

2022

AOAC SEA Section 1st Annual Conference
Food Safety: Regulation and Analytical Science

October 12-13, 2022 | Singapore



CONFERENCE
PROGRAM BOOK





Welcome to the 2022 AOAC SEA 1st Annual Conference on **Food Safety: Regulation and Analytical Science**. We hope you have a good knowledge sharing and networking opportunity so that together we can drive the development of analytical competence and capability through mutual recognition and improve the standards and performance of analytical science.

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TECHNICAL BRIEFING



Please put your phone on vibration mode and use the area outside the ballroom for urgent calls.



Q&A sessions will be at the end of each presentation and are approximately 2 minutes long.



Please be mindful of time and return to the conference area on time.



We hope you have a great time networking and finding collaboration opportunities with the community.



In case of emergency, we need to follow the emergency protocol as briefed by the hotel staff and gather at the nearest emergency exit.

CONFERENCE FEEDBACKS



At the end of the conference, please respond to the feedback form so that we can improve your experience for the next year.



2022 AOAC SEA 1st Annual Conference

FOOD SAFETY: REGULATION AND ANALYTICAL SCIENCE

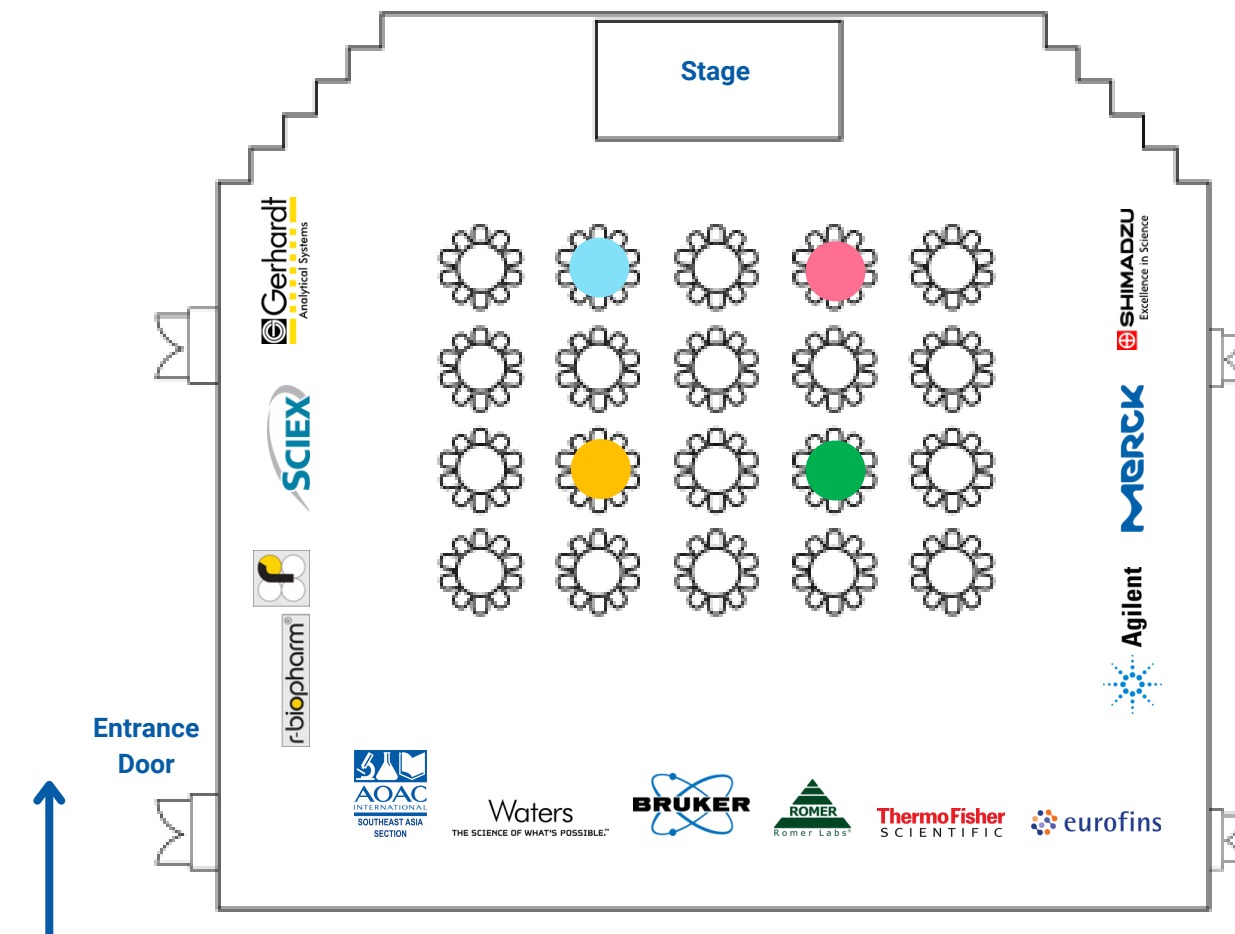
Date	Time	Content	Speaker
12 Oct AM	8:30-9:30	Registration & Coffee/Tea	
	9:30-9:45	Opening Speech	Dr Xinping Hou, President of AOAC SEA; Analytical Services Manager SEA, BV-AQ
	9:45-10:00	AOAC INTERNATIONAL Update	Mr David Schmidt, Executive Director, AOACI
	10:00-10:15	AOAC INTERNATIONAL Global Program Update	Ms Mary Kay Krogull, President-Elect, AOACI; Sr. VP Business Administration Food NA, Eurofins Scientific
	10:15-10:35	Driving Food Safety Research & Risk Assessment to Ensure a Supply of Safe Food	Ms Angela Li, Director, Research and Exposure Science Department, Singapore Food Agency
	10:35-10:55	Local Regulatory Authority Requirements on Food Safety and Impacts on Analytical Methods	Dr Pravate Tuitemwong, President of AOAC Thailand Section; Associate Professor, King Mongkut's University Thonburi (KMUTT)
	10:55-11:20	Tea Break	
	11:20-11:40	AOAC Southeast Asia Section Update	Dr Xinping Hou, President of AOAC SEA; Analytical Services Manager SEA, BV-AQ
	11:40-12:00	AOAC INTERNATIONAL Method Validation Process and the Development and Use of SMPR's	Mr Darryl Sullivan, Chair of AOAC SPIFAN; Chief Scientific Officer, Eurofins Scientific
	12:00-12:20	Measurement Uncertainty in Chemical Analysis	Dr Erik Konings, Program Manager, Nestlé Institute of Food Safety & Analytical Sciences
	12:20-12:45	Expect the Unexpected - Food Trends Influencing Food Contaminant Trends	Mr Ronald Niemeijer, Director Global Marketing, R-BioPharm AG
	12:45-14:10	Lunch	
12 Oct PM	14:10-14:15	Start of Afternoon Session	
	14:15-14:35	Towards Harmonised Methods for Determining MOSH/MOAH in Challenging Food Matrices	Dr Stefanka Bratinova, Scientific Project Officer, Joint Research Centre (JRC), European Commission
	14:35-14:55	Mineral Oil Hydrocarbon Analysis in Food	Dr Lei Bao, Senior Expert, Nestlé China Food Safety Institute
	14:55-15:15	Taking Forever to Analyse Forever Chemicals? Let's Make It Simple.	Ms Rashi Kochhar, Strategic Markets & Programs Manager SEA, Waters Corporation
	15:15-15:45	Tea Break	
	15:45-16:05	Simultaneous Mycotoxin Testing and Method Harmonization	Dr Martien Spanjer, Senior Inspector, Dutch Food and Consumer Protection Authority
	16:05-16:20	Precise Testing of Pesticides with SCIEX 7500	Ms Siew Hoon Tai, Senior Field Application Specialist/Market Development ASEAN, SCIEX
	16:20-16:35	Food Provenance by Elemental Profiling by Agilent ICP-MS	Mr Steven Pang, Spectroscopy Product Specialist, Agilent Technologies
	16:35-16:50	Comprehensive Solutions to Protect Our Food Supply	Dr Dhaval Patel, Center of Excellence (SEATW), Chromatography and Mass Spectrometry, Thermo Fisher Scientific
	17:00	End of Day 1	
	18:00-20:00	Gala Dinner (Invitation only)	



Date	Time	Content	Speaker
13 Oct AM	9:00-9:20	<i>Reference Materials for Food Testing – Requirements and Uses</i>	Dr Tran Cao Son, Deputy Director, National Institute of Food Control, Vietnam
	9:20-9:40	<i>Microbiological Risk Analysis: How Safe is Safe?</i>	Dr Chai Lay Ching, Associate Professor, Head of Center for Research Services, University of Malaya
	9:40-10:00	<i>Achieving Comparability on Determination of Veterinary Drug Residues in Food to Support Realization of Metrological Traceability</i>	Ms Cheow Pui Sze, Consultant Analytical Scientist, Chemical Metrology Division, Health Sciences Authority Singapore
	10:00-10:20	<i>Rapid Identification of Bacteria, Yeast and Molds Starting from Colony Material with the MALDI Biotyper</i>	Mr Olaf Degen, Global Business Development Manager, Microbiology and Diagnostics, Bruker
	10:20-10:50	<i>Tea Break</i>	
	10:50-11:10	<i>How 3-MCPD and GE Enter Food Supply Chain and Mitigation Actions – Voice from Vegetable Oil Producers</i>	Mr Mark Alton, Special Nutrition Category APAC Lead, Cargill
	11:10-11:30	<i>AOAC First Action Methods for 3-MCPD and GE – Implementation in Testing Laboratories</i>	Dr Qi Lin, Senior Lead, Analytical Research, Abbott Nutrition
	11:30-11:50	<i>Introduction of AOACI 2022 Per- and Polyfluoroalkyl Substances (PFAS) Initiative</i>	Dr Erik Konings, Program Manager, Nestlé Institute of Food Safety & Analytical Sciences
	11:50-12:05	<i>New Applications Sharing: Dioxin Extraction and Milk Analysis</i>	Mr Jonathan Lee, Director, Gerhardt Malaysia
	12:05-12:20	<i>Improving Mycotoxin Testing Methods Using ISO17034 Certified Reference Materials</i>	Ms Lee Juan Chin, Senior Laboratory Manager, Romer Labs Asia Pacific
12:20-12:35	<i>Validation of a Screening Method: A Comparison of Current Guidelines and Gaps for Automation</i>	Mr Daniel Tan, Business Unit Manager Industrial Solutions Asia, Eurofins Technologies	
12:35-14:05	<i>Lunch</i>		
13 Oct PM	14:05-14:25	<i>Program of the Year and Student Award Ceremony</i>	
	14:25-14:45	<i>Nurturing and Building the Future of STEM Talents: Issues, Challenges and Way Forward</i>	Dr Zaiton Binti Abdul Majid, Professor and Dean, Faculty of Science, Universiti Teknologi Malaysia
	14:45-15:05	<i>Polymer Inclusion Membrane (PIM) Sampling Probe for Electric Field Driven Extraction of Drug Analytes from Biological Fluids</i>	Tey Hui Yin, Universiti Teknologi Malaysia, Malaysia
	15:05-15:25	<i>Spinning Liquid Marbles for the Amplified and Portable Colorimetric Detection of Total Aflatoxin Content in Food Products</i>	Veronica Pereira, Nanyang Technological University, Singapore
	15:25-15:45	<i>Surface-Enhanced Raman Scattering (SERS) Taster: A Machine Learning-Driven Multireceptor Platform for Multiplex Profiling of Wine Flavors</i>	Yong Xiang Leong, Nanyang Technological University, Singapore
	15:45-16:00	<i>Closing Speech</i>	
16:00-17:00	<i>Working Groups Networking Session</i>		
17:00	<i>End of Day 2</i>		



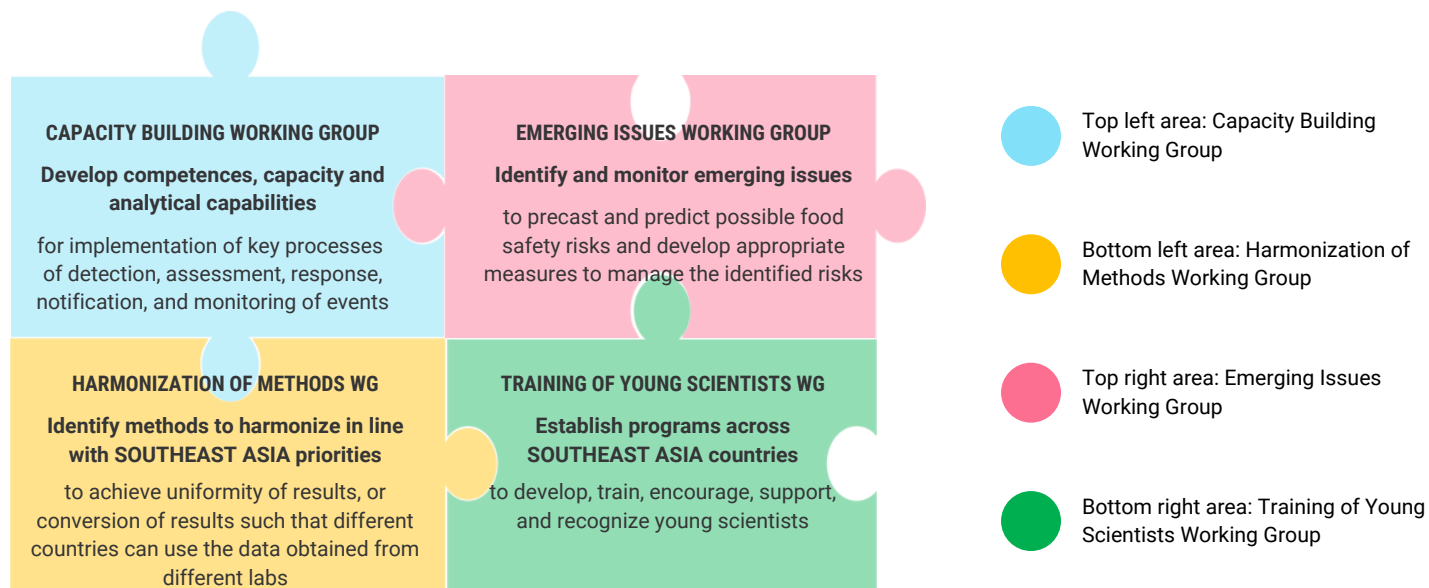
ORCHARD HOTEL LEVEL 3 BALLROOM



WORKING GROUPS NETWORKING SESSION

OCT 13, 16:00-17:00

After the closing speech on Day 2, there will be a Networking Session for Working Group members. Meeting areas are color coded as below.





RECOGNITIONS OF YOUNG SCIENTISTS

AOAC SEA Section Student Awards Program aims to support students engaged in the area of food safety and analytical science, with the intention to encourage and appreciate students' work and scientific contribution.



Student Award Winner
Hui Yin Tey
Graduate, Universiti Teknologi Malaysia
Malaysia



Student Award Winner
Yong Xiang Leong
Graduate, Nanyang Technological University
Singapore



Student Award Winner
Veronica Pereira
Graduate, Nanyang Technological University
Singapore



Student Travel Award Recipient
Anh Kieu
Undergraduate, VNU University of Science
Vietnam

2021-2022 PROGRAM OF THE YEAR

To recognize programs/working groups and to motivate the SEA Section working groups to carry out more and greater programs, AOAC SEA Section awarded the *2021-2022 Program of the Year* to the **Student Awards Program** under the Training of Young Scientists Working Group.

Recognized individuals in this programs are:

Lee Hui Key
University of Malaya

Dr. Akmali Mokhter
Universiti Teknologi Malaysia

Amelia Cheng-Quek

Dr. Joanne Ho
Waters Corporation

Dr. Hong Hanh Nguyen
Transmed, Vietnam

Nguyen Thi Minh Hoa
National Institute for Food Control, Vietnam

Dr. Sheela Chandren
Universiti Teknologi Malaysia

Dr. Qi Lin
Abbot Nutrition

AOAC SEA SECTION FOUNDING MEMBERS

AOAC SEA Section is grateful to the Founding Members for taking the initiatives, setting up the frameworks, calling for volunteers and supports, and leading the Section in its early time. They are instrumental to the forming and shaping of the Section today.

Dr. Erik Konings

AOAC SEA Section Mentor
Program Manager
Nestlé Institute of Food Safety and Analytical Sciences

Mr. Philippe Gallardo

AOAC SEA Past President (2021)
Head (Retired)
Nestlé NQAC, Singapore

Dr. Jing Tan

Previous Lead Scientist, Abbott Nutrition
Current Analytical Team Leader, FMC Corporation



Registration

Oct 12, 8:30-9:30

Welcome! Please help yourself with coffee & tea after checking in and getting your name badges.

Don't forget to say Hi to **Pinky** (Maria Josephine Gonzales) and **May Ling** at the registration desk. Other Conference Organizing Committee volunteers also wear **blue stripe** name badges.

OPENING SPEECH

Oct 12, 9:30-9:45

Xinping Hou, AOAC SEA, BV-AQ

AOAC INTERNATIONAL Update

Oct 12, 9:45-10:00

David Schmidt, AOACI

While we have emerged from the global pandemic, AOAC INTERNATIONAL has maintained its momentum in progress on its strategy. Dave Schmidt will provide an organizational overview of updates and accomplishments to date, a focus on our growing network of sections and the outlook for additional AOAC network collaboration through next year.

AOAC INTERNATIONAL Global Program Update

Oct 12, 10:00-10:15

Mary Kay Krogull, AOACI, Eurofins

Mary Kay Krogull will present an update on the new Board of Directors of AOAC INTERNATIONAL for 2023. She will also present a series of updates and accomplishments to date on global programs that are underway or initiating in 2022/2023 that may impact or benefit members of the Southeast Asia Section. These updates will include items on harmonization of standards, current projects in the region, trade issues, updates on methods accepted by Codex, etc.

Driving Food Safety Research & Risk Assessment to Ensure a Supply of Safe Food

Oct 12, 10:15-10:35

Angela Li, Singapore Food Agency

The National Centre for Food Science (NCFS) in the Singapore Food Agency (SFA) is the national reference laboratory on food science. It plays a crucial role in the enforcement of Singapore's food safety regulations and conducts food safety monitoring to generate scientific data for risk assessment and food safety standard review. NCFS provides scientific expertise in food safety by performing in-depth applied research, risk assessment studies, data analytics, and laboratory diagnosis. The application of science and technology enables us to adopt an evidence-based approach in addressing emerging food safety and security concerns. Research and development (R&D) is a pivotal pillar driving the innovation of agri-food technologies and products. While food innovation present potential for food security, we must ensure its safety by having a robust food safety system and advancing our regulatory science capabilities to shape policies in tandem with new market innovations. As food safety is a joint responsibility, SFA will continue to work with industry and consumers to build their capabilities and educate them on their roles in ensuring food safety.

Local Regulatory Authority Requirements on Food Safety and Impacts on Analytical Methods

Oct 12, 10:35-10:55

Pravate Tuitemwong, AOAC Thailand, KMUTT

Thailand has been active in food safety control legislation due to the highly diverse food culture that leads to various food safety issues and requires solutions with country specific approaches to provide the best safety/quality foods to the world market. This presentation gathers information on current regional/local authority requirements on food safety implementation/certification from farm to table. Several local requirement as well as revised international standards such as ISO9001:2015; ISO22000:2018, Good Hygiene Practice (GHP), the US Food Safety Modernization Acts (FSMA): Preventive Control of Human Food (PCHF), have affected these changes. These schemes required rapid and accurate testing to work with. New methods are introduced including molecular typing, non-cultured, non-contact and non-destructive methods to meet industry demands. Firms, as well as research agencies in private, governmental, and academic organizations have developed own test kits to replace current cumbersome conventional methods for their specific used in order to control food production chain for safety. Locally developed methods required local validation for primary approval. Some methods for quality control purpose still needs proper validation as required by ISO17025. AOAC Sections should be instrumental in these activities that include method validation development training and establishing joint organization with AOAC International to support in this activity in the future.

Tea Break

Oct 12, 10:55-11:20

Grab some refreshments and start networking. Also, check out the booths of AOAC SEA sponsors who have been an instrumental support pillar to make this event into reality!

Say Hi to **Hong, Joanne, & Hui Key** at AOAC SEA booth as well.

AOAC SOUTHEAST ASIA SECTION UPDATE

Oct 12, 11:20-11:40

Xinping Hou, AOAC SEA, BV-AQ

The objective of the section is to serve its members. On the one hand, AOAC SEA will engage more members and stakeholders, and further survey to update and fine tune priorities of the working groups. On the other hand, we will evaluate/expand current projects and initiate new ones that integrate with AOACI initiatives when relevant.

Organizational membership is available in various levels for organizations to voice up at the Section's Board Meetings and establish regional and global network in the community.





AOAC INTERNATIONAL Method Validation Process and the Development and Use of SMPR's

Oct 12, 11:40-12:00

Darryl Sullivan, AOAC SPIFAN, Eurofins

AOAC is active in some very exciting standards development programs. One of the most exciting programs is AOAC's Stakeholder Panel Process and the development of Standard Method Performance Requirements. (SMPR) This process is being used to develop standards for infant formula (SPIFAN), and other important food and dietary supplement matrices. Infant formula is one of the most highly regulated products in the world, and it is critical that there are good validated test methods for analysis of these products. SPIFAN has already validated over 50 new AOAC Official First Action Methods and 14 AOAC Official Final Action Methods using the SMPR process. Twelve of these new AOAC methods have also been approved by ISO, IDF, and Codex Alimentarius. This makes them the most recognized international test methods for infant formula.

The presentation will outline each of the steps in the AOAC method validation process. Details will be provided on the new AOAC standards development process and how it is being used to develop Standard Method Performance Requirements (SMPR's). Each step in the SMPR process will be explained and the overall outcomes in several areas will be described. A critical component of the SMPR understands the global implications of the test methods that are being developed. It is important to AOAC that we have Stakeholders from all of the geographies where these important standards are needed. The final SMPR is codified as an official AOAC standard, and is used as the definition of requirements in all of the future validation programs.

Several examples SMPR's will be shared during the presentation and each of the components of these standards will be described in detail for the audience. The importance of the SMPR will be highlighted in each of the examples that are discussed.

Measurement Uncertainty in Chemical Analysis

Oct 12, 12:00-12:20

Erik Konings, Nestlé Institute of Food Safety & Analytical Sciences

Physical and analytical measurement results in food control are used to assess whether food products meet relevant specifications. The accuracy of measurement results is affected by various error components. It is important to ensure these errors are properly considered. Measurement uncertainty is of utmost importance in physical and analytical testing and subsequent decision-making. Codex Alimentarius Commission recommend laboratories involved in Import and Export control should provide measurement uncertainty.

This presentation will focus on types of measurement errors, procedures for estimating measurement uncertainty, how to report measurement uncertainty and how measurement uncertainty can affect decisions.

Expect the Unexpected - Food Trends Influencing Food Contaminant Trends

Oct 12, 12:20-12:45

Ronald Niemeijer, R-BioPharm AG



Lunch

Oct 12, 12:45-14:10

Don't forget to say Hi to the emcees, **Kumud and Amelia!**

Look out for AOAC SEA Executive Committee members as well; they are very approachable! *Hints:* They have **Erik, Xinping, Jie,** and **Qi** on their name badges!

Towards Harmonised Methods for Determining MOSH/MOAH in Challenging Food Matrices

Oct 12, 14:15-14:35

Stefanka Bratinova, JRC, European Commission

The analysis of MOH in food, especially in food with a high fat content, is very demanding in terms of analytical methodology and interpretation of chromatograms. In November 2019, a dispute emerged related to published data on MOAH in infant formula and follow-on formula (IF). The comparability and thus reliability of the results from different analytical procedures applied by laboratories to monitor the MOAH content in IF was in question.

The European Union Reference Laboratory for Food Contact Materials (EURL FCM) identified the need for a fully harmonised analytical method to be characterised with respect to its performance and further standardisation. This was also recognised by all stakeholders (European Commission, official control laboratories, non-governmental organisations and commercial laboratories).

The presentation will summarise the current achievements from this project including:

- A roundtable discussion with all stakeholders;
- An exploratory review and trial of the variety of experimental procedures applied;
- Cooperation with stakeholders for the preparation of suitable test materials for collaborative trials;
- Organisation of a pre-trial for the evaluation of the draft Standard Operating Procedure (SOP) and familiarisation of the labs with it;
- Identification of the need and conducting two additional ring trials on characterisation of a MOSH/MOAH in a mineral oil and on integration;
- Overview of the draft results from the recent full collaborative trial for establishing the performance characteristics of a SOP for determination of the MOAH in IF.

Mineral Oil Hydrocarbon Analysis in Food

Oct 12, 14:35-14:55

Lei Bao, Nestlé China Food Safety Institute

This presentation will focus on the introduction of MOH mainly including its contamination sources, composition and toxicology, the analytical method development trend from manual to online quantitative and qualitative method, as well as important development processes of MOH analysis. A brief introduction of international and China standard method progress of MOH analysis in vegetable oils and infant formula will also be addressed in this presentation.



Taking Forever to Analyse Forever Chemicals? Let's Make It Simple.

Oct 12, 14:55-15:15

Rashi Kochhar, Waters Corporation

Waters
THE SCIENCE OF WHAT'S POSSIBLE.™

Tea Break

Oct 12, 15:15-15:45

Simultaneous Mycotoxin Testing and Method Harmonization

Oct 12, 15:45-16:05

Martien Spanjer, Dutch Food and Consumer Protection Authority

Mycotoxins were traditionally mainly determined by single analyte methods, based on ELISA techniques. When liquid chromatographic techniques were introduced the assays were applied as clean-up step. At first as single compound clean-up and further developed in multi assay versions. After introduction of LC-MS techniques for routine analysis it was possible to leave out any sample clean-up, which enabled simultaneous determination of many mycotoxins in one single analytical run, including confirmation by MS data. This was helpful to control the expanded legislation for mycotoxins, as well facilitated quality control requirements. Leaving out any sample clean-up introduced the matrix effect, which is the disturbance of the analytical signal by the main components of the sample. Since the introduction of isotopically labelled compounds for the analytes of interest, this effect can be corrected for by simple calculation. As to fulfil accreditation requirements the applied analytical methods have to meet a long list of performance criteria. This work can be done by joining efforts in CEN, the European Committee for Standardization, which is the association that brings together the National Standardization Bodies of 33 European countries plus 17 Affiliates. Regarding mycotoxins CEN worked with 2 mandates of the European Commission. In a first mandate 9 standards were developed for mycotoxins for which maximum limits are given in standing EU legislation. The second mandate, which finished this year, included 9 methods regarding mycotoxins that are regulated in a broader range of food and 2 multi-methods. With these standards the member states are prepared to enforce existing legislation and new amendments getting into force per January 2023 as well. The applied collaborative studies and proficiency tests have been regularly published in the Journal of AOAC International and the Official Methods of Analysis of AOAC International.

Precise Testing of Pesticides with SCIEX 7500

Oct 12, 16:05-16:20

Siew Hoon Tai, SCIEX

SCIEX

Food Provenance by Elemental Profiling by Agilent ICP-MS

Oct 12, 16:20-16:35

Steven Pang, Agilent Technologies

Agilent

Comprehensive Solutions to Protect Our Food Supply

Oct 12, 16:35-16:50

Dhaval Patel, Thermo Fisher Scientific

ThermoFisher
SCIENTIFIC

End of Day 1

Oct 12, 17:00

We hope you have had a day filled with learnings, collaboration, connecting and succeeding together!

If you haven't talked to the speakers yet, go catch them quickly – before they go off to the Gala Dinner at 18:00-20:00.



START OF DAY 2

Oct 13, 8:45-9:00

Welcome back! Please help yourself with coffee & tea and get ready for another exciting day!

Reference Materials for Food Testing -- Requirements and Uses

Oct 13, 9:00-9:20

Tran Cao Son, National Institute of Food Control, Vietnam

Food safety is more demanding due to extending of the food trade and its effect on human health. Food commodities represent very complicated and diverse matrices, which is still a challenge for food analysis to overcome the effect of different matrices. Reference materials (RMs) are materials that are sufficiently homogeneous and stable for specified properties and fit for their intended use in a measurement process. Certified reference materials (CRMs), moreover, are characterized by a metrologically valid procedure for one or more specified properties. The production of RMs and CRMs in compliance with ISO 17034 is a crucial requirement to ensure their quality. In food laboratories, RMs & CRMs play an important role in a number of purposes: (1) verification and validation of analytical methods; (2) quality control of daily analytical tests; (3) determination of measurement uncertainty; (4) qualification of analytical instruments; (5) training and evaluation of personnel; and (6) providing materials for organizing proficiency testing or other interlaboratory comparisons. This report would clarify the definitions, production process, and the use of RM & CRM in food safety and quality testing laboratory.

Microbiological Risk Analysis: How Safe is Safe?

Oct 13, 9:20-9:40

Chai Lay Ching, University of Malaya

Foodborne illness is one of the most prevalent causes of morbidity and mortality on a global scale, especially in today's closely interconnected global communities through international food trade. To protect national public health, each nation has its own national food safety metrics, typically in the form of limits or standards for microbiological contamination (e.g., salmonella not identified in 25 g of food; 100 cfu/g of coliforms in food) in food products entering local markets. In general, the limits or criteria for microbiological contamination in food are established based on scientist and industrial expert opinions, research findings, and food manufacturing experience of the nature of microbial contamination in food and the capacity of the practises, technologies, and processes adopted in the food industry (GMP and HACCP) to inactivate foodborne microorganisms to ensure food safety.

However, there have been doubts and questions raised as to whether the food safety metrics are adequate to provide consumers with the desired level of protection against foodborne illnesses; are the food safety metrics too stringent and unnecessary as it increases food loss and waste as well as the cost of food? Zero risk cannot be achieved in terms of food safety. Consequently, how safe is safe? The World Trade Organization (WTO) pushed the Sanitary and Phytosanitary (SPS) Agreement to adopt a risk-based approach to food safety management. In the SPS Agreement, the term "Appropriate Level of Protection" (ALOP) was introduced as the "Level of protection judged appropriate by the member (country) instituting a sanitary or phytosanitary measure to protect human, animal, or plant life or health within its territory." With ALOP, we no longer ask, "Is the food safe?" but rather, "What is the accepted level of safety?" when we realised that zero risk or complete safety do not exist. The Food Safety Objectives (FSO) are described as "the greatest frequency and/or concentration of a microbiological hazard in the food at the time of consumption in order to satisfy a public health goal, such as the ALOP" will serve as the new measures based on risk. However, there have been many obstacles in implementing this, and the majority of countries, if not all, are still using hazard-based food safety metrics rather than these risk-based food safety measurements.

Achieving Comparability on Determination of Veterinary Drug Residues in Food to Support Realization of Metrological Traceability

Oct 13, 9:40-10:00

Cheow Pui Sze, Health Sciences Authority Singapore

The use of antibiotics and other veterinary drugs in livestock and fisheries has attracted global concerns regarding their potential adverse effects on human health. Ensuring more judicious use of these drugs in animals and fishes, which inadvertently enters the human food chain, is thus one of the key elements in controlling the issue of antimicrobial resistance. Accurate determination of veterinary drug residues remains a big challenge due to the complexity of the matrices. To support quality assurance in testing laboratories, the Chemical Metrology Laboratory of Health Sciences Authority, Singapore developed high accuracy methods for determination of veterinary drug residues in food using liquid chromatography-isotope dilution tandem mass spectrometry (LC-IDMS/MS). The results were comparable to those obtained by other national metrology institutes (NMIs) and designated institutes (DIs) as demonstrated in an inter-laboratory comparison. To establish the equivalence of measurement results among NMIs/DIs, extensive studies and discussions of methods including investigations on different parameters such as pH of extraction solvent systems, preparation of calibrants and internal standards, stability of reference standards, etc were performed in the comparison. The developed method was then adopted for the assignment of reference values of veterinary drugs in a seafood material. The uncertainties associated with the certified values were evaluated by combining the uncertainty components from characterisation, potential inhomogeneity and long-term instability of the material. The certified values are traceable to the International System of Units and the certified reference material can be used by the food testing laboratories to validate their methods or as quality control material to improve the accuracy of their measurements.



Rapid Identification of Bacteria, Yeast and Molds Starting from Colony Material with the MALDI Biotyper

Oct 13, 10:00-10:20
Olaf Degen, Bruker



Tea Break

Oct 13, 10:20-10:50

How 3-MCPD and GE Enter Food Supply Chain and Mitigation Actions -- Voice from Vegetable Oil Producers

Oct 13, 10:50-11:10
Mark Alton, Cargill

3-MCPD & GE are important contaminants which are carcinogenic. Even though they are mentioned together they do not equal each other.

They have different precursors and formation temperatures. The mitigation techniques and critical processing steps differ so they need to be considered independently.

It is important to understand to select the right combination of mitigation strategies as this is dependent on the required 3-MCPD/GE level as well as other targeted contaminants and quality, some may act in antagonistic manner.

AOAC First Action Methods for 3-MCPD and GE -- Implementation in Testing Laboratories

Oct 13, 11:10-11:30
Qi Lin, Abbott Nutrition

There are two official test methods, AOAC 2018.03 and AOAC 2018.12, for the determination of glycidol in infant formula that have received First Action Method status from the AOAC INTERNATIONAL. Both methods have been validated and shown to be fit for purpose for the determination of glycidol in infant formula.

Both methods are similar in several aspects including analytical instrumentation (GC-MS) and corresponding derivatization of diols with PBA, fat extraction for the separation of GE from sample matrix, and conversion of glycidol to MBPD for GC-MS detection.

AOAC 2018.03 converts GE to MBPD esters under heated acidic condition before acidic hydrolysis to form free MBPD from GE. Mono-/di-glycerides presenting in sample can be converted to MBPD ester under the same condition, which will be falsely quantified as GE and results in artifactual test results with increased GE amount. Therefore, aminopropyl SPE cleanup of sample matrix to remove mono-/di-glycerides is necessary.

AOAC 2018.12 uses alkaline conditions at -25 °C to detach fatty acid chain (via transesterification) from glycidol backbone which subsequently undergoes bromination under a cooled condition. The controlled low-temperature reaction condition significantly reduces the possibility of formation of MBPD from non-glycidol compound (i.e. glycerol) compared to AOAC 2018.03. Therefore, removal of mono-/di-glycerides from the sample matrix is not required. AOAC 2018.12 also has its own potential artifacts, which is glycidol formation from MCPD during transesterification. To address the issue, the method applies an empirically determined representative transformation factor with every analytical batch to correct undesired conversion of MCPD to glycidol.

Most testing laboratories adopt AOAC 2018.03 due to the relatively convenient reaction conditions and straightforward measurement. While the use of SPE cartridges may lead to higher cost of the testing, laboratories have found various ways to mitigate.

INTRODUCTION OF AOACI 2022 PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) INITIATIVE

Oct 13, 11:30-11:50

Erik Konings, Nestlé Institute of Food Safety & Analytical Sciences

New Applications Sharing: Dioxin Extraction and Milk Analysis

Oct 13, 11:50-12:05

Jonathan Lee, Gerhardt Malaysia



Improving Mycotoxin Testing Methods Using ISO17034 Certified Reference Materials

Oct 13, 12:05-12:20

Lee Juan Chin, Romer Labs Asia Pacific



Validation of a Screening Method: A Comparison of Current Guidelines and Gaps for Automation

Oct 13, 12:20-12:35

Daniel Tan, Eurofins Technologies



Lunch

Oct 13, 12:35-14:05



Program of the Year & Student Award Ceremony

Oct 13, 14:05-14:25

Please join us to congratulate:

- Tey Hui Yin
- Veronica Pereira
- Yong Xiang Leong

Nurturing and Building the Future of STEM Talents: Issues, Challenges and Way Forward

Oct 13, 14:25-14:45

Zaiton Binti Abdul Majid, Universiti Teknologi Malaysia

The necessity to secure high quality pool of future scientists and engineers is inevitable as our economy grows and competitiveness relies heavily on innovation. Numerous reports indicated a growing concern of policymakers and industry leaders regarding the shortage of science, technology, engineering and mathematics (STEM) university graduates to replace the retiring STEM workforce. To exacerbate this issue, globally an increasing number of young graduates are seen to pursue non-STEM careers. In schools, STEM subjects are perceived as difficult and boring and youth often perceived careers in STEM as dull, difficult, and limits creativity. While STEM graduates in developed countries have better chances of getting well-paid jobs, this is not the case in most developing countries. Efforts are being made by countries worldwide to prevent further decline in the number of STEM graduates. The shift required to address the imbalance between STEM and non-STEM graduates will not occur overnight. Hence, a well-coordinated effort from all stakeholders; governments, NGOs, schools, businesses, parents are required to nurture and build our future STEM talents.

Polymer Inclusion Membrane (PIM) Sampling Probe for Electric Field Driven Extraction of Drug Analytes from Biological Fluids

Oct 13, 14:45-15:05

Tey Hui Yin, Universiti Teknologi Malaysia

Spinning Liquid Marbles for the Amplified and Portable Colorimetric Detection of Total Aflatoxin Content in Food Products

Oct 13, 15:05-15:25

Veronica Pereira, Nanyang Technological University

Surface-Enhanced Raman Scattering (SERS) Taster: A Machine Learning-Driven Multireceptor Platform for Multiplex Profiling of Wine Flavors

Oct 13, 15:25-15:45

Yong Xiang Leong, Nanyang Technological University

CLOSING SPEECH

Oct 13, 15:45-16:00

WORKING GROUPS NETWORKING SESSION

Oct 13, 16:00-17:00



Please grab your refreshments and start networking with other Working Group members.

Below are the working group chairs (WGCs):

- **Harmonization of Methods WGC:** Dr. Annabelle V. Briones, Director of the Industrial Technology Development Institute (ITDI), Department of Science and Technology (DOST), Republic of the Philippines
- **Emerging Issues WGC:** Dr. Jie Zhang, Manager of Analytical Governance & Toxicology, Global Food Safety at Mead Johnson Nutrition Asia Pacific (Reckitt), Singapore
- **Training of Young Scientists WGCs:** Dr. Qi Lin, Senior Manager at the Abbott Nutrition Research & Development Pacific Asia Centre, Singapore; and Ms. Amelia Cheng-Quek, retired Group Quality Control and Quality Assurance Manager at GC Holdings Sdn Bhd, Malaysia
- **Capacity Building WGC:** Dr. Hong Hanh Nguyen, IndoChina Center of Excellence Manager at Transmed, Vietnam

The meeting area arrangement can be found on Page 4.

If you are interested in being the **Emerging Issues WG Co-chair**, please contact **Dr. Jie Zhang** (Jie.Zhang3@reckitt.com).

End of Conference

Oct 13, 17:00

We hope you had a fruitful and fun conference experience!

Please don't forget to leave feedbacks and rate the event so that we can do better next year!



<https://forms.gle/e82w55bYKftMwybi8>

See you again at 2023 AOAC SEA 2nd Annual Conference!



Dr. Xinping Hou
President of AOAC SEA
Analytical Service Manager SEA, BV-AQ
Oct 12, 9:30-9:45; 11:20-11:40

Xinping Hou is currently the analytical service manager at BV-AQ Singapore, where she provides technical consultation and develops analytical service strategies for the organization to support the industries on their innovation, process improvement and product quality control. Prior to BV-AQ, she had been working in other contract research and testing laboratories as technical manager and operation director for food and pharmaceutical product analysis.

She has been a member of AOAC International since 2016. She has participated AOAC SPIFAN program and led the setup of many AOAC methods in the laboratory.

Dr. Hou has been appointed by Singapore Accreditation Council (SAC) as the technical auditor for food and pharmaceutical laboratory accreditation since 2003.

She has a bachelor and master's degree in analytical chemistry and got her PhD in Chemistry from National University of Singapore. She is (co)author of more than 10 scientific publications.



Mr. David B. Schmidt
Executive Director,
AOAC INTERNATIONAL
Oct 12, 9:45-10:00

Dave was appointed as Executive Director by AOAC INTERNATIONAL's Board of Directors effective May 1, 2018. Prior to joining AOAC, he was principal consultant for Schmidt Commonwealth Strategies, LLC. From 2006 to 2015, he served as president and Chief Executive Officer (CEO) of the International Food Information Council (IFIC) and CEO of the IFIC Foundation in Washington, DC. He joined IFIC in 1993 and held positions from Director to Executive Vice President prior to being elected CEO. Dave also served as the first Bush Administration's director of external affairs for USDA's Food Safety and Inspection Service where he addressed food safety and nutrition issues and managed the inspection agency's media, legislative, and consumer education programs. He also gained a thorough understanding of the food industry in previous sales positions with Oscar Mayer Foods, Pepsi-Cola USA, and Canada Dry Corp. He holds a B.A. in Business Administration from Vanderbilt University and completed graduate business studies at the University of New Orleans. He has also served the Town of Leesburg, Virginia, as a town council member.



Ms. Mary Kay Krogull
President-Elect, AOAC INTERNATIONAL
Sr. VP Business Administration Food NA, Eurofins
Scientific
Oct 12, 10:00-10:15

Ms. Krogull holds a BS in Biology and an MS in Food Chemistry from the UW-Madison (and all but dissertation towards a PhD). Mary Kay is currently the Sr. VP of Business Administration at Eurofins. Mary Kay is responsible for Business administration for the Food and Feed businesses across North America and is the Sr. leader of the Canadian Cannabis laboratory. Previously Mary Kay worked for 4 years as President of Eurofins Scientific, Inc. Food US.

Prior to joining Eurofins, Mary Kay worked in multiple executive level positions at Covance Laboratories including VP of Business Operations Global Early Development, VP of Global QA Global Early Development, Global Sr. Director of Lean Six Sigma and a Certified Master Black belt, Director of Bioanalytical Testing and Manager of the Food Chemistry Division. Notable is her 3 years as Director of the Pharmaceutical Testing Division for Covance, a Division of LabCorp, one of the largest Contract Research and Medical testing companies in the world, where she directed the start-up of the GMP Pharmaceutical Testing Division. Under Mary Kay's leadership, the Pharmaceutical Testing Division grew from \$0 to \$10M in sales in 3 years.

In her current role, Mary Kay leads a team of 11 direct staff to manage the business aspects of the Food and Feed Testing, including IT, QA, acquisitions and real estate, on boarding of large complex multi-site projects, managing the Chief Scientific Officers and engaging with the technical community in the marketplace. Mary Kay facilitates the High Potential training program for new Business Unit Managers for the Eurofins Food groups and acts as a mentor for other business managers. Mary Kay lives in Madison WI. When not working, Mary Kay likes to travel, read mysteries and spend time with family and friends. Mary Kay is Secretary/Treasurer of the BOD for A2LA and serves as Treasurer for BOD of AOAC. She is a member of the IFT, IAFF, AOCS, and co-chair of the ACIL Regulatory Committee.



Ms. Angela Li
Director, Research & Exposure Science Department,
National Centre for Food Science, Singapore Food
Agency
Oct 12, 10:15-10:35

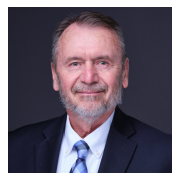
Angela is the director of Research and Exposure Science Department under the National Centre for Food Science (NCFS) in the Singapore Food Agency (SFA). Her department comprises of two branches (i) Applied Research and Collaboration and (ii) Exposure and Data Science. The applied research strategies include anticipating food safety risks through early detection of food safety concerns and advancing rapid testing capabilities. The exposure and data science branch leads the risk-based market monitoring programme and harnesses data analytics to obtain pre-emptive insights on hazards in food with which to proactively track food safety trends and anticipate new/emerging foodborne hazards and risks.



Dr. Pravate Tuitemwong
President of AOAC Thailand
Director of Food Safety Center, King
Mongkut's University Thonburi (KMUTT)
Oct 12, 10:35-10:55

Dr. Pravate Tuitemwong is an Associate Professor in Food Science and Technology at King Mongkut's University Thonburi (KMUTT). He received his BS and MS in Microbiology from Kasetsart University and had experienced industry works for several years. He completed Ph.D. in Food Science from Kansas State University, Manhattan, Kansas, USA.

His areas of interest are Microbial Food Safety and Rapid Detection in Microbiology. Dr. Tuitemwong served as Director of Food Safety Center and Deputy Director of Academics for the Institute for Scientific and Technological Research and Services (ISTRS), which provides directed and contract research services, training, consulting, testing, and certification services to Thailand and regional industries. Dr. Tuitemwong also served as the president of AOAC International Thailand Section during 2013-2016 and 2020-2022. He has been active in Microbial Food Safety Management and Controls for more than 30 years. Dr. Tuitemwong has served in many organizations including Thailand subcommittee of the ASEAN Food Testing Laboratory Committee (AFTLC). His industry experience in consulting, auditing, and doing research to solve industry problems made him the speaker/researcher in this field and also practitioner in this regard. He has more than 100 publications in local and regional journals and conferences, and more than 40 international research papers in Food Microbiology, Rapid Methods in Microbiology, and Food Safety Management and Controls.



Mr. Darryl Sullivan
Chair of AOAC SPIFAN
Chief Scientific Officer, Eurofins Scientific
Oct 12, 11:40-12:00

Darryl Sullivan is the Chief Scientific Officer for Eurofins Scientific. Mr. Sullivan acts as a consultant for companies who need help meeting scientific and regulatory requirements. In this role he is often called upon as an expert witness for litigation and dispute resolution. He is considered an international expert in the analysis of infant formula and dietary supplements and represents Eurofins in many areas of the scientific community. Mr. Sullivan is a delegate to Codex Alimentarius and actively participates in the Codex Nutrition Committee (CCNFSDU) and the Methods Committee (CCMAS).

Mr. Sullivan has more than 40 years of experience in testing of infant formula, dietary supplements and food. He is considered to be an expert in the field of validation of analytical methods, having served for three years as Chair of the AOAC INTERNATIONAL Official Methods Board. He is the Past President and Secretary of the AOAC INTERNATIONAL Board of Directors, and was the Chair of the AOAC Stakeholder Panels on Infant Formula, Adult Nutritionals, and Dietary Supplements. Mr. Sullivan is member of the IFT Board of Directors. He is a past member of the USP Expert Committee for Dietary Supplements. Mr. Sullivan has developed and validated hundreds of analytical methods in the areas of nutrient and residue testing, and is the author of more than 75 publications and 100's of scientific presentations.



Dr. Erik Konings
Program Manager,
Nestlé Institute of Food Safety & Analytical Sciences
Oct 12, 12:00-12:20; Oct 13, 11:30-11:50

Erik Konings is Program Manager at the Nestlé Institute of Food Safety and Analytical Sciences in Lausanne, Switzerland where he provides leadership to global quality, laboratory and regulatory teams to engage in strategic local activities to drive alignment/harmonization of analytical methods and partners with government and non-government organizations in the development of standards for analytical methods.

He is active within AOAC INTERNATIONAL (Past-President), the International Organization for Standardization (ISO) (Chair ISO TC 34, Working Group 14 on Vitamins, carotenoids and other nutrients), the European Committee for Standardization (CEN) (Chair CEN TC 275 Working group 9 on Vitamins and carotenoids), and the International Dairy Federation (IDF). He participates in the Codex Committee on Methods of Analysis and Sampling (CCMAS).

He studied higher professional laboratory education with majors in Analytical and Clinical chemistry holds an MSc degree in Epidemiology and a PhD in Health Sciences of Maastricht University, the Netherlands (2001). He is (co)author of more than 40 scientific publications.



Mr. Ronald Niemeijer
Director Global Marketing
R-BioPharm AG
Oct 12, 12:20-12:45

Ronald Niemeijer is director global marketing at R-Biopharm AG in Darmstadt, Germany. He graduated at the Vrije Universiteit of Amsterdam and obtained his master's degree in biochemistry. Before joining R-Biopharm, he held positions in sales, marketing & product development at companies like Ruitenbergh Ingredients, ALControl Laboratories and Unilever. Ronald Niemeijer is in charge of the marketing department of R-Biopharm as well as responsible for R-Biopharm's marketing communication strategies. Since 2010 he is also part of the Trilogy Analytical Laboratory marketing team and responsible for the global marketing strategies. He is a member of the MicroVal General Committee and the board of AOAC Europe. His main activities are in the field of digital marketing and content marketing. He presents and writes frequently about mycotoxins, food allergens, microbiology, biotechnology and other food relevant topics.



Dr. Stefanka Bratinova
Scientific Project Officer
Joint Research Centre (JRC), European
Commission
Oct 12, 14:15-14:35

- Analytical Chemist with background in environmental and food chemistry
- Scientific Project Officer at the European Union Reference Laboratory (EURL), Joint Research Center (JRC) -Geel.

From 2004 to 2010 I worked on temporary contracts at the EURL-Food Contact Materials (FCM) in Ispra, Italy. From 2012 I joined the Unit of Food safety at JRC-Geel, Belgium, with focus on analyses of contaminants (PAH and Mycotoxins) for the EURLs functioning in the JRC at that time. After JRC ceased to operate these two EURLs on decision from the JRC Management, I returned back to EURL-FCM activities.

My expertise is in the field of method validation via collaborative trials, proficiency testing and operation of an EURL via networking with the NRLs and OCLs in the respective fields.

During the past 5 years my activities withing the team were focused on managing the project on the analyses of mineral oils from food and FCMs. The role of EURL team was to coordinate the knowledge available in that field and to propose general performance criteria for the methods to be used for the monitoring and the way of reporting results to European Food Safety Authority (EFSA).



Dr. Lei Bao
Senior Expert,
Nestlé China Food Safety Institute
Oct 12, 14:35-14:55

Dr. Lei Bao is currently Senior expert of Nestle Food Safety Institute. Before that, she is the Director and Scientific leader of Food Safety Laboratory at General Administration of Quality Supervision, Inspection and Quarantine of People's Republic of China (AQSIQ)/Shandong Branch. She received her Ph.D. from College of Marine Life Science, Ocean University of China in 2009.

Bao held various scientific positions including Board Director of AOAC INTERNATIONAL; President, China section of AOACI. Committee Member of JECFA (Joint FAO/WHO Expert Committee on Food Additives and Contaminants); Chair of the Joint Asian Sections Committee, and editorial Board Member, Journal of AOAC INTERNATIONAL & World Mycotoxin Journal; the international expert for ISO/TC34/SC4 Mycotoxin Working Group, IDF Standing Committee on Analytical Methods for Additives and Contaminants (SCAMAC); Chinese Delegation Member for the Codex Committee on Food Contaminants (CCCF) at the fifth and sixth sessions; Senior Advisor, Committee for Food Safety Standardization, AQSIQ, China; Chengdu FDA Food Safety Experts Committee Member, Shandong Public Security Bureau Food Safety Experts Committee Member.

Bao received award as "AOAC 2018 Official Methods Board (OMB) Award for Achievement in Technical and Scientific Excellence", "Award for 2018 China food safety innovation technology and practice",

"Outstanding expert for publicity national food safety law in China in 2016", AOAC 2014 Multi-Laboratory Study of the Year (Chemistry), 2013 China Standardization Honor of the Year, 2012 Fellow of AOAC International and 2011 Outstanding Scientists Award, AQSIQ, China.



Ms. Rashi Kochhar
Strategic Markets & Program Manager, SEA
Waters Corporation
Oct 12, 14:55-15:15

A decade and half in business of life science and analytical measurement, Rashi has held many marketing and strategic portfolios catering Biopharma, Food and Material Sciences in different geographies. Communication and Science are two passion which she unequivocally merges, with clear cognizance of the impact her work on science and world at large.



Dr. Martien Spanjer
Senior Inspector
Dutch Food and Consumer Protection Authority
Oct 12, 15:45-16:05

Martien Spanjer achieved a PhD in analytical chemistry at Utrecht University, the Netherlands. He started to work in the Food Safety area in 1986 at the Food Inspection Service in Alkmaar, as head of the general chemistry department. At that time only aflatoxin was analyzed in nuts by thin layer chromatography. In 16 years' time this topic was evaluated into analyzing 35 mycotoxins by LC-MS, nowadays even 55 compounds in this multimethod. Meanwhile he moved to the Headquarters of the Netherlands Food and Consumer Product Safety Authority of the Netherlands where he is responsible for expertise of mycotoxins and plant toxins, enforcement, surveillance and control programs and import control. He is convenor of the European Normalization working group on Biotoxins, which harmonized some 20 analytical methods regarding mycotoxins, including multi methods. He is (co)author of 18 papers, 4 book chapters and 2 EFSA project reports regarding sampling and analysis. He is also editorial board member of the World Mycotoxin Journal and editor-in-chief of the Food Additives and Contaminants part B journal.



Ms. Siew Hoon Tai
Senior Field Application Specialist/Market
Development
SCIEX
Oct 12, 16:05-16:20

Siew Hoon is the senior field application specialist for ASEAN region. She has been with SCIEX for 12years and has over 15 years of experience working with LCMSMS for various applications especially for food, environmental and forensic. She worked very closely with customers in the region to help them to be successful with LCMSMS. She graduated with Bachelor of Science (Chemistry) from National University of Singapore.



Mr. Steven Pang
Spectroscopy Product Specialist
Agilent Technologies
Oct 12, 16:20-16:35

Steven Pang joined Agilent Technologies in 2010 as an ICP-MS Applications Chemist with backgrounds in Biology & Chemistry and Business Management. Currently Steven is Agilent's Spectroscopy Product Specialist in Singapore & Indonesia. Steven has over 20 years of work experience in the field of Instrumental Analysis and has presented in both international and in Agilent's seminars relating to the field of Applied Atomic Spectroscopy.



Dr. Dhaval Patel
Group Leader, Center of Excellence
(SEATW), Chromatography and Mass
Spectrometry, Thermo Fisher Scientific
Oct 12, 16:35-16:50

Dr. Dhaval Patel is a group leader for the centre of excellence (Southeast Asia and Taiwan) of chromatography, mass spectrometry and trace elemental analysis at Thermo Fisher Scientific, based in Singapore. Dr. Patel is passionate to facilitate adoption of analytical instrumentation and solutions to broader scientific community and laboratory dependent organizations. His rewarding experience with chromatography and mass spectrometry technologies began during his doctoral and postdoctoral research and then spent about nine years at Waters Corporation in multiple global/regional roles focusing LC/MS applications/workflow solution development, regional business/market development and product management functions. He received his Ph.D. degree in pharmaceutical sciences from the National University of Singapore (NUS), Singapore and M.S(Pharm.) degree from the National Institute of Pharmaceutical Education and Research (NIPE), Mohali, India.



Dr. Tran Cao Son
Deputy Director
National Institute of Food Control, Vietnam
Oct 13, 9:00-9:20

Dr. Tran Cao Son is the Deputy Director of the National Institute for Food Control (NIFC), Ministry of Health of Vietnam. Dr. Tran graduated from Hanoi University of Pharmacy in 2005. He received a Ph.D. in Toxicology and Drug Testing at Hanoi University of Pharmacy in 2015. He has spent more than 15 years working in laboratories with modern analytical instruments such as liquid chromatography, gas chromatography, mass spectrometry, ... and their applications in food safety testing and pharmacokinetic study. He has vast experience in laboratory management following ISO/IEC 17025 standard. He has participated in numerous international and national laboratory assessment programs. He has been a member of the ASEAN Food Testing Laboratory Committee (AFTLC) since 2017 and chaired this committee from 2018 to 2020. He has published numerous scientific articles in national and international publications on analytical method development and validation, food control, risk assessment, toxicology, and pharmacokinetics study. He is now the Editor-in-chief of the Vietnam Journal of Food Control (VJFC).



Dr. Chai Lay Ching
Associate Professor, Head,
Center for Research Services, University of Malaya
Oct 13, 9:20-9:40

Associate Prof Dr Chai Lay Ching is a microbiologist and lecturer at University of Malaya. She is the Chair of the Young Scientists Network-Academy of Sciences Malaysia (YSN-ASM) that represents top young researchers in the country who are committed to contribute to the national ecosystem beyond their individual research interests. Part of her role includes engaging young academics in the country to rethink their role in shaping higher education for the future. Dr Chai's research focuses on infectious microorganisms, food safety and microbiological risk assessment. Dr Chai served as the Vice Chair of the Technical Working Group of Microbiology under the Food Analysis Committee (JKAM) chaired by the Department of Chemistry Malaysia from 2016-2020; and is listed as the Malaysian expert on microbial risk assessment in the ASEAN Risk Assessor Directory. Also, she leads numerous academia-industry projects, such as serving as key opinion leaders of 3M Asia Pacific, food safety research with Kikkoman Japan and other local food manufacturers. Her active contribution and involvement in microbiological safety research has won her the Malaspina International Award by the International Life Science Institute (ILSI) in 2017; and she is currently serving as the scientific advisor of ILSI South East Asia Region providing guidance and advice on food safety risk assessment. Dr Chai is also involved in promoting biosafety and biosecurity in Malaysia. She was selected and provided a fellowship to participate in the United Nations Office for Disarmament Affairs (UNODA) Global South Biosecurity Diplomacy Workshop in Switzerland in 2019. Her research and leadership in promoting research integrity, inclusivity and excellence has been recognised through multiple awards such as the L'Oréal-UNESCO Women in Science Award in 2018, Marie Claire's Amazing Woman in Malaysia 2019, Prestige's 40 under 40 Malaysia 2019 and the Asian Women Entrepreneurs Leadership Award 2019.



Ms. Cheow Pui Sze
Consultant Analytical Scientist,
Health Sciences Authority Singapore
Oct 13, 9:40-10:00

Ms Cheow Pui Sze obtained her MSc (Chemistry) degree from the National University of Singapore in 2008. She joined the Chemical Metrology Laboratory in HSA in early 2009 as a Scientist in the Organic Chemistry Section. Over the years, she has been actively involved in developing capabilities on purity assessment of organic compounds, measurement of food additives & contaminants in different food matrices, and organic contaminants in fuel oil. Pui Sze is currently a Consultant Analytical Scientist with HSA and heads both the Organic Chemistry Section and Statistical Unit within the Chemical Metrology Laboratory. Till date, she has participated in 14 regional and international comparisons together with the team, with a focus on food safety. Most of the capabilities demonstrated in these comparisons have been implemented in real services to local and overseas laboratories such as organisation of accuracy-based proficiency testing (PT) programmes and production of certified reference materials (CRMs) in compliance with ISO/IEC 17043 and ISO 17034, respectively. She is the anchoring Trainer for HSA statistics courses such as method validation, measurement uncertainty, statistics used in the certification of CRMs and organisation of PT programmes. Pui Sze is Singapore



Accreditation Council's Technical Assessor/Expert and serves as a member of the Working Group for Testing/Calibration and Inspection under the Singapore Standards Council. She is currently serving as a member in ISO/CASCO Working Group (WG) 57 on Conformity assessment – General requirements for proficiency testing and ISO/TC 334 WG 16 on Reference Material Value Assignment.



Mr. Olaf Degen
Global Business Development Manager
Bruker
Oct 13, 10:00-10:20

Olaf Degen works as Global Business Development Manager of Bruker Microbiology & Diagnostics and is member of the German standard working organization DIN. Before he worked for 20 years in several diagnostics and pharmaceutical companies in business development, marketing and product innovations. His educational background is microbiology (diploma degree of the Free University of Berlin, Germany) and Business Administration (MBA of Northwestern University, USA & WHU, Germany).



Mr. Mark Alton
Special Nutrition Category APAC Lead,
Cargill
Oct 13, 10:50-11:10

Mark joined Cargill in 2016 firstly in the role of FSQR regional lead and is now the Special Nutrition and Dairy Category Lead for APAC based in Melbourne Australia. He is a specialist in food safety management within the APAC food industry. Mark has a Bachelor of Science (Biochemistry & Chemistry) and a MBA (Marketing); with more than 30 years' experience within the food and beverage industry. He holds professional memberships with the AIFST (Australian Institute of Food Science and Technology). He has worked in senior regional roles with Cargill, Nestle & AssureQuality over the last 15 years mostly based in Singapore.



Dr. Qi Lin
Senior Lead,
Abbott Nutrition
Oct 13, 11:10-11:30

Qi Lin is Senior Manager at the Abbott Nutrition Research & Development Pacific Asia Centre, Singapore. She leads the Analytical Research function to provide analytical solutions to new nutritional product development, pre-clinical and clinical study, product Quality Assurance, regulatory and IP for countries in the region. She leads research on analytical science and food chemistry, and development of test methods for nutrients, contaminants, physical characterization, and bioanalysis.

Qi joined AOAC International since 2013 and has participated in AOAC SPIFAN program via submitting nutrient test method and joining working group.

She is the current Treasurer of the AOAC SEA Section and chairing the Working Group for Training of Young Scientists.

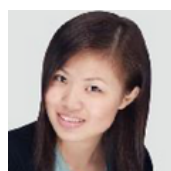
Dr Lin holds a PhD degree in Organic Chemistry from University of Wisconsin – Madison, USA. She is (co)author of more than 20 scientific publications and patents.



Mr. Jonathan Lee
Director,
Gerhardt Malaysia
Oct 13, 11:50-12:05

Jonathan Lee have been a partner of C. Gerhardt GmbH since 2006. He has been appointed as the Director for Gerhardt Malaysia which oversee the market in Singapore, Malaysia and Brunei.

Jonathan Lee is experience in Food and Agricultural market and application. This year, he set up Gerhardt Singapore Pte Ltd in Singapore to provide better support to Singapore customer.



Ms. Lee Jiuan CHIN
Senior Laboratory Manager
Romer Labs Asia Pacific
Oct 13, 12:05-12:20

Lee Jiuan has over 19 years of extensive experience in the food safety market particularly in the field of mycotoxin testing for food and feed samples. She heads the laboratory of Romer Labs Singapore and undertakes mycotoxin testing in Asia. She also conducts research projects and studies as proposed by Romer Labs. She evaluates and implement methods and standard of procedures while working cross divisionally with Romer Labs United States, Austria and various company project leaders.

Prior to this, she was with the Chemical Laboratory Singapore as an Application/ Quality Assurance Chemist for raw materials, chinese medicine, food, human urine and water using various analytical methods by HPLC, GC, ICP, IC, AAS-FIAS and IR. She was involved in the development, optimization, validation and establishment of new test method in the laboratory, and handled ISO17025 documents preparations. She was also a trainer for students from the Singapore Polytechnic.

Lee Jiuan graduated from the University of Malaya with a Bachelor of Science (Hons) major in applied chemistry in 2001.



Mr. Daniel Tan

Business Unit Manager Industrial Solutions Asia
Eurofins Technologies Singapore
Oct 13, 12:20-12:35

Daniel Tan is currently the Business Unit Manager Industrial Solutions Asia at Eurofins Technologies Singapore, a business division specialised in diagnostic kit and Equipment solutions product lines. In his current role, Daniel leads a team of 7 direct staff to manage the commercial development and application of diagnostic product lines, where he is responsible for business development and technical application development across 14 countries and territories in Asia. Prior to joining Eurofins Technologies group, he was working as technical sales in the food safety and food ingredient field. He currently holds a BS (Hons) in Food Technology (1st) from University of Queensland, and an Executive Masters in Business Administration from National University of Singapore.



Dr. Zaiton Binti Abdul Majid

Associate Professor, Dean
Faculty of Science, Universiti Teknologi
Malaysia
Oct 13, 14:25-14:45

Dr Zaiton Abdul Majid is a Professor of Chemistry at the Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia. She obtained her BSc and MSc in Chemistry from Western Illinois University, United States and PhD in Civil Engineering from Universiti Malaya. She is currently the Dean, Faculty of Science, UTM, an Associate Member of Academy of Sciences, Malaysia since 2018, member of the Malaysian Institute of Chemistry (IKM), ANALIS, and American Chemical Society. She was one of the four recipients, and the first from Asia, to be awarded the Lise Meitner Guest Professorship Award, Lund University, Sweden in 2014. She was also a Visiting Scientist at Kyoto University in 1993, 2013 and 2015. She was appointed as a Technical committee (under Department of Standards Malaysia) for the Standards and Metrology Institute for Islamic Countries (SMIIC), Turkey (2017-2019).

Her research focuses on 2 main areas of waste utilization, i.e. i) development of sorbents from waste, specifically focusing on separation-sorption technology in water treatment and ii) utilization of waste as cement additives, particularly focusing on their effect cement hydration reactions. Her research are multi disciplinary in nature with collaborators from science and engineering background.

She is a member of the National STEM Association Malaysia (NSA) and is actively involved in promoting STEM at the national level for the community especially schools and preschool under KEMAS. Together with UTM, State Department of Education and NSA, she is actively involved in promoting STEM especially to children and youth in an effort to increase the number of enrolment of Malaysian students in STEM streams and empower our children and youth with quality STEM education.



STUDENT AWARDS ASSESSMENT COMMITTEE

Lee Hui Key

*Committee Chair
Manager, Scientific Program
ILSI SEA*

Akmali Mokhter, Ph.D.

*Senior Lecturer
Universiti Teknologi Malaysia*

Danny Wong, Ph.D.

*Senior Lecturer
Macquarie University, Australia*

Hongshun Yang, Ph.D.

*Associate Professor
National University of Singapore*

Son Cao Tran, Ph.D.

*Deputy Director
NIFC, Vietnam*

Hong Hanh Nguyen, M.P.P., Ph.D.

*Stand-in Committee Member
Manager
Transmed, Vietnam*

CONFERENCE SPEAKERS

Distinguished Guest Speakers

Dr. Xiping Hou
Mr. David Schmidt
Ms. Mary Kay Krogull
Ms. Angela Li
Dr. Pravate Tuitemwong
Mr. Darryl Sullivan
Dr. Erik Konings
Dr. Stefanka Bratinova
Dr. Lei Bao
Dr. Martien Spanjer
Dr. Tran Cao Son
Dr. Chai Lay Ching
Mr. Mark Alton
Dr. Qi Lin
Dr. Zaiton Binti Abdul Majid

Technology Provider Speakers

Mr. Ronald Niemeijer
Ms. Rashi Kochhar
Ms. Siew Hoon Tai
Mr. Steven Pang
Dr. Dhaval Patel
Mr. Olaf Degen
Mr. Jonathan Lee
Ms. Lee Jiuan Chin
Mr. Daniel Tan

CONFERENCE ORGANIZING COMMITTEE

Ms. Amelia Cheng-Quek
Dr. Annabelle Briones, ITDI, PH
Mr. Chandra Mohan Rajendran, Thermo
Dr. Erik Konings, Nestlé
Dr. Hong Nguyen, Transmed, VN
Dr. Jie Zhang, Reckitt

Dr. Joanne Ho, Waters
Ms. Kumud Kushwaha, Merck
Ms. Lee Hui Key, University of Malaya
Ms. Michelle Yit, Bioscience Diagnostics
Dr. Qi Lin, Abbott Nutrition
Dr. Xiping Hou, BV-AQ



AOAC SEA Technical Forum provides a platform for discussion of food safety and analysis, including techniques, laboratory management, standards and regulations, and collaborations.

Our goals are to

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

1

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

2

Lab Management

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

3

Community (Members Only)

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



Looking for volunteers to join the Consultant Panel

Dr. Jing Tan, Analytical Team Leader at FMC, Singapore, volunteered to lead this program.

If you are the expert in any of the fields above, please find Jing at the conference or drop her an email at jing.tan@fmc.com.



Supporting AOAC SEA keeps your organization at the forefront of analytical science and builds your recognition as a leader in food safety and analysis.

Organizational Members are instrumental in AOAC's work to identify, prioritize, and solve global and local food safety testing challenges. Organizational Members advance analytical science through collaborative problem-solving, by working with AOAC SEA and other key stakeholders, such as academia, industry and regulators.

Organizational Members include academic institutions, businesses, and government agencies. Organizational membership is available in various levels for organizations to voice up at the Section's Board Meetings and establish regional and global network in the community.

Executive	Associate	Supporter	Government & Association (Non-Profit)
10000 SGD	7000 SGD	4000 SGD	300 SGD
5 Individual Membership to AOAC INTERNATIONAL – Includes access to online OMA, online AOAC Journal, ILM	3 Individual Membership to AOAC INTERNATIONAL – Includes access to online OMA, online AOAC Journal, ILM	2 Individual Membership to AOAC INTERNATIONAL – Includes access to online OMA, online AOAC Journal, ILM	1 Individual Membership to AOAC INTERNATIONAL – Includes access to online OMA, online AOAC Journal, ILM
Membership in AOAC SEA expert working groups	Membership in AOAC SEA expert working groups	Membership in AOAC SEA expert working groups	Membership in AOAC SEA expert working groups
Participation in annual section meeting organizing committee	Participation in annual section meeting organizing committee	Participation in annual section meeting organizing committee	Participation in annual section meeting organizing committee
100% discount on webinars hosted by AOAC SEA Section	75% discount on webinars hosted by AOAC SEA Section	50% discount on webinars hosted by AOAC SEA Section	100% discount on webinars hosted by AOAC SEA Section
Invitations to Section's Full Board Meetings; access to exclusive Section events	Invitations to Section's Full Board Meetings; access to exclusive Section events	Invitations to Section's Full Board Meetings; access to exclusive Section events	Invitations to Section's Full Board Meetings; access to exclusive Section events
Access to exclusive Annual Section Meeting benefits including first option on sponsorship packages at 10% discounted prices & stand placement, the VIP room & Keynote Meet & Greet	Access to exclusive Annual Section Meeting benefits including first option on sponsorship packages at 5% discounted prices	-	Access to exclusive Annual Section Meeting benefits including first option on sponsorship packages at 10% discounted prices & stand placement, the VIP room & Keynote Meet & Greet
Logo on AOAC SEA Section website (with link to organization's homepage)	Logo on AOAC SEA Section website (with link to organization's homepage)	Logo on AOAC SEA Section website (with link to organization's homepage)	Logo on AOAC SEA Section website (with link to organization's homepage)
Inclusion of technical article/information/news in AOAC SEA Section newsletter to Section membership	Inclusion of technical article/information/news in AOAC SEA Section newsletter to Section membership	Inclusion of technical article/information/news in AOAC SEA Section newsletter to Section membership	Inclusion of technical article/information/news in AOAC SEA Section newsletter to Section membership



Got questions?

Please look for **Xinping** at the conference. You can also email to info@aoac-sea.org.