engineers to meet the needs of a growing economy and ensure a country's competitiveness in innovation, Dr. Zaiton Abdul Majid talked about obstacles faced in developing countries. Those include the perception that STEM subjects are difficult and boring and STEM careers are dull, difficult, and lack of creativity. All the while, STEM graduates in developing countries have a hard time getting well-paid jobs, in contrast to those in developed countries. She identified coordinated efforts from governments, NGOs, schools, businesses, and parents to nurture and build future STEM talents. AOAC SEA can be one of the important stakeholders in this.

"I am honored to help launch the 1st meeting of the Southeast Asia Section of AOAC INTERNATIONAL.

Special congratulations to the organizing committee. Look at this. It's a beautiful room. Just about every seat fills. It's quite an amazing project that you have completed."

David Schmidt, AOAC INTERNATIONAL



"The team should be complemented on a wonderful conference."

Mark Alton, Cargill



The land of unthinkable success

Hong Hanh Nguyen, M.P.P., Ph.D.
AOAC SEA Strategic Engagement Manager

We started from ground zero -- first year, nothing, no membership fee, no conference attendance fee.

Yet positive results started to pile up at the beginning of September, a month away from AOAC SEA 1st Annual Conference on Oct 12-13, 2022; six months after the Call for Nominations of the Conference Organizing Committee, and four months after the first conference organizing committee meeting.

We managed to get a set of high-profile and strategic speakers. We obtained enough sponsors to pay for speakers' travels, conference venue, event management, and student awards. We covered not just the top three most excellent students in analytical science but also the next runner-up, who was the only undergraduate among the six finalists. Finally, after four months of operation, we figured that we could manage to share the travel cost with overseas volunteers, who together with the team in Singapore worked tirelessly regardless of days, nights, or weekends to take care of the conference organizing to the minute details.

How did we do it?

Let's take a look at the way Erik advertised himself. "I am the Past-President of AOAC INTERNATIONAL (2014) and as a member of the Past-Presidents Council, I mentored and am still mentoring several sections among which is the AOAC Southeast Asia Section." Just bare facts but the responsibilities are carried with and hidden behind the title AOACI Past-President.

Peeking at a Whatsapp message from Qi, AOAC SEA Treasurer, who had to spend several hours of frustration to deal with website IT stuff can also reveal the spirit, "I will create the draft post for registration announcement. Could you help insert a nice picture? Thanks. [...] I may not make it nicely before I hand over it to you. My apologies. As it is now 8:30 pm and I am still in office. I need to arrive home for a 9:30 meeting."

"Happy to be part of the AOAC family and calling our 1st AOAC SEA SECTION Annual Conference a success in Singapore!"

Joanne Ho, Ph.D.
Sponsor Chair & Event Program Co-chair

It is contagious. The moment one person selflessly pours in such amount of effort, it is kindly returned and spread out even further.

The next morning of Jul 29, 10 weeks away from the conference date, a [website post](#), a promotional video, and social media posts were all in place. The ball kept rolling. The message about conference registration was distributed to personal networks, in formal emails to AOAC SEA members, in social media advertisements, and to laboratories in the region that use AOAC Official Methods of Analysis and the similar.

From the fear of not having enough people registering for the conference, we had 253 registrations, exceeding the 200 people capacity, and had to close registration early.

Is this success replicable?

Considering that AOAC SEA Section follows closely AOACI's Sections Operations Guidelines and was established on the ground set up by its Founding Members with lessons learned from existing AOAC sections, the current most variable element is its people.

Many frameworks can be applied to explain the people and leadership at AOAC SEA. Let's take the Adaptive Leadership framework for example. It was developed in the 1990s by Doctor Ronald Heifetz, a polymath and the founder of Center for Public Leadership at Harvard Kennedy School.

First, we can recognize that the most active people of AOAC SEA decided to deal with this as an adaptive challenge, meaning the solution was not fixed and they had to continuously learn and stay adaptive to circumstances.

Second, the most empowering leaders of AOAC SEA were capable of viewing the situation from high above in order to regulate distress, maintain disciplined attention, give the work back to the people, and protect leadership voices from below. Since the hierarchy structure of AOAC SEA is relatively flat and the people are quite well-educated, many of the times the leaders would have to regulate distress within themselves in order to maintain disciplined attention so that the organization can attain its goals and make progresses.

This implies to attain further unthinkable success, AOAC SEA needs to retain and produce more of such people.



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Very proud of the team who are capable, creative and persistent with full of passion and energy. I am very honoured to be part of the team. Thank you so much for your support and making the AOAC SEA first annual meeting such a successful one!

Xinping Hou, Ph.D.
President of AOAC SEA Section

AOAC SEA before and after the conference

AOAC SEA aims to establish effective vehicles to gather government, industry, and academia to drive development of analytical competence and capabilities, foster more public-private engagements, and ensure safety and integrity of foods and other products that impact public health to ultimately benefit consumers and economies in the region.

2022 AOAC SEA 1st Annual Conference in Singapore worked as a platform for people to meet face to face for the first time and further programs of the organization. We had 253 people from 18 countries of different continents registered.

"Delighted to be at the 1st AOAC SEA Section Annual Conference! It's been a good 3 years since I attended a Face to Face conference. It was great to see so many familiar faces to reconnect and see the latest updates in regulatory and food sciences."

Jilius Hiu, Waters

Working on the conference also served as an effective method to reach out to and engage interested stakeholders. Currently we have 470 members of 23 countries registered on AOAC SEA website, besides a list of 72 more.

Before the announcement of the Student Awards (Jun 17), we had 128 registered members. From that moment to the issuances of Newsletter 1 to 6 and after, we have gained 46, 8, 81, 67, 78, 47, and 15 more, respectively.

In October, the month of the conference, we gained 119 new followers on LinkedIn, accounting for 40% of the total followers.

After the conference, a number of speakers have agreed to share their presentation decks, and even allowed them to be translated, so that people in the region could be benefited -- especially those from disadvantage backgrounds and/or lower income countries. This is in line with the spirits of AOAC SEA Capacity Building and Training of Young Scientists Working Groups.

A number of technology providers have also approached AOAC SEA to show interests in collaborating programs through AOAC SEA Working Group activities.



In collaboration with Dr. Tran Cao Son, AOAC SEA Country Representative for Vietnam, AOAC SEA gave a talk in the plenary session and displayed 2 posters, in English and the native language, in the biannual Food Control Conference (FCC) of Vietnam's National Institute for Food Control (NIFC) on Oct 20-22, 2022.

AOAC SEA 1st Annual Conference Program Book was printed to reach individuals and elaborate what AOAC SEA can do for the country and region.

"The FCC has been an important event for Vietnam's food quality and safety agencies and stakeholders in recent years. The FCC aims to connect food scientists, regulators, and businesses to share scientific advances to develop the food control system in Vietnam. We are proud to introduce AOAC SEA at the FCC 2022 and believe that AOAC SEA will successfully contribute to the development of the analytical communities in the region."

Tran Cao Son, Ph.D.

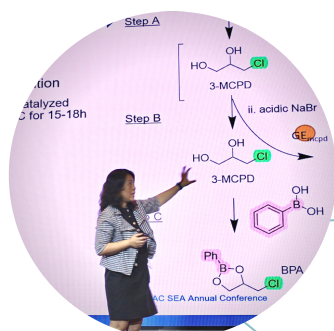
Deputy Director, National Institute for Food Control, MoH, Vietnam



The SERI 2022: SERIES 1 - SHARE YOUR EXPERIENCE: RESEARCH & INDUSTRIAL TRAINING on Nov 10, 2022 is a joint program between AOAC SEA and Universiti Teknologi Malaysia (UTM), the Malaysian Institute of Chemistry (IKM) Southern Branch, and Universiti Sains Malaysia (USM).

This program is designed to facilitate early industrial exposure for the students prior to embarking on their Industrial Training and Research Training. It is a continuation of the work of AOAC SEA volunteers from the industry and academia, under AOAC SEA Training of Young Scientists Working Group.

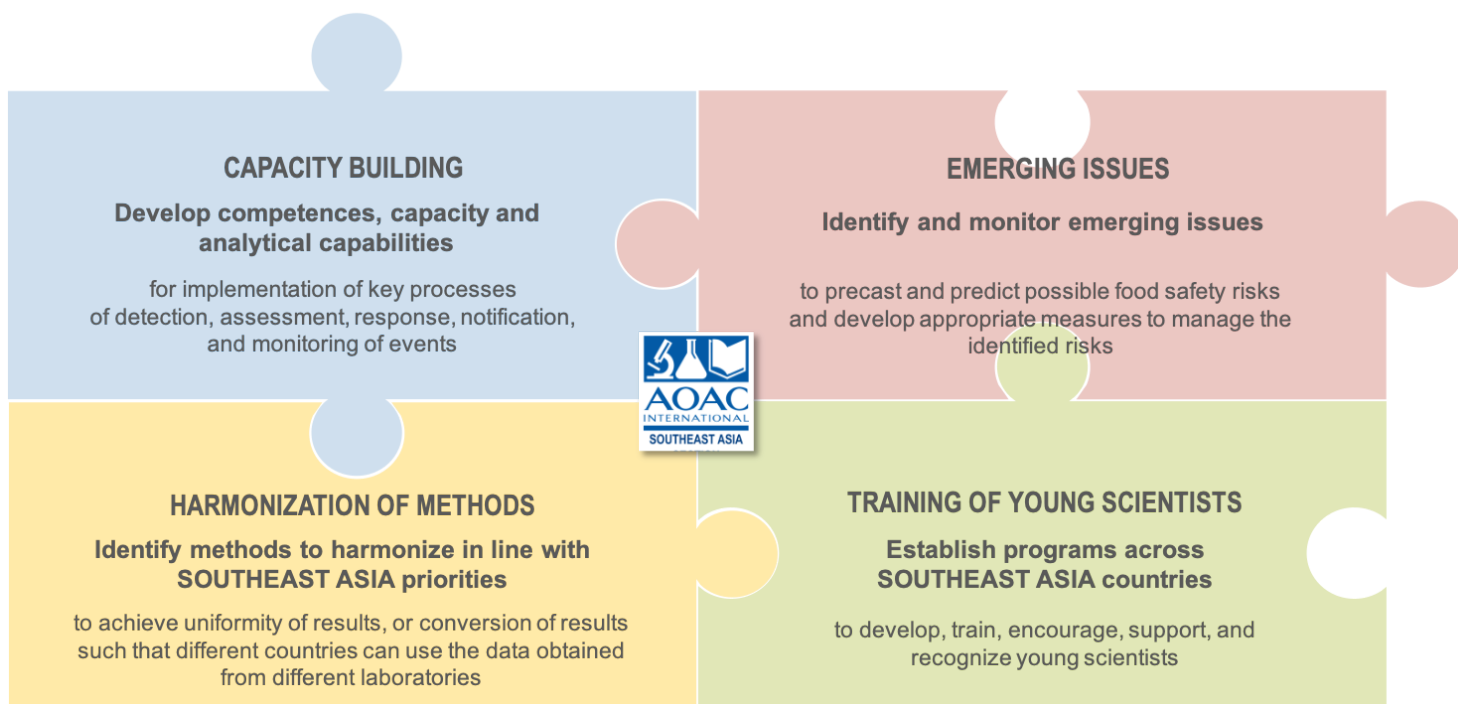
Exciting talks



Great networking opportunities



Four Working Groups



Online Discussion Forum

Our goals are to

- Bring together government, industry, and academia to establish standard methods of analysis
- Provide information for testing labs in this region to enhance lab capacity and compliance with regulatory requirements
- Facilitate knowledge sharing & collaboration among AOAC communities

Technical Topics

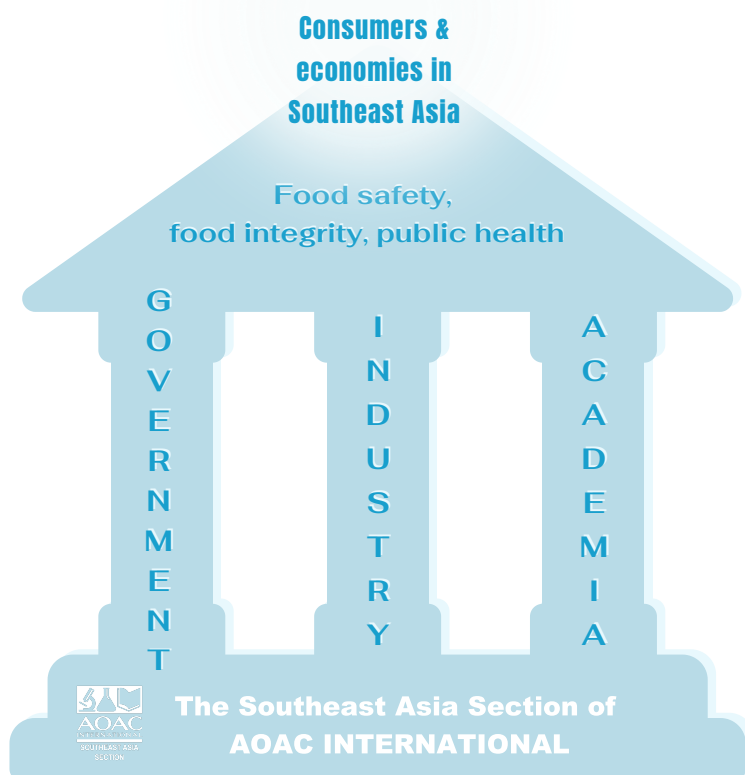
- Sampling
- Method Selection
- Sample Preparation
- Detection Techniques (LC, GC, ICP, MS/MS; Microbiol.; etc.)
- Data Processing
- Lab Investigation Report (LIR)
- Method Validation and Verification
- Statistical Analysis and Chemometrics

Lab Management

- Lab Establishment & Maintenance
- Lab Quality System and Audits
- Lab Safety System and Audits
- Technical Talent Management
- Testing Lab Networking
- Standards and Regulations

Community (Members Only)

- Young Scientists
- Achievement Sharing
- Contests and Challenges
- Knowledge Base
- Volunteer Opportunities



Organizational Membership

Executive	Associate	Supporter	Government & NPO
SGD 10,000 /year	SGD 7,000 /year	SGD 4,000 /year	SGD 300 /year
<ul style="list-style-type: none"> • Logo on AOAC SEA website • Membership in AOAC SEA Expert Working Groups • Participation in AOAC SEA Annual Meeting organizing committee • Invitations to AOAC SEA Full Board Meetings; access to exclusive events • Inclusion of technical article / information / news in AOAC SEA Section newsletters 			
<ul style="list-style-type: none"> ➤ 5 memberships with access to online OMA, AOACJ, ILM ➤ 100% discount on AOAC SEA webinars ➤ Exclusive AOAC SEA Annual Meeting benefits with 10% discounts 	<ul style="list-style-type: none"> ➤ 3 memberships with access to online OMA, AOACJ, ILM ➤ 75% discount on AOAC SEA webinars ➤ Exclusive AOAC SEA Annual Meeting benefits with 5% discounts 	<ul style="list-style-type: none"> ➤ 2 memberships with access to online OMA, AOACJ, ILM ➤ 50% discount on AOAC SEA webinars ➤ N/A 	<ul style="list-style-type: none"> ➤ 1 memberships with access to online OMA, AOACJ, ILM ➤ 100% discount on AOAC SEA webinars ➤ Exclusive AOAC SEA Annual Meeting benefits with 10% discounts



The Southeast Asia Section of
AOAC INTERNATIONAL

Come Join Us for FREE

