PRELIMINARY PROGRAM

Southern Section
AOAC INTERNATIONAL
37th Annual Conference
April 2-3, 2024

Atlanta Marriott Perimeter Center
246 Perimeter Center NE
Atlanta, Georgia

To register go to:
www.ssaoac.org
Tuesday-April 2\textsuperscript{nd}

Topic Presentations

AOAC International Update

Katerina (Kate) Mastovska, Deputy Executive Director & Chief Science Officer, AOAC INTERNATIONAL

Keynote Presentation

"Recyclability and Recycled Content: Take a Glance of the Ouroboros of Plastic Packaging"
Wei Zang, PhD. Sr. Manager, Material Characterization Scientist, The Coca-Cola Company

Vendor Luncheon Technical Training Workshops

Tuesday-April 2\textsuperscript{nd}
Thermo Fisher Scientific

Non-Targeted Approach for Authentication of Spices and Herbs using GC-Orbitrap MS technology
Ed George

Waters
TBA
Vendor Luncheon Technical Training Workshops

**Wednesday-April 3rd**

Shimadzu Scientific
Expanding the Power of Your Impurity and Heavy Metal Analyses & MALDI-Based Mass Spectrometry Solutions for Food Quality Control
Nivesh Mittal & Mohamed Boutaghou

*Luncheon Technical Training include lunch for a limited number of attendees. Sign up at the registration desk Tuesday and Wednesday morning.*

**Vendor Technical Training Workshop-Tuesday-April 2nd**

UCT
There is More to Solid-Phase Extraction than C18 and Silica

Agilent
Advances in Food PFAS Analysis
Stephan Baumann: Technical Marketing Manager, Global Applied Markets

MobillON
Using Innovative High Resolution Ion Mobility to Improve Traditional Separations and Analysis
Thomas Lubinsky, Applications Scientist, MOBILion Systems

BioMerieux
Augmented Diagnostics: Data to Tools

Perry Johnson Lab Accreditation
TBD
Southern Section Reception

In appreciation of your continued support of analytical sciences and the Southern Section of AOAC International, and especially for your attendance at our 2024 Annual Conference please attend the Evening Reception. Please relax and enjoy complimentary drinks and heavy appetizers while catching up with colleagues and old friends and networking with fellow scientists, administrators, and vendors.

To register for this exciting meeting go to www.ssaoac.org

<table>
<thead>
<tr>
<th>MEMBERS</th>
<th>NON-MEMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>$70 Pre-registered</td>
<td>$75 Pre-registered</td>
</tr>
<tr>
<td>$90 Onsite</td>
<td>$95 Onsite</td>
</tr>
</tbody>
</table>

FULL TIME STUDENTS ARE FREE!!!!!

Thanks to the support of our Vendor Partners, this low registration fee includes, technical training workshops, all breaks, and the Southern Section Reception.

Register using any major credit card or by check
Wednesday-April 3rd
Chemistry Presentations

Updates and Expansion of FDA’s Analytical Method for PFAS Detection in Food and Feed
Wendy Young, USFDA, College Park, MD, USA

Economic Adulteration of Saffron
Bhakti Petigara Harp, PhD., Research Chemist
USFDA, College Park, MD, USA

Integrated Mycotoxin Management Programs for Pet Food
Jason Vickers, Senior Director Regulatory and Nutrition Compliance
Mars Pet Nutrition North America

Comparison of ELISA vs. HPLC-MS/MS Methods for the Evaluation of Mycotoxins in Animal Feeds
Erika Womack, PhD, State Chemist & Magan Green, MSc, Associate Research Prof.
Mississippi State Chemical Laboratory

Nano Tech Presentation Title TBD
Ramaraja P. Ramasamy, PhD, Director
Nano Electrochemistry Research Lab
University of Georgia

The Next Generation of Terpene and Residual Solvent Analysis in Cannabis Products
Roy Sorensen, MSc. Senior Laboratory Director - MLT
Method Testing Labs, Brandon, Florida
Prevalence of PFAS in Recreational Fisheries from Coastal Biscayne Bay: Bioaccumulation and Health Risk Implications
Natalia Soares Quinete, Assistant Prof., Chemistry Department and Institute of Environment, Florida International University, North Miami, FL

Post pH-driven Approach for Encapsulating Polyphenols in Plant – Based Foods
Hualu Zhou, PhD, Department of Food Science and Technology, University of Georgia

Removal of Perfluorooctanoic Acid (PFOA) in water using Advanced Oxidation Processes (AOP) and Identification of Oxidation Products using FluoroMatch non-targeted PFAS workflow with the next generation quadrupole time-of-flight instrument, the Agilent Revident LC/Q-TOF
William Holmes¹,² Elizabeth Boyd¹,² Katherine Ashurst¹,² Mark Zappi¹,²University of Louisiana, Energy Institute¹, Department of Chemical Engineering², Lafayette, LA

Validation Study for the Novel Detection of Seven Avermectin Compounds
Bruno Giri, Chemist, USDA/FSIS/Eastern Laboratory/Chemistry Section, Athens, GA

Transforming Yeast into Facultative Photoheterotrophs via Expression of Microbial Rhodopsins
Anthony Burnetti, Bioscience, Georgia Tech

Methods for Screening Adulterants in Dietary Supplements
Grace Bandong, Director of Contaminates, and Inorganics, Eurofins Food Chemistry Testing, Madison, WI
Wednesday-April 3rd
Microbiology Presentations

Microbial Interaction with Emerging Pollutants and its Impact on Food Safety
Pratik Banerjee, PhD
Associate Professor of Food Safety, University of Illinois at Urbana-Champaign

Foodborne Enteric Viruses
Jacquelina Williams-Woods, PhD
Research Microbiologist, Gulf Coast Seafood Lab, CFSAN, FDA

Development and Evaluation of a Partition-based Digital PCR Assay for the Estimation of Salmonella Load from Poultry Rinse Samples
Prashant Singh, PhD
Associate Professor, Florida State University

Potential Use of Antimicrobial Blue Light to Control Foodborne Pathogens
Francisco Diez-Gonzalez, PhD
Professor and Director, Center for Food Safety, University of Georgia

Use of AI in building sampling models
Kevin Karem, PhD
Lab Director, Atlanta Human and Animal Food Laboratory, FDA

Molecular investigation of foodborne HAV outbreaks, describing application of NGS to these investigations
Yury Khudyakov, PhD
Lead Research Microbiologist, Division of Viral Hepatitis, CDC
Using bile as a biomarker for foodborne pathogen presence in agricultural matrices
Govindaraj Dev Kumar, PhD
Assistant Professor, Center for Food Safety, University of Georgia

Regulatory Frameworks and Future Testing Strategies for Cannabis-Infused Edibles
Anthony Repay, MS
Laboratory Director, Method Testing Labs

Implementation of WGS technology in the Investigation and control of Foodborne Outbreaks, and Food Regulatory Activities for Food Safety and Security
Irshad M Sulaiman, PhD
Research Microbiologist, Atlanta Human and Animal Food Laboratory, FDA

Use of Machine Learning Approaches in Food Safety of Pastured Poultry Farms
Abhinav Mishra, PhD
Associate Professor, Department of Food Science and Technology, University of Georgia

Dangerous Liaisons: Food as a Potential Route for the Dissemination of the Mobile Colistin Resistance Genes in the USA
Issmat Kassem, PhD
Assistant Professor, Center for Food Safety, University of Georgia

Impact of Dietary Fiber Consumption on the Development of Intestinal T Cells Over Generations
Luisa Cervantes Barragan, PhD
Assistant Professor, Department of Microbiology and Immunology, Emory University
Posters

Total Organic Carbon Determination: Comparing Two Different Approaches to Acid Treatment in Preparation for Combustion Analysis
Lloyd Allen, Jeffery Gast, Kristi Folden -LECO

Correlating the Carbonyl Index to Contact Angle of Weathered Plastics
Dhimani Still and Marina Koether, Kennesaw State University

Evaluating the Effects of Storage and Packaging on the Volatile Composition of Soft Drinks
Kenneth Hellstern, Field Sales Manager Southeast - Americas - Markes International, Inc,

Proposed Design for a Contained Burn Chamber (CBC) for destruction of ammunitions and explosives combined with on-line GC/MS for analysis of off-gas by-products
Cade Hontiveros¹,², Samuel Scelfo¹,², Rafael Hernandez¹,², William Holmes¹,²
University of Louisiana, Energy Institute¹, Department of Chemical Engineering, Lafayette, LA

Analytical Determination for Hydrogen Peroxide with HPLC/UV
Samuel Scelfo¹,², Cade Hontiveros¹,², William Holmes¹,²
University of Louisiana, Energy Institute¹, Department of Chemical Engineering, Lafayette, LA
The Influence of Prematurity on Pharmacokinetics of Indomethacin and Furosemide Using Preterm Pigs as a Model for Preterm Infants
Ava Welch¹,³, Randal Buddington⁴, William Holmes¹,²
Energy Institute¹ Department of Chemical Engineering² Department of Biology³ University of Louisiana, Lafayette and LSU Medical Center⁴ Shreveport, LA

A Techno-economic Analysis of an Integrated Biorefinery Process within Wastewater Treatment Plants to Valorize Biosolids as Sustainable, Wood Adhesives
Blake Foret¹,², Chelsea Trahan¹,², William Holmes¹,² William Chirdon¹,², Mark Zappi¹,²
University of Louisiana, Energy Institute¹, Department of Chemical Engineering², Lafayette, LA

Metabolomics Provides Insight into the Molecular Mechanisms and Dynamics Underlying Eimeria Infection in Laying Hens
Namhee Lee¹, Elizabeth Delane Ward¹, Milan Kumar Sharma², Woo kyun Kim², Joon Hyuk Suh¹
¹Department of Food Science & Technology, University of Georgia, Athens, GA,
²Department of Poultry Science, University of Georgia, Athens, GA, USA

Ynes Rosa Ortega and Phanindra Gude*
Center for Food Safety, University of Georgia, Griffin, Georgia
Fluoresce Under Duress: Assessing Plasmid pGFPuv Stability in *Salmonella* Newport Isolates
Govindaraj Dev Kumar¹, Abhinav Mishra² and Indu Aashritha Idumalla¹,*
¹Center for Food Safety, University of Georgia, Griffin, Georgia
²Food Science and Technology, University of Georgia, Athens, Georgia

In-depth assessment of *Campylobacter* spp. in retail chicken meat in Georgia, USA
Nivin Nasser*, Miranda Barr and Issmat I. Kassem
Center for Food Safety, Department of Food Sciences and Technology, University of Georgia, Griffin, Georgia

The Emergence of the Mobile Colistin Resistance Genes (mcr) in Environmental and Surface Water Samples in Georgia, USA
Jouman Hassan*, Tongzhou Xu, David Mann, Malak A. Esseili, Xiangyu Deng and Issmat I. Kassem
Center for Food Safety, Department of Food Sciences and Technology, University of Georgia, Griffin, Georgia

Genotypic and Phenotypic Characterization of *Serratia* and *Enterobacter* spp. Isolated from Imported Fresh Produce in Georgia, USA
Issmat I. Kassem, Jiayue Wang, Jouman Hassan* and Malak A. Esseili
Center for Food Safety, Department of Food Sciences and Technology, University of Georgia, Griffin, Georgia

Survival of *L. monocytogenes* on Waxed Peaches
Govindaraj Dev Kumar and Johana Lilian John Muthiah
Center for Food Safety, College of Agricultural and Environmental Sciences, University of Georgia, Griffin, Georgia
Biofilm formation by *L. monocytogenes* and *P. aeruginosa* as mono and binary cultures at two different temperatures
Govindaraj Dev Kumar and Johana Lilian John Muthiah
Center for Food Safety, College of Agricultural and Environmental Sciences, University of Georgia, Griffin, Georgia

Inhibition of Shiga toxin-producing *Escherichia coli* strain MD47 by *Pseudomonas fluorescens* strain A506 on romaine lettuce
Tongzhou Xu*¹, Maria Brandl² and Xiangyu Deng¹
¹University of Georgia, Center for Food Safety, Griffin, Georgia
²USDA Agricultural Research Service, Albany, California

Virus Elution Buffer is Critical for Maximizing the Recovery of Foodborne Viruses from Strawberries
Riya Hooda* and Malak A. Esseili
Center for Food Safety, University of Georgia, Griffin, Georgia
2024 Meeting Sponsors

ADVION INTERCHEM
AGILENT TECHNOLOGIES
ANTON-PAAR
AUTOSCRIBE INFOMATICS
BIOMERIEUX
BRUKER
CAMAG
CLINISYS
ITSP SOLUTIONS
LECO
MARKES INTERNATIONAL
MASSTECH
MILLIPORE SIGMA
MOBillion SYSTEMS
PROVIDION US
PERKIN ELMER
PERRY JOHNSON LABORATORY ACCREDITATION, INC.
RESTEK
SARTORIUS
SHIMADZU SCIENTIFIC
TECAN
THERMO FISHER SCIENTIFIC
UCT, INC
WATERS CORPORATION
Please Note: for 2025

The 38th Annual Conference of the Southern Section
AOAC International
will be held in
Atlanta, GA
April 1-2, 2025

Proposed 2025 Conference Topics:

General:
Nanotechnology
Virtual Reality and Laboratory Training
Merging of Artificial Intelligence and the Analytical Sciences

Chemistry:
Biotechnology, Energy Innovations and Nutraceuticals
New Technologies & Methodology
Cannabis, Toxins, Food, Environmental Contaminants, Heavy Metals
LC-MS/MS and GC-MS/MS

Microbiology:
Biotechnology and Nutraceuticals
Emerging Technologies and the Analysis of Food Borne Pathogens
MALDI-TOF Mass Spectrometry
PCR, Mass Spectrometry, Rapid testing