



PRELIMINARY PROGRAM

**Southern Section
AOAC INTERNATIONAL
39th Annual Conference
March 31-April 1, 2026**

**Atlanta Marriott Northeast/Emory Area
2000 Century Boulevard NE
Atlanta, Georgia**

To register go to:
www.ssaoac.org



Tuesday-March 31st

Topic Presentation

AOAC International Update

Katerina Mastovska, PhD
Deputy Executive Director and Chief Science Officer
AOAC International

Keynote Presentations:

“The Evolution of Food Testing in the Last 50 Years”

Darryl Sullivan, PhD
Chief Science Officer, Eurofins
Past President, AOAC International

“Positioning of Municipal Wastewater Treatment Plants as Integrated Biorefineries for Production of Sustainable Chemicals”

Mark Zappi, PhD, PE
Executive Director of the Energy Institute of Louisiana
Director of the Louisiana Energy Extension Service
BORSF Endowed Chair in Bioprocessing in the Department of Chemical Engineering
University of Louisiana at Lafayette (UL)

Vendor Luncheon Technical Training Workshops

Tuesday-March 31st

TBA
SHIMADZU SCIENTIFIC

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



Vendor Luncheon Technical Training Workshops

Wednesday-April 1st

TBA
Sciex

TBA
Thermo Fisher Scientific

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

Vendor Technical Training Workshops-Tuesday-March 31st

Lab Automation for HPLC, GC, MS, and ICP/ICPMS
C. Derrick Quarles Jr., Ph.D.
Sr. Scientist & Product Manager Elemental Scientific

TBA
BioMerieux

Vendor Technical Training Workshops-Tuesday-March 31st

TBA
Agilent

TBA
PerkinElmer

Additional Workshop
TBA



Tuesday-March 31st
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 2026 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

MEMBERS (AOAC)

\$75 Pre-registered

\$95 Onsite

NON-MEMBERS

\$95 Pre-registered

\$110 Onsite

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 1st **Biological Presentations**

Implementation of New Technologies in Disease Surveillance, Prevention, and Control

Irshad M Sulaiman, PhD
Research Microbiologist, Office of Scientific Coordination and
Computational Sciences, FDA

***Salmonella* Quantification in Beef and Poultry: Innovation, Reliability, and Concerns**

Prashant Singh, PhD
Associate Professor, Florida State University

Molecular and Biosensors for Rapid Food Safety Diagnostics

Pratik Banerjee, PhD
Associate Professor, Department of Food Science and Human Nutrition,
University of Illinois at Urbana-Champaign

Next Gen Food Safety and Quality Decision Systems using imaging technology with AI

Amit Morey, PhD
Associate Professor, Department of Poultry Science, Auburn University

Isolation and Detection of Foodborne Pathogens from Agricultural Soil

Ynes Ortega, PhD
Associate Professor, Center for Food Safety, University of Georgia

Dynamics of Disease Outbreaks, Causes, and Controls

Kevin Karem, PhD
Lab Director, Atlanta Human and Animal Food Laboratory, FDA



Wednesday-April 1st
Biological Presentations

Pause and Effect: Unraveling the Bacterial Lag Phase

Abhinav Mishra, PhD

Associate Professor and Director of Graduate Studies,
Department of Food Science and Technology, University of Georgia

**Integrated Serosurveillance as a Future Surveillance System for
Public Health Response**

Kumar V. Udhayakumar, PhD

Program Director, Integrated Serosurveillance Program, The Task Force
Global Health

**Novel insights on the Epidemiology and Control of *Campylobacter* in
Poultry Meat**

Issmat Kassem, PhD

Assistant Professor, Center for Food Safety, University of Georgia

Cannabis Microbiology Preparation: Moving Toward Standardization

Anthony Repay, MS

Laboratory Director, Method Testing Labs

**Understanding the Role of "Mundane" Effects on *Chlamydia*
Pathogenesis**

Yusuf Omosun, PhD

Assistant Professor, Department of Microbiology, Biochemistry and
Immunology, Morehouse Medical School

**Identification and Characterization of a Novel Heavy-metal Tolerant
Microbacterium species capable of Xenobiotics Degradation**

Mautusi Mitra, PhD

Professor, University of West Georgia



Wednesday-April 1st
Chemistry Presentations

**Simulated Gastrointestinal Assessment of Plastic Particle Absorption
Using a Human Intestinal Cell Platform**

Yu-Jou Chou, PhD
Postdoctoral Fellow
Health, Nutrition & Food Sciences
Florida State University

**Sensitive and Optimized Methods for Carbohydrates Analyses for
Industrial Applications**

Parastoo Azadi, PhD
Complex Carbohydrate Research Center, University of Georgia

**Political and Public Perspectives of the World's Largest Algae Bloom:
The Great Atlantic *Sargassum* Belt**

Brian Lapointe, PhD
Research Professor,
Florida Atlantic University/Harbor Branch Oceanographic Institute

**Production of Nonanoic Acid as Herbicide from Wastewater via In-situ
Ozone Cracking of Microbial Oils**

Esau Obuong, Dhan Lord B. Fortela, William Holmes, Rafael Hernandez,
Andrei Chistoserdov, Ashley Mikolajczyk, Wayne Sharp, Mark E. Zappi
University of Louisiana at Lafayette



Wednesday-April 1st
Chemistry Presentations

Airway Metabolites Predict the Development of Bronchiectasis in Very Young Children with Cystic Fibrosis

Joshua D. Chandler, PhD
Assistant Professor of Pediatrics, Emory University
Scientific Director, Emory Pediatric Metabolomics and Biomarkers Core (EPMBC)

PFAS Removal from Water and Wastewater: Advanced Oxidation Assessed by Revident Q-TOF

Katherine O Ashurst^{1,2}; Elizabeth A Boyd^{1,2}; Daniel D Gang^{1,3}; William E Holmes^{1,2}; Mark E Zappi^{1,2}
Energy Institute of Louisiana¹, Department of Chemical Engineering²,
Department of Civil Engineering³, University of Louisiana, Lafayette, LA

Sustainable and Efficient Production of Bioactive Compound-Loaded Nanoparticles from Raw Plants

Hualu Zhou
Assistant Professor, Dept. Food Science and Technology
University of Georgia

Development of an Integrated LC-MS Workflow for Perfluorome-Level Screening

Aryan D. Patel, Catherine E. Mullins, Yiran Liu, Collin France, Douglas I. Walker
Research Specialist, Emory University



Wednesday-April 1st **Chemistry Presentations**

Hydrogen Economy: From Pipe Dreams to Pipelines

William Holmes

Energy Institute of Louisiana and Energy Extension Service, University of Louisiana

Resolving Oxylipin Isomer Complexity through Multipass Cyclic Ion Mobility Mass Spectrometry

Eric Gier^{1,2}, Facundo Fernández²

¹Capt, US Air Force

^{1,2}Georgia Institute of Technology

How High-Resolution Mass Spectrometry Can Help Resolve Ongoing Controversies in MNP Measurement in Human Biospecimens?

Kuanliang Shao, PhD

Postdoctoral Fellow, Emory University

Expanding Detection Capabilities in Groundwater Monitoring

Tyler McIntosh, Xiaoxia Xia, Shannon Alford, Ph.D.

Clemson University



Tuesday-Wednesday March 31- April 1st
Poster Presentations

Detection and Recovery of *Cryptosporidium* oocysts in milk

Chaitanya Konappagari, and Ynes Ortega
Center for Food Safety, University of Georgia

Biocontrol of *Escherichia coli* O157:H7 by *Pseudomonas fluorescens* A506 on Romaine Lettuce

Tongzhou Xu¹, Mehmet Dogan^{1,2}, David Mann¹, Maria Brandl³, and Xiangyu Deng¹

¹Center for Food Safety, University of Georgia

²National Food Reference Laboratory, Yenimahalle, Türkiye

³USDA, Agricultural Research Service, Albany, CA

Discovery and Characterization of a Novel Microbacterium Species that Degrades Plastic and Other Environmental Pollutants

Arpita Nath Sarker, Delight Okere, Logan Chastain, Chukwuemeka Okpala, and Mautusi Mitra

University of West Georgia, School of Field Investigations and Experimental Sciences, Biology Program, Carrollton, Georgia

Determining the role of the estrous cycle in immune response against *Chlamydia* and disease pathogenesis

Danielle Wright¹, Awa Sore¹, Medhavi Fnu¹, Caitlynn Diggs¹, Francis Eko¹, Jason DeBruyne², and Yusuf Omosun¹

¹Morehouse School of Medicine, Department of Microbiology, Biology and Immunology, ²Pharmacology, Toxicology and Neuroscience

Understanding the role of sleep in Chlamydial pathogenesis, immune response, and cellular modifications

Awa Sore¹, Medhavi Fnu¹, Taylor Tanner¹, Adelle Durand¹, Danielle Wright¹, Caitlynn Diggs¹, Stephanie Lundy¹, Francis Eko¹, Christopher Ehlen², and Yusuf Omosun¹

¹Morehouse School of Medicine, Department of Microbiology, Biology and Immunology, ²Department of Neuroscience



Tuesday-Wednesday March 31-April 1st
Poster Presentations

Role of time of day of infection on the expression of fibrosis and EMT genes in the course of *Chlamydia* infection

Stephanie Lundy¹, Medhavi Fnu¹, Shakyra Richardson, Joseph Igietseme², Francis Eko¹, and Yusuf Omosun¹

¹Morehouse School of Medicine, Department of Microbiology, Biology and Immunology, ²Centers for Disease Control, Atlanta

Turning Waste into Growth: Pyrolysis of Chicken Litter for Natural Fertilizer Production

Hayden-Digestion and ICP

Hayden M Hulin¹; Prashanth R Buchireddy¹; David J Shoemaker ^{1,2};
William E Holmes^{1,2}; Mark E. Zappi ^{1,2}.

Energy Institute of Louisiana¹, Department of Chemical Engineering²,
University of Louisiana, Lafayette, LA

From Proteins to Performance: Exploring Binding Mechanisms in Bio-Based Adhesives

Ava G Welch^{1,2}; Andrei Y Chistoserdov^{1,2}; Mark E Zappi^{1,3}; William E Holmes^{1,3}

Energy Institute of Louisiana¹, Department of Biological Sciences²;
Department of Chemical Engineering³, University Louisiana, Lafayette, LA

From Menace to Resource: Bioenergy and Nutraceutical Potential of Giant Salvinia

Andrew M Chiasson^{1,2}; Xiaobo Lei^{1,2}; Mark E Zappi^{1,2}; William E Holmes^{1,2}

Energy Institute of Louisiana¹, Department of Chemical Engineering²,
University of Louisiana, Lafayette, LA



Tuesday-Wednesday March 31-April 1st
Poster Presentations

The Presence of PFAS Compounds in Cannabis Products

Adam B. Floyd, Ben Armstrong, Cassie Ereman
Lab Zen, LLC

Challenges and Solutions for Trace Element Determination in High-Fat Food Matrices

Bob Lockerman, Layla Abu-Al-Halaweh, Lanie Griffin Hough
CEM Corporation

Use of HBF₄ as a Replacement for HF in Microwave Digestion of Silicates and Titanio-Alumino-Silicate Materials

Peter Kettisch, Markus Michaelis and Shanyce Nicholson
Anton-Parr

Comparison of PFAS Analysis with HPLC/MS vs. HPLC/Q-TOF: Methods, Resolution, and Sensitivity

Anna Perello, Elizabeth A Boyd; Mark E. Zappi; William E. Holmes
Energy Institute of Louisiana; Department of Chemical Engineering
University of Louisiana, Lafayette, LA

Survival of *E. coli* TVS 353 in Soil at Various Moisture Levels in Controlled Environments

Harsimran Kaur Kapoor, Aishani Tewari, and Abhinav Mishra
Department of Food Science & Technology, Univ. of Georgia, Athens, GA



Tuesday-Wednesday March 31-April 1st
Poster Presentations

**Shelf-life Extension of Centrally Prepared Retail Ready Cuts Using
"Absolute Zero-Oxygen" Process**

Aishani Tewari, Anat Tewari, Gaurav Tewari, and Abhinav Mishra
Department of Food Science & Technology, Univ. of Georgia, Athens, GA

**Modeling the Effect of Temperature History on the Lag Phase
Duration of *Listeria monocytogenes***

Harsimran Kaur Kapoor, Aishani Tewari, Govindaraj Dev Kumar, and
Abhinav Mishra
Department of Food Science & Technology, Univ. of Georgia, Athens, GA

**Applying Marine Geochemistry Analytical Techniques to Heavy Metal
Analysis of Natural Colors and Spices**

Dr. Peter Morton, Ph.D.
Associate Research Scientist, Texas A&M University-
Oceanography, College Station, Texas

**Exposure to Commonly Used Disinfectants in Assisted Living
Facilities: Implications for Older Adults**

Tret Burdette¹, Minghao Kong², Raghu Sanath Kumar², Claire Dempsey³,
Parinya Panuwet², Amina Salamova^{2*}

¹Center for Applied Isotope Studies, University of Georgia,

²Gangarosa Department of Environmental Health, Rollins School of Public
Health, Emory University

³Department of Public Health, Agnes Scott College



Tuesday-Wednesday March 31-April 1st
Poster Presentations

Beyond Analytics: Scale-Up Perspectives on Preparative Lipid Fractionation

Hailey Privat^{1,2}, William E Holmes^{1,2}, Rafael Hernandez^{1,2}, Mark E Zappi^{1,2},
Ashley P Mikolajczyk^{1,2}

¹Energy Institute of Louisiana, ²Department of Chemical Engineering,
University of Louisiana

Development and Validation of a High-Sensitivity LC-MS/MS Method for Pharmaceutical Compounds in Complex Matrices

Julie Toler, Ashley Meredith, Magan Green, Erika Womack
Mississippi State Chemical Laboratory

Rethinking Solvents: Safer Alternatives for SPE of Chlorinated Phenoxy Acids in Water

Anna Beth Gaudin, Magan Green, Erika Womack
Mississippi State Chemical Laboratory

Linking Water Chemistry to Hellbender Mortality: An Analytical Investigation of Habitat Waters

Sara Sapienza, Ashley Meredith, Erika Womack
Mississippi State Chemical Laboratory

Persistence of *Lactiplantibacillus plantarum* in Commercial Mayonnaise Products at Different Inoculation Levels

Sunghee Yoon and Ynes Ortega
Center for Food Safety, University of Georgia, Griffin, GA



2026 Meeting Sponsors

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Please Note: for 2027

The 40th Annual Conference of the Southern
Section
AOAC International
will be held in
Atlanta, GA
March 30-31, 2027

Proposed 2027 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 (PFAS), 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

