



35th
Annual
Meeting
Southern Section
AOAC
International

Atlanta
April 19-20

“The Scientific Association
Dedicated to Analytical Excellence”

SUMMARY OF EVENTS

Monday, April 18

5:00 PM	Executive Committee Meeting	Lenox Room
6:00 PM	Exhibit & Poster Setup	Peachtree Ballroom

Tuesday, April 19

Exhibits & Posters 9:00AM - 5:00PM in the Peachtree Ballroom

7:30 AM – 4:00 PM	Registration	Foyer
8:30 AM – 11:45 AM	General Session	Piedmont Room
12:00 PM – 1:00 PM	Luncheon Workshop	Piedmont Room
1:15 PM – 4:15 PM	Workshops	Piedmont Room
4:15 PM – 5:00 PM	Poster Session	Peachtree Ballroom
5:00 PM – 8:00 PM	Evening Reception	Garden Grill Restaurant

Wednesday, April 20

Exhibits & Posters 9:00 AM-3:15 PM in the Peachtree Ballroom

7:30 AM – 12:00 PM	Registration	Foyer
8:30 AM – 12:25 PM	Microbiology Session	Piedmont Room A
	Chemistry Session	Piedmont Room B
12:25 PM – 1:25 PM	Luncheon Workshops	Piedmont Room A & B
1:25 PM – 3:30 PM	Microbiology Session	Piedmont Room A
	Chemistry Session	Piedmont Room B



Southern Section of AOAC INTERNATIONAL
“The Scientific Association Dedicated to Analytical Excellence”

April 19, 2022

Dear Colleagues,

Welcome to the 35th Annual Meeting of the Southern Section of the AOAC. I hope you enjoy your stay here in Atlanta.

One of the best benefits about this meeting is that I make great contacts with other people of analytical excellence, and I want you to do the same. There has been a lot of new analytical requirements recently for our laboratories and it is much easier knowing the correct people to contact to assist with these new challenges. You will find other scientists that are willing to help you with the new regulatory and analytical issues, as well. We are in exciting times in the field of analytical science with all the advancements in technology and methodology that are occurring right now.

To help make these new contacts, please plan to attend the evening reception on Tuesday. There will be heavy appetizers, drinks, and live entertainment. Some of the best networking happens when we take the time to talk in a relaxed atmosphere.

You will find a lot of microbiology and chemistry presentations that will give you solutions and ideas that you can take back to advance your laboratory. Also, make sure that you visit the poster area to get a plethora of information on current topics in both sciences from these presentations. In addition, I want to encourage the students to network and use the knowledge of the other attendees because you are the up-and-coming stars of the analytical community. There will be a lot of attendees, myself included, that are very passionate about analytical excellence and the latest breakthroughs in methodologies. Feel free to ask us questions because we love to share the knowledge with others.

Don't forget to visit our vendors. Their generosity makes this meeting possible at such an affordable price. They have the latest technology to aid with today's analytical challenges that require greater sensitivity, specificity, and efficiency for our laboratories.

Please feel free to reach out to myself or any of the officers if there is anything, we can do to help make your experience more beneficial. We'd love to talk with you about volunteering too.

Sincerely,

Dana Shell

President Southern Section of AOAC International

2022 VENDORS

*Exhibit Area is open Tuesday 9:00 AM to 4:00 PM
and Wednesday 9:00 AM to 3:00 PM (Peachtree Ballroom)*

Agilent Technologies

Autoscribe Infomatics

bioMerieux

Biotage, LLC

Bruker

Chem Service, Inc

CEM

EST Analytical

Interscience Laboratories

MilliporeSigma

NACRW/Flag Works

Omicron Scientific

Peak Scientific

PerkinElmer

Perry Johnson Laboratory Accreditation, Inc

Sciex

Shimadzu Scientific

UCT, Inc.

ThermoFisher Scientific

Verder-Scientific

Waters Corporation

WORKSHOPS

AGILENT TECHNOLOGIES

PERKIN ELMER

BRUKER

THERMOFISHER SCIENTIFIC

WATERS

PERRY JOHNSON LABORATORY ACCREDITATION, Inc

LUNCHEON WORKSHOPS



Agilent Technologies

BREAKS



NAME BADGE LANYARDS



ATTENDEE BAGS



Tuesday, April 19 General Session

Morning Session—Piedmont Room

- 8:30-8:35** Welcome—President
Dana Shell, Georgia Department of Agriculture
- 8:35-8:40** **Call to Order—President-Elect**
Kenneth Powell, Retired NOAA
- Section Appreciation Award**
Presented to Bill Holmes, University of Louisiana
- 8:40-9:35** **AOAC International Update**
Scott Coates
Senior Director of AOAC Research Institute
AOAC INTERNATIONAL
- 9:35-10:15** **Keynote Presentation:**
Seeing is Believing: Imaging to Reassess Biological and Pathological Events in Large Animal Models
Francois Villinger DVM
Director New Iberia Research Center
University of Louisiana at Lafayette
- 10:15-11:00** **Break—Sponsored by bioMerieux**
Door Prizes (Exhibit Hall)
VISIT EXHIBITORS AND POSTERS
- 11:00-11:45** **Keynote Presentation:**
Food Emergency Response Network and the Laboratory Flexible Funding Model, FDA Updates, and Accomplishments
Mike Farrow, Health Scientist
US FDA, ORA/ORS/OFFLO

Tuesday, April 19

Technical Training Workshops
Piedmont Room

Moderator: Kenneth Powell

Luncheon Session

Limited to the first 50 attendees who sign up at the registration desk, Tuesday morning. Lunch is provided.

12:00-1:00 **Advance your Quantitative Capabilities with the TSQ Plus Triple Quadrupole Mass Spectrometer and Robust Solutions for Polar Pesticides in Food**
Ed George, Thermo Fisher Scientific

Tuesday, April 19

Technical Training Workshops
Piedmont Room

Moderator: Oliver Ou

1:15-2:00 **Novel Mass Spec Solutions for Environmental Analysis**
Artem Filipenko, Bruker Scientific, LLC

2:00-2:45 **LCMSMS Pesticide Solution Involving Difficult Matrices**
Charlie Schmidt, Perkin Elmer

2:45-3:30 **Break— Door Prizes (Exhibit Hall) VISIT EXHIBITORS AND POSTERS (Authors Present)**

3:30-4:15 **You are now ISO/IEC 17025:2017 Accredited. What's Next and What are the Best Practices to Maintain Accreditation**
Lawrence Lagman, Perry Johnson Laboratory Accreditation

5:00-8:00 **Southern Section Reception**
Garden Grill Restaurant

Wednesday, April 20
Microbiology Presentations
Morning Session—Piedmont Room A
Breaks and Exhibits in the Peachtree Ballroom

Moderator: Ynes Ortega

- | | |
|--------------------|--|
| 8:30-8:55 | Assessment of MALDI-TOF Mass Spectrometry in the Rapid Identification of Some Known Foodborne Pathogens
Irshad Sulaiman
FDA |
| 8:55-9:20 | Dust Associated Dispersal of Foodborne Pathogens
Govindaraj Dev Kumar
University of Georgia |
| 9:20-9:45 | Anti-Biofilm Compounds: Understanding their Targets and Activity
Eric Gilbert
Georgia State University |
| 9:45-10:45 | Break—Sponsored by NACRW/Flag Works (Exhibit Hall)
Door Prizes VISIT EXHIBITORS AND POSTERS |
| 10:45-11:10 | Salmonella – Historical Perspective and Future Opportunities
Stan Bailey
bioMerieux |
| 11:10-11:35 | Investigating Peracetic Acid's Antimicrobial Efficacy during Poultry Processing Immersion Chilling
Stephanie Richter
Georgia Tech |
| 11:35-12:00 | Wireless Sensor for in-situ Detection of Bacterial Cells in Liquid Media and on Surface
Zhongyang Cheng
Auburn University |
| 12:00-12:25 | A Microbial Evaluation of a Commercial Aquaponics Farm
Jennifer Mae Dorick
University of Georgia |

Wednesday, April 20
Microbiology Presentations
Afternoon Session—Piedmont Room A
Breaks and Exhibits in the Peachtree Ballroom

Moderator: Val Suktankar

- 12:25-1:25** **Luncheon Session**
***Luncheon Workshop includes lunch for 35 of attendees.
Sign up at the registration desk, Wednesday morning.***
- Analytical Developments to Advance Food Testing**
Naren Meruva
Waters Corporation
- 1:25 -1:50** **Metabolomic Analysis Elucidates How Shade Conditions
Ameliorate the Deleterious Effects of Huanglongbing
Disease in Citrus**
Joonhyuk Suh
University of Georgia
- 1:50-2:15** **Method Development for SARS-CoV2 in Food**
Malak Esseili
University of Georgia
- 2:15-2:40** **NoroSurv- a Global Network for Monitoring Norovirus
Strains Associated with Diarrhea in Children Less Than 5
Years Old**
Jennifer Cannon
CDC
- 2:40-3:05** **Break—Door Prize Drawing in Foyer
VISIT EXHIBITORS AND POSTERS**
- 3:05-3:30** **Characterizing Norovirus Transmission and Infection Risks
in the Fresh Produce Agricultural Environment**
Julia Soboli
Emory University
- 3:30-3:50** **Southern Section of AOAC Annual Meeting Concludes
“Exciting Door Prizes” and the
“Grand Prize Drawing” in the Foyer**

Wednesday, April 20
Chemistry Presentations
Morning Session—Piedmont Room B
Breaks and Exhibits in the Peachtree Ballroom

Moderator: Sookwang Lee

- | | |
|--------------------|--|
| 8:30-8:55 | The Trouble with Tritium...A Laboratory Journey into the World of Radioactivity
Lisa Price
NOAA |
| 8:55-9:20 | Production of Green Adhesives from Sustainable Proteins Derived from Urban Based Sewage Sludges
Bill Holmes
Energy Institute of Louisiana |
| 9:20-9:45 | How Do You Develop a Custom Certified Reference Standard?
HuiChen Stavros
o2si / LGC |
| 9:45-10:45 | Break—Sponsored by NACRW/Flag Works Door Prizes (Exhibit Hall) VISIT EXHIBITORS AND POSTERS |
| 10:45-11:10 | Analysis of Multiple Antibiotics in Shrimp and Honey by LC/MS/MS
Molly Cumming (Retired)
Tennessee Department of Agriculture |
| 11:10-11:35 | DDT Levels in Soils from Historic Cotton Farms in Georgia
Kathryn J. Barr, Parinya Panuwet, and Eri Saikawa
Emory University |
| 11:35-12:00 | Update on the AOAC Cannabis Analytical Science Program (CASP)
Scott Coates
AOAC INTERNATIONAL |
| 12:00-12:25 | Emerging Technique - SARS-CoV-2 and Other Chemical Tracking in Wastewater
Bill Holmes
Energy Institute of Louisiana |

Wednesday, April 20

Chemistry Presentations

Afternoon Session—Piedmont Room B
Breaks and Exhibits in the Peachtree Ballroom

Moderator: Eric Clevenger

- 12:25-1:25** **Luncheon Session**
***Luncheon Workshop includes lunch for 35 of attendees.
Sign up at the registration desk, Wednesday morning.***
- What's Your Sample iQ – Overview of the New Agilent InfinityLab LC/MSD iQ for Food Testing**
Greg Thompson, Agilent Technologies
Nutritional Facts? A Metabolic Comparison of Plant-Based and Traditional Ground Meat
Stephan Baumann, Agilent Technologies
- 1:25 -1:50** **Characterization and Testing of Catalysts for the Removal of Sulfur Compounds from Natural Gas**
Percival Soni Castro
University of Louisiana
- 1:50-2:15** **The Effects of Exogenously Applied Methyl Jasmonate, Jasmonic Acid, and Salicylic Acid on Cannabinoid Production of *Cannabis sativa* Hurricane Hemp: Florence, Propagated Clones with Simulated Abrasive Wind Damage**
Brian K. Ward
Coastal Research and Education Center
Clemson University
- 2:15-2:40** **The Role of Amine and Amide I Functional Groups in the Adsorption of Perfluorooctanoic Acid (PFOA) onto Polyethyleneimine Modified Graphene Oxide**
Xiaobo Lei, University of Louisiana, Lafayette, Louisiana
- 2:40-3:05** **Break—Door Prize Drawing in Foyer VISIT EXHIBITORS AND POSTERS**
- 3:05-3:30** **Assessment of the Effects of Methanotrophic Growth Conditions on Methane Biocatalysis for Lipid Production**
Lisa Stephanie Dizon, University of Louisiana, Lafayette
- 3:30-3:50** **Southern Section of AOAC Annual Meeting Concludes**
 “Exciting Door Prizes” and the
 “Grand Prize Drawing” in the Foyer

Tuesday and Wednesday, April 19-20

Poster Presentations

*Poster Area is open Tuesday from 9:00 AM to 5:00 PM
and Wednesday from 9:00 AM to 3:05 PM (Peachtree Ballroom)*

Moderator: John Mathis

Methyl Mercaptan Removal through Metal-Oxide Catalysts

Gerson Martinez , University of Louisiana

Degradation of Emerging Groundwater Pollutants via Advanced Oxidation Processes

Elizabeth Boyd and Serenity Broussard
University of Louisiana

Applications of 3D Printing in Laboratory Research

Hayden Hulin
University of Louisiana

Solid-phase Extraction Coupled with *in situ* Chemical Derivatization of Urinary Monohydroxylated Polycyclic Aromatic Hydrocarbons for their Analysis using Liquid Chromatography Single Quadrupole Mass Spectrometry

Volha Yakimavets¹, Kostya Kartavenka², Parinya Panuwet^{1,2}, Priya E. D'Souza¹, Grace E. Lee¹, Dana Boyd Barr^{1,2}, and P. Barry Ryan^{1,2}.

¹ Laboratory of Exposure Assessment and Development of Environmental Research (LEADER), Rollins School of Public Health, Emory University

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

Impact of Electrolyte Addition on Non-Ionic Surfactant Solution Phase Behavior During Biomolecules Extraction

Kristel M Gatdual, University of Louisiana, Lafayette, Louisiana

Tuesday and Wednesday, April 19-20

Poster Presentations (continued)

*Poster Area is open Tuesday from 9:00 AM to 5:00 PM
and Wednesday from 9:00 AM to 3:05 PM (Peachtree Ballroom)*

Moderator: John Mathis

Bacterial Conversion of Methane into Bioproducts: Towards a Closed-Loop Manufacturing in Space

Robert S Bertrand, University of Louisiana, Lafayette, Louisiana

Reactive In-Situ Fractionation of Lignocellulosic Biomass

Reid Boudreaux, University of Louisiana, Lafayette, Louisiana

Adsorption of an Antibiotic (Sulfamethoxazole) onto OMC: Morphology and Kinetic Study

Pubali Sarker, University of Louisiana, Lafayette, Louisiana

Inhibitive Effects of *Mangifera indica* Seed Extract on Corrosion of Stainless Steel in Acidic Medium

Matluck Afolabi, University of Technology, Ogbomosho, Nigeria

Anant Jain Founder's Award

The Anant Jain Founder's Award was established in 1999 to honor a distinguished member of the Southern (formerly Southeast) Section of the AOAC International who continues to make contributions to our Section through their leadership. The recipient must have held a leadership role as a Section officer and had an active role in the Section.

Past recipients:

1999 Anant Jain	2008 Jim McGuire
2000 Wick Johnson	2009 Sherry Garris
2001 Sher Ali	2010 Reuben Beverly
2002 Virlyn Burse	2011 Anne Reid
2003 Doug Hite	2012 Dana Barr
2004 Jim Scott	2013 Joe Rainey
2005 Larry Lagman	2014 Jay Hardee
2006 Mike Farrow	2015 Amy Brown
2007 Lurlene Dixon	2016 Bill Holmes
	2018 Val Suktankar

Doug Hite Honorarium

The Doug Hite Honorarium was established in 2006 by Co-Presidents Sherry Garris and Jim McGuire to recognize the dedication and leadership that Doug has demonstrated to the Southern Section and AOAC International.

The recipient will be determined by the Section Awards Committee and must have held a leadership role in the Section, had an active role in the Section for a minimum of 10 years, and be a member of the AOAC International Board of Directors, Official Methods Board, or active in Association work.

Past recipients:

2006 Doug Hite
2007 Anant Jain
2008 Jo Marie Cook
2009 Gayle Lancette
2010 Wayne Ziemer
2011 Doug Hite
2012 JoMarie Cook
2013 Doug Hite
2015 Doug Hite
2016 Amy Brown

Fellows of AOAC INTERNATIONAL from the Southern Section

The Fellow of AOAC INTERNATIONAL Award recognizes the dedication and commitment of those volunteers who serve the Association. Fellows are chosen from those members who have given 10 years of meritorious service to AOAC.

1990 Ken Boyer
1992 Gayle Lancette
1997 George Latimer
1997 Anant Jain
2000 Argentina Vindiola

2001 Doug Hite
2004 Mark Mozola
2006 Wayne Ziemer
2011 Jo Marie Cook

AOAC Southern Section Officers 2021-2022

President

J. Dana Shell

Grants Manager
Georgia Dept. of Ag
19 MLK Jr. Dr.
Atlanta, GA
Phone: (404) 586-1113
joseph.shell@agr.georgia.gov

President-Elect

Kenneth Powell

(Retired) Quality System Manger
NOAA National Marine Fisheries
11658 Holly Bluff Circle
Biloxi, MS 39532
Phone: (228) 392-4847
kenneth.powell2@att.net

Secretary

Ynes Ortega

Assoc. Professor of Microbiology
University of Georgia
1109 Experiment St. Griffin, GA
Phone: (770) 233-5587
ortega@uga.edu

Treasurer

Doug Hite

President
ICD Associates
Franklin, TN
Phone: (615) 491-8600
dhite420@comcast.net

Immediate Past President

Oliver Ou

(CAERS) Coordinator, FDA
Harvey Wiley Building Room 2C-076
Washington, DC
Phone: (240) 402-0082
oliver.ou@fha.hhs.gov

Past Presidents

1986	Anant Jain	2003	Jo Marie Cook
1987	Frank Allen	2004	Evelyn Bonnin
1988	Martha Hudak-Roos	2005	Wayne Ziemer
1989	Sher Ali	2006	J.McGuire & S.Garris
1990	Gail Parker	2007	Reuben Beverly
1991	Jim Hess	2008	Anne Reid
1992	Virlyn Burse	2009	Dana Barr
1993	Doug Hite	2010	Joe Rainey
1994	Bill Brooks	2011	Jay Hardee
1995	Jim Scott	2012	Amy Brown
1996	Larry Lagman	2013	Bill Holmes
1997	Bert Lynn	2014	Tim Beasley
1998	Mike Farrow	2015	Val Suktankar
1999	Pat Beckett	2016	Mark Crosswhite
2000	Reba Ingram	2017	Denise Mitchell
2001	Lurlene Dixon	2018	Joe Basile
2002	Michael Curry	2019	Oliver Ou

AOAC Southern Section Executive Board Members 2021-2022

MEMBERS AT LARGE

Dana B. Barr

Research Professor, Department of
Environmental and Occupational Health
Rollins School of Public Health of Emory
1518 Clifton Rd, NE, Room 272
Atlanta, GA 30322
Phone: (404) 727-9605
dbbarr@emory.edu

Beth Hardin

Laboratory Director
SC Dept of Pesticide Regulation
Clemson University
511 Westinghouse Road
Pendleton, SC 29621
864-646-2171
bhardin@clemson.edu

Stephen Bell

Quality Systems Manager
NOAA National Marine Fisheries
3209 Frederic Pascagoula, MS 39567
Phone: (228) 549-1720
Stephen.bell@noaa.gov

Ynes R. Ortega

Associate Professor Microbiology
University of Georgia
1109 Experimental St
Griffin, GA 30223
Phone: (770) 233-5587
ortega@uga.edu

Val Suktankar

Supervisory Microbiologist
FDA Southeast Food & Feed Lab
60 8th Street, NE
Atlanta, GA 30309
Phone: (404) 253-2270
vilasini.suktankar@fda.hhs.gov

Sherry Garris

Retired Supervisor Chem Residue Lab
SC Department of Agriculture
7330 Panola Rd
Pinewood, SC 29125
Phone: (803) 491-7481
sherrytgarris@gmail.com

AOAC Southern Section Executive Board Members 2021-2022

MEMBERS AT LARGE (continued)

Larry Lagman

Kwality Management Solutions
P.O. Box 195714
Little Rock, AR 72291
Phone: (501) 249-0106z
Lawrence.lagman@kwalityms.com

Eric Clevenger

Chemist
FDA SE Food & Feed Lab
Atlanta, GA
Phone: 404-253-2354
eric.clevenger@fda.hhs.gov

Jay Hardee

Genesis Analytics
Atlanta, GA
Phone: (770) 761-7791
jay.hardee@mail.com

D. Kirk Holladay

Atomic Spectroscopy Account Manager
Agilent Technologies
Phone: 407-489-2156
E-mail: kirk.holladay@agilent.com

Bill Holmes

Dir. Analytics & Process Chemistry
The University of Louisiana
Energy Institute
P.O. Box 42251
131 Rex Street, Madison Hall 224
Lafayette, LA 70504
Phone: 337-326-6861
wxh9221@louisiana.edu

Sookwang Lee

Chemist
FDA SE Food & Feed Lab
Atlanta, GA
Phone: 404-253-2250
sookwang.lee@fda.hhs.gov

John Mathis

Chemist
FDA Southeast Tobacco Lab
Atlanta, GA
Phone: 404-253-2299
John.mathis@fda.hhs.gov

Scott Boone

Director of Enviro. & Chem Regulatory
Mississippi State Chemical Laboratory
1145 Hand Lab
310 President Circle P.O. Box CR
Mississippi State, MS 39762
Phone: (662) 325-3428
sboone@mscl.msstate.edu

Zachary Sealy

Chemist
AI Dept. Of Agriculture
1445 Federal Drive
Montgomery, AL 36107
Phone: (334) 240-7157
zachary.sealy@agi.alabama.gov

Raymond Allum

Environmental Manager
Division of Food Safety
FL Dept of AG
3125 Conner Blvd, Lab 3
Tallahassee, FL 32399
Phone: (850) 617-7509
raymond.allum@freshfromflorida.com

Randy Culp

Associate Professor
Center for applied Isotope Studies
University of Georgia
120 Riverbend Rd
Athens, GA 30602
Phone: (706) 542-6122
rculp@uga.edu

Joe Basile

Director, Food & Drug Lab
AL Dept. of Agriculture & Ind.
1445 Federal Drive
Montgomery, AL 36107
Phone: (334) 240-7305
joseph.basile@agi.alabama.gov

Please Note: for 2023

**The 36th Annual
Meeting of Southern
Section
AOAC International
Atlanta, GA
April 18-19, 2023**