

60th Annual Conference

July 14-17, 2024
Marriott Harbor
Beach Resort
Fort Lauderdale, Florida



www.nacrw.org

"Bringing Scientists Together to Develop and Validate Better Methodologies"



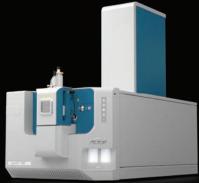
Supporting your food compliance testing programs

Whether you are a commercial lab or a food manufacturer, the quality of your food testing data is paramount. From residue analysis and authenticity to allergens, cannabinoids, and PFAS testing, SCIEX solutions help you support consumer safety and ensure your product quality standards are met.









Visit us at Booth #16 to learn more

Join our vendor seminar on achieving next-level robustness for PFAS analysis in food Tuesday, July 16 at 7:15 a.m in Grand Ballroom E

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2025 July 27-30 Francis Marion Hotel Charleston, SC



Thank You

to all of our amazing volunteers!



Dear Attendees, Exhibitors, Sponsors and Guests:

Welcome to the 60th North American Chemical Residue Workshop (NACRW)! George Fong founded the precursor to NACRW, the Florida Pesticide Residue Workshop (FPRW) back in 1964. Over its many years of existence, FPRW, and subsequently NACRW, have had huge positive impacts on the professional careers of many and helped nurture numerous life-long friendships. The 2024 meeting celebrates the rich history of 60 years of the working, now covering all sorts of topics related to the analysis of all chemical residues and contaminants in food, feed, and environmental samples. Whether you are a long-time attendee or a first-time participant, we extend a warm greeting to all. We would like to express our sincere gratitude to our Exhibitors and Sponsors for their generous support, which has made this workshop possible while keeping registration fees affordable for attendees. NACRW has become a favorite event for many, are we look forwards to its fantastic technical sessions, interactive poster presentations, and relaxed, informal atmosphere.

We invite you to join us on Sunday, July 14th for the NACRW Veterinary Drugs Working Group meeting. There will also be a fascinating opportunity to be involved in an interactive workshop with Antony Williams from the US EPA on using the EPA Dashboards to support analysis of residues and contaminants. These sessions will feature interesting presentations and an open forum for discussions and questions.

Our Program Committee has put together a marvelous technical program for this year's workshop. It covers a wide range of topics, including advances in analytical technology, pesticide and vet drug residue analysis, toxins and contaminants including PFAS, validations, certifications and regulatory issues, difficult matrices, sampling and method improvements, deficiencies, and expansions. While most attendees are from North America, important international speakers are always included in the Technical Program, and this year we have folk from Europe and South America. Additionally, we have a forum on "Overcoming challenges in the lab - sharing the pain", where attendees can ask questions to the moderators and members of the audience – and hopefully get some answers... We encourage you to attend the poster sessions. The poster authors will be available at designated times to present their posters and talk to you about their work. This is a wonderful opportunity to interact with the authors and ask questions. We are pleased to offer student poster awards, sponsored by FLAG Works, Inc. and the ACS Journal of Agricultural and Food Chemistry. Students will be attending the workshop and will be available at their posters during designated times for a chat. Recipients of student scholarship awards will have the opportunity of presenting their work at a session on Wednesday. We also encourage attendees to visit our exhibitors throughout the workshop and their vendor sessions to learn more about the products and services they offer for all your testing needs.

I would like to express my deepest appreciation to the fantastic volunteers who have made this event a reality. To this year's NACRW Organizing Committee, Program Committee, especially Secretary Jana Hepner, Program Committee Co-Chairs Wendy Young and Wiley Hall, Poster Committee Co-Chairs Brian Eitzer and Susan Genauldi, Student Scholarship Awards Chair, Katie Carlos, and of course our Executive Director Teri Besse, it has been a joy working with you, and I am truly grateful for your patience, time, and dedication to the workshop. I also want to thank NACRW for providing me, a Brit, with the opportunity to be President for 2024; it has been an honor.

We invite you to make the most of your time at NACRW and enjoy all that sunny Florida has to offer. With its warm climate and beautiful beaches, it's the perfect backdrop to enhance your conference experience. Take some time to unwind, soak up the sun, and engage in thought-provoking discussions about residue and contaminant testing. We hope you have a fantastic time at NACRW and make lasting memories both inside and outside the conference venue.

Sincerely,

Simon Hird, 2024 NACRW Organizing Committee President Wiley Hall and Wendy Young, 2024 NACRW Program Committee Co-Chairs



The George and Wilma Fong Founders Award

In Appreciation for Years of Leadership and Dedication to the Florida Pesticide Residue Workshop and the North American Chemical Residue Workshop by Volunteering so many hours that contributed to the Advancement of NACRW

Past Recipients

2011 George and Wilma Fong-Founders

2012 Gail Parker
2013 Pat Beckett
2014 Sherry Garris
2015 Jack Cochran
2017 Jo Marie Cook
2018 Julie Kowalski
2019 Steven Lehotay
2023 André de Kok

2016 Amy Brown

Board of Directors

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Alexandria Bush Simon Hird

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Program Committee

Co-Chairs:

Wiley Hall, USDA-ARS-SJVASC Wendy Young, US FDA

Co-Chairs Elect:

Lukas Vaclavik, Eurofins Food Chemistry Testing Kai Zhang, US FDA CFSAN

Immediate Past Co-Chairs:

Susie Genualdi, US FDA Ken Kise, Iowa Dept. of Agriculture

Program Committee Members

Julie Brunkhorst, Trilogy Analytical Laboratory
Julia Coppin, US FDA
Jana Hepner,Restek Corporation
Kyle Heater, OMIC USA Inc.
Wade Huang, US FDA
Holly Lee, SCIEX
Brian Ng, US FDA
Jessica Krank, USEPA-NEIC
Katerina Mastovska,AOAC
Matt Noestheden,SCIEX
Elsie Peprah, US FDA CFSAN
Don Shelley, UCT, LLC
Eric Verdon, ANSES
Jian Wang, Canadian Food Inspection Agency

Poster Committee

Co-Chairs:

Brian Eitzer, retired Susie Genualdi, US FDA

Poster Committee Members

Kevin Armbrust, Louisiana State University Mark Engel, FDACS Wiley Hall, USDA-ARS-SJVASC Holly Lee, SCIEX Brian Ng, US FDA Sherri Turnipseed, US FDA ORA ADRC Wendy Young, US FDA

Organizing Committee Officers

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Simon Hird, Waters Corp.

Secretary:

Jana Hepner, Restek Corporation

President-Elect:

Matt Noestheden, SCIEX

Immediate Past President:

Oscar Cabrices, G-flo Scientific

Organizing Committee Members

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Alexandria Bush, Restek Corporation
Katie Carlos, US FDA CFSAN
Kyle Heater, OMIC USA Inc.
Nathan Johnson, Campbell Soup Company
Scott Krepich,SCIEX
Yelena Sapozhnikova, USDA ARS
BJ Seyler, UCT
Raegyn Taylor, Syngenta Crop Protection LLC
Jona Verreth, Montana Dept. of Agriculture
Jon Wong, US FDA
Maria Guerra de Navarro, FIT (Communications Committee)

Student Scholarship Committee

Chair: Katie Carlos, US FDA CFSAN Kevin Armbrust, Louisiana State University Rodney Bennett, Winding Trails LLC Scott Krepich, SCIEX Yelena Sapozhnikova, USDA ARS

Discover the future of pesticide residue science!

Join us for a groundbreaking scientific event

Inspiring keynote speakers

Cutting-edge research presentations

Networking with experts

Interactive workshops



10th Latin American Pesticide Residue Workshop



May 4th – 8th, 2025

More information: www.laprw.com contacto@laprw.com

We would like to thank the following companies for their support of the 60th Annual NACRW

Platinum Sponsors

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GENERAL INFORMATION

Registration

Check in once at the registration desk at your earliest opportunity

Sunday - 1:00 pm - 6:00 pm Monday - 7:30 am - 5:00 pm Tuesday - 8:00 am - 4:00 pm Wednesday - 7:45 am - Noon

KEY to Presentation Numbering System

Oral presentations are numbered O-1, O-2, O-3, etc, **Vendor Seminars** are numbered V-1, V-2, V-3, etc. **Session A posters** are **ODD** numbered P-1, P-3, P-5, etc. **Session B posters** are **EVEN** numbered P-2, P-4, P-6, etc.

Poster Sessions (Exhibit Hall, Caribbean Ballroom, 1st level)

Hang posters Sunday afternoon from 3:00 pm to 6:00 pm or Monday morning from 7:00 am to 9:30 am. Take down posters between 12 noon to 2:00 pm on Wednesday

Posters may be viewed any time Exhibition is open

Poster Session A (odd#) authors must be at their posters from 11:00 am – noon on Monday and 3:10 – 3:55 pm on Tuesday Poster Session B (even#) authors must be at their posters from 3:10 pm – 3:40 pm on Monday and 11:00 – noon on Tuesday

Poster Prizes

Two poster prizes of \$200 each will be awarded this year, and the same poster/author(s) are eligible to win both prizes. The People's Choice Poster Award will be determined by popular vote of attendees, and the Judges Choice Poster Award will be determined by the poster committee. The criteria used in each case will be importance of the study, quality of the science, and its presentation (including oral discussion and abstract). Attendees must place their votes in the ballot box by noon on Wednesday. Be sure to write your name on the back of your voting ticket for the chance to win a door prize.

Exhibition (Caribbean Ballroom, 1st level)

Sunday: A welcome reception with light hors d'oeuvres and an open beer and wine bar will be held from 6:30 - 8:00 pm. If you would like to try the "Strawberry OrbiRITA" cocktail stop by the *Thermo Fisher Scientific booth* #10 to get a ticket for a free drink.

Monday: 10 am - 1 pm and 2:30 pm - 4 pm Tuesday: 10 am - 1 pm and 2:30 pm - 4 pm

Wednesday: 10 am - 12 noon

Coffee and Breaks

Coffee will be available each morning in the Caribbean Ballroom foyer (please refer to the times in the conference program). There will also be mid-morning and afternoon refreshment breaks each day. The Monday and Tuesday mid-morning and afternoon breaks, as well as the Wednesday mid-morning break, will be served in the Exhibition Hall (Caribbean Ballroom). On Wednesday afternoon, the break will be served in the Grand Ballroom foyer.

Announcements

Moderators will make general announcements from the podium. If you need to have an announcement made, please go to the conference registration desk or see the onsite audio-visual team in the meeting room, and give them your annoucement.

Mobile App

Thanks to the Platinum Sponsors we have a mobile app to view the program, see who is attending the meeting, and connect with them via the app. You should have received an email just prior to the conference with a link to download the app to your mobile phone along with a link that will automatically log you in.

Door Prizes

Door prizes will be drawn at the end of each morning and afternoon oral session. You must be ON TIME at the beginning of each session to receive a door prize ticket. You must be present at each drawing to win.

Get to Know Your Sponsor

Participate in the "Get to Know Your Sponsor" quiz and win an Apple iPad tablet. A quiz will be provided to you in your registration bag. Simply take the quiz to each sponsor booth, get the right answer and the sponsor will place a sticker on your quiz. After you have completed the quiz, return it to the registration desk no later than Wednesday, July 17, at 1:30 pm. We will be announcing the winner Wednesday afternoon.

Submission of Manuscripts to Journal of Agricultural and Food Chemistry

Oral and Poster presenters are encouraged to contribute original research and/or review articles to the Journal of Agricultural and Food Chemistry for a special section related to the 2023 NACRW. Please inform **Teri Besse (teri@nacrw.org), by September 5, 2024,** if you intend to submit an article. Authors will then be invited by JAFC to submit their manuscripts electronically online through the JAFC website with a deadline of November 29, 2024.

Copies of Presentations

<u>Oral Presentations:</u> Following the meeting, as time and resources permit, oral presentations will be posted on our web site if author permission is granted. There are limitations to what we can post. Absolutely no files will be posted without a speaker's written permission (historically, two thirds of our speakers have given permission). The Power Point files are converted to PDF format. Various security restrictions may be added to the PDF file per speaker's request (such as disabling "copy text" and "print" functions). Some slides containing confidential or proprietary information may be deleted.

<u>Poster Presentations:</u> Drop your business card in the "reprint request" envelope available at each individual poster board. The author should mail/email you a reprint.

Meeting Website

www.NACRW.org - the website includes information on current and future NACRW meetings, as well as archives going back a few years.

Meeting Evaluations

Look for an on-line conference evaluation on the last day of the conference. The evaluation will be emailed to you, so please take a few moments to fill out the online form.

A BIG THANK YOU TO ALL OF OUR VOLUNTEERS, SPONSORS & EXHIBITORS! The workshop would not be possible without your valuable assistance.

MARK YOUR CALENDAR FOR THE 2025 NACRW

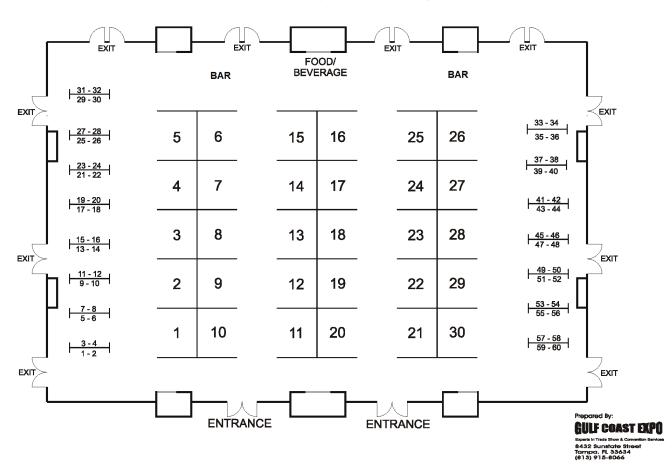
July 27-30 Francis Marion Hotel, Charleston, South Carolina

EXHIBITION HALL AND POSTER SESSIONS

Location: Caribbean Ballroom, 1st Level

NORTH AMERICAN CHEMICAL RESIDUE WORKSHOP

JULY 14-17, 2024 HARBOR BEACH MARRIOTT, FT. LAUDERDALE, FLORIDA



EXHIBITORS

Booth #1

Lab Instruments Srl

Booth #2

ITSP Solutions, Inc.

Booth #6

Waters

Booth #8

Perkin Elmer

Booth #10

Thermo Fisher Scientific

Booth #11

Restek Corporation

Booth #12

Milliporesigma

Booth #14

GERSTEL, Inc.

Booth #15

UCT, LLC

Booth #16

SCIEX

Booth #17

Phenomenex, Inc

Booth #18

Shimadzu Scientific Instruments

Booth #19

HPC Standards

Booth #19

Agilent

Booth #21 and #22

LGC Standards

Booth #23

Providion Us

Booth #25

Cambridge Isotope Laboratories

Booth #26

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VENDOR SEMINARS

Food and beverage provided by each company
(PRE-REGISTRATION IS REQUIRED)
Please sign up at the meeting registration desk

V-1 Monday, July 15, 2024

7:15-8:15 am

Restek Corporation

Location: Grand Ballroom E, 3rd floor

Recent Developments in Emerging and Persistent Contaminants

Colton Myers, R&D Manager, Sample Preparation, Restek Corporation

PFAS, mycotoxins, pesticides, and many other compound classes continue to disrupt laboratory workflows due to their chemical nature and difficult matrices, which they persist in. High-throughput laboratories need clean and effective solutions to navigate these challenges, as methods continue to emerge targeting lower limits of detection. Improving areas such as background contamination, analyte behavior, and instrument up-time is critical for accurate quantitation and creating a safer world. These challenges can be mitigated through novel sample preparation and chromatographic products. To be presented are new advancements from the Restek laboratories that showcase innovative LC, GC and sample preparation solutions targeting these emerging compound classes and problematic matrices.

V-2 Monday, July 15, 2024

12:15-1:15 pm

Agilent Technologies

Location: Grand Ballroom E, 3rd floor

Solving Analytical Challenges in PFAS, Mycotoxin, Veterinary Drug and other Contaminants in Food

Dana Rothwein, Technical Director, IEH Analytical Laboratories

Kyle Heater, Analytical Chemist 3, OMIC USA Inc.

Lorna De Leoz, Director, Global Food Market, Agilent Technologies

Learn about streamlined workflows and best practices for the analysis of PFAS, patulin, vet drugs, and other contaminants in food. This lunch seminar includes presentations and a panel discussion.

V-3 Tuesday, July 16, 2024 SCIEX

7:15-8:15 am

Location: Grand Ballroom E, 3rd floor

Robustness defined: PFAS in food with the next-generation SCIEX 7500+ system

Holly Lee, Food LCMS Scientist, Global Technical Marketing, SCIEX

Residue analysis in food matrices is challenged by the presence of co-extractable compounds that can result in instrument contamination and subsequent system downtime. Come hear how the new SCIEX 7500+ system successfully achieved 6,400 injections of various food extracts under experimental conditions designed to get the system dirty! Performance for various PFAS compounds in salmon, avocado, spice powder and petfood will be presented.

V-4 Tuesday, July 16, 2024

Thermo Fisher Scientific

Location: Grand Ballroom E, 3rd floor

From Innovation to Routine: Advances in Targeted and Non-targeted Mass Spectrometry Techniques for Food Control Laboratories

Part 1: High-end chromatography for more efficient mass spectrometry

Professor Amadeo Rodriguez Fernandez-Alba, EURL-FV – EU Reference Laboratory for pesticide residues in Fruits and Vegetables, **University of Almería – Spain**

Recent advances in liquid and ion chromatography instrumentation can significantly improve the efficiency and robustness of MS techniques in a routine pesticide residue laboratory. For example, dual-column chromatography with two columns in one LC connected to one MS can improve utilization of the MS time to improve throughput or be used to optimize sensitivity by allowing mobile phase combinations favoring either positive or negative ionization. Another common challenge is a robust and reliable analytical workflow for polar pesticides. An IC-MS/MS workflow was demonstrated for the validation of several food matrices with hundreds of injections, making it ideal for laboratories facing high sample volumes.

continued on next page

12:15-1:15 pm

Part 2: Non-Targeted Approach for Authentication of Spices and Herbs using GC-Orbitrap MS technology

Ed George, Vertical Marketing Manager, Environmental and Food Safety, **Thermo Fisher Scientific**, San Jose, CA

Adulteration of spices typically refers to the practice of adding impurities or low-quality substances to spice products, with the intent to deceive consumers and maximize profits. A non-targeted GC-Orbitrap technology workflow using solid phase micro-extraction (SPME) arrow technology and a multivariate statistical analysis was developed to effectively profile intentionally adulterated oregano samples. The workflow includes extraction, deconvolution, and identification of unknown compounds using mass spectral libraries, PCI mode to confirm molecular ions, and additional MS/MS experiments to support the proposed formula.

You will learn:

How dual chromatography can be used routinely to improve productivity and sensitivity.

- How IC-MS/MS meets the challenge of polar pesticides analysis.
- How GC-Orbitrap's high resolution accurate mass system and easy-to-use software can pinpoint adulteration.

V-5 Wednesday, July 17, 2024

UCT, LLC

Location: Grand Ballroom A-D, 3rd floor

What You Might Not Know About Solid-Phase Extraction

Don Shelly, Consultant, **UCT**

Numerous papers have explored using C18 and HLB sorbents for extraction and purification. However, these papers often overlook a crucial detail - the origin of the sorbents. The manufacturing origin of these sorbents is crucial. This presentation will discuss the differences among C18 produced by 5 different manufacturers and highlight a few underutilized sorbents.

V-6 Wednesday, July 17, 2024

12 noon-1:00 pm

7:15-8:15 am

Waters Corp.

Location: Grand Ballroom A-D, 3rd floor

From Trace Quantitation to New Discoveries – A Day in the Life of a Waters MS Applications Scientist

Hosted by: Narendra Meruva, PhD, MBA, Director, Americas Food & Environmental Markets, **Waters Corporation**

Presenter: Gordon Fujimoto, PhD, Chemical Analysis Group Leader, Americas Mass Spectrometry Applications Laboratory, **Waters Corporation**

Food and environmental contaminants encompass a wide range of analytes, including pesticides, veterinary drugs, PFAS, mycotoxins, and the unknown. Scientists often specialize in specific contaminant classes or analytical techniques, and instrument vendors seek to collaborate with these experts to develop cutting-edge technologies and enhance laboratory capabilities. Successful partnerships require a shared understanding of industry challenges and opportunities... But who possesses extensive knowledge of both food and environmental matrices, hands-on experience with diverse contaminants and constituents, and deep expertise in trace analysis and discovery? Enter Waters Mass Spectrometry (MS) Applications Scientists! Often described as "jacks of all trades and masters of everything," these MS Applications Scientists assist current and future collaborators by showcasing how the right analytical tools—whether it's LC with routine tandem quadrupole MS or APGC with advanced HRMS—can address their specific laboratory needs. From analyzing cucumbers, fish, and water to studying botanicals and soil, no two days are alike for these scientists! Join us for lunch to learn about a day in the life of an MS Applications Scientist at Waters and discover how they contribute to scientific partnerships.

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Food Safety Matters is the podcast for food safety professionals, hosted by the *Food Safety Magazine* editorial team. Each episode features industry news and updates, plus a conversation with a food safety professional sharing their experiences and insights into the important job of safeguarding the world's food supply.



Save the Date! May 12–15, 2025

Donald E. Stephens Convention Center | Rosemont, IL





Oral and Poster Presenters

(alphabetical order by Last Name)

First Name Last Name Presentation

Please note that oral and poster abstracts are available in the mobile app digital program.

MEETING PROGRAM

Sunday, July 14, 2024

1:00-6:00 pm	Registration	Caribbean Foyer
1:00-5:00 pm	Exhibitor set-up	Caribbean Ballroom
3:00 - 6:00 pm	Poster Board set-up	Caribbean Ballroom
2:00-3:30 pm	NACRW Veterinary Drugs Working Group	Grand Ballroom E
2:00-2:25 pm VDWG-01	Anton Kaufmann, Official Food Control Authority of the Canton of Zürich, Zürich; Switzerland Comparison of the Low versus High Resolution-based Confirmation Criteria for Veterinary Chemical Residues in Food Control	
2:25-3:00 pm	Robin Kämpf and <u>Anton Kaufmann</u> , KLZH, Official Food Control Authorit Zurich, Zürich, Switzerland; <u>Maïwenn Le Floch</u> and Eric Verdon, ANSES, Food, Environmental and Occupational Health & Safety, Laboratory of Food, Environmental Alejandra Rodríguez Haralambides, University of the Republic, Montevi	the French Agency for ougeres; France; and
VDWG-02	Progress of the Veterinary Drug Residue Collaborative Study, 2023-2024 (Rounds 1 & 2)	
3:00-3:15 pm	<u>Eric Verdon</u> , the French Agency for Food, Environmental and Occupational Health & Safety, Laboratory of Fougeres; France	
VDWG-03	News on the new EU Implementing Regulation for Analytical Methods Performance for the Veterinary Drug Residue Official Control in Food: CIR (EU) 2021/808	
3:15-3:30 pm	Open Forum Moderators: Jo Marie Cook, Florida Department of Agriculture, FL, USA, retired; and Eric Verdon, The French Agency for Food, Environmental and Occupational Health & Safety, Laboratory of Fougeres; France	
3:30-4:00 pm	Beverage Break	Grand Ballroom Foyer
4:00-5:30 pm	Workshop with Antony Williams US EPA A Hands-On Experience of Accessing Data from EPA Dashboards to Support Analysis of Pesticides, Veterinary Drug Residues, and other Chemicals in Food, Animal Feed, and Environmental Samples	Grand Ballroom E
6:30 - 8:00 pm	Welcome Reception (Exhibit Hall)	Caribbean Ballroom

Monday, July 15, 2024

7:00 - 9:30 am	Poster Board Set-up	Caribbean Ballroom
7:15 - 8:15 am	Restek Vendor Seminar (pre-registration required)	Grand Ballroom E
7:30 am -5:00 pm	Registration	Caribbean Foyer
7:45- 8:15 am	Early Morning Coffee	Caribbean Foyer
8:20-8:45 am	Opening Remarks - NACRW 2024	Grand Ballroom F-K
8:20-8:30 am	Sherry Garris, Chair, FLAG Works, Inc. Board of Directors	
8:30-8:35 am	Simon Hird, 2024 NACRW President	
8:35-8:40 am	Wiley Hall and Wendy Young, 2024 NACRW Program Co-Chairs	

Grand Ballroom F-K 8:40 - 10:45 am **SESSION 1:** sponsored by SCIEX Progress and Advances in Analytical Technology, Cheminformatics, Monitoring, and Risk Assessment for Hazardous Chemicals in the **Environment and Food Supply** Co-Chairs: Jian Wang and Brian Ng 8:40-8:45 am Session Sponsorship - SCIEX **Matt Noestheden** 8:45-9:40 am Antony Williams, US EPA, Durham, NC, USA **Keynote Speaker** Accessing Data to Support Pesticide Residue and Emerging Contaminant Analysis from US-EPA **Online Dashboards** 9:45-10:10 am Carsten Prasse, Johns Hopkins University, Baltimore, MD, USA 0-01 Combining non-targeted analysis with computer-based hazard comparison approaches to support prioritization of unregulated organic contaminants in environmental media 10:15-10:45 am **Julien Parinet,** ANSES, Montreuil, France **O-02** Strengths & weaknesses to reanalyze by QuEChERS-LC-HRMS/MS (targeted and suspected approaches) a selection of total diet study samples analyzed ten years ago by various LC-MS/ MS methods **Caribbean Ballroom** 10:45 - noon **Break - Exhibition and Poster Opening** 11:00 am - noon Poster Session A (authors present for odd #s) **Caribbean Ballroom** 12 noon Lunch on your own 12:15 - 1:15 pm **Agilent Technologies Vendor Seminar** (pre-registration required) **Grand Ballroom E** 1:30 - 3:10 pm **SESSION 2: Grand Ballroom F-K Non-Pesticide Residues** Co-Chairs: Eric Verdon and Jessica Krank 1:30-1:50 pm Dr. Simon Hird, Waters Corporation, Wimslow, Cheshire, UK **O-03** Determination of nitrofuran metabolites, including nifursol, in shrimp and fish by UPLC-MS/ MS: in-house method validation according to Commission Implementing Regulation (EU) 2021/808 1:50-2:10 pm Dr. Jana Hepner, Restek Corporation, Bellefonte, PA, USA **O-04** Exploration of new Low-Pressure GC columns for food and environment emerging contaminants 2:10-2:30 pm Frank Kero, Bruker, Billerica, MA, USA **O-05** A novel approach for monitoring multi-classes of POPs in a single run by GC-Ion Mobility-**HRMS** 2:30-2:50 pm Dr. Wiley Hall, US Department of Agriculture, Agricultural Research Service, Parlier, CA, USA **O-06** Considerations and Progress in Developing Multiresidue Analysis Methods for the Inorganic **Residues of Postharvest and Preplant Fumigants** 2:50-3:10 pm Q & A

3:10-3:40 pm	BREAK- Exhibition & Posters Poster Session B (authors present for even #s)	Caribbean Ballroom
3:40-5:00 pm	SESSION 3: Validations, Certifications and Regulatory Issues Co-Chairs: Julia Coppin and Kate Mastovska	Grand Ballroom F-K
3:40-4:00 pm	Spencer Walse , US Department of Agriculture, Agricultural Research Se Parlier, CA, USA	rvice,
O-07	Regulatory Challenges to the Use of Postharvest Fumigants in the Glok Commodities	oal Trade of Agricultural
4:00-4:20 pm O-08	Luciana Teresa Dias Cappelini, Florida International University, North Miami, FL, USA Occurrence and distribution of emerging contaminants on children's food in Miami-Dade – FL	
4:20-4:40 pm	Alejandra Rodriguez-Haralambides, Facultad de Química-IPTP, Universid Uruguay, Pando, Canelones, Uruguay	dad de la República-
O-09	Mapping of Mycotoxins Profiles in Wheat Production Regions of Urugu	uay
4:40-5:00 pm O-10	Thomas Day, US Food and Drug Administration, Bothell, WA, USA Detection of C. thevetia Cardiac Glycosides Adulteration in Dietary Supplements utilizing Untargeted High Resolution Mass Spectrometry	
6:30-9:00 pm	SOCIAL EVENT (Dinner) – Marriott Harbor Beach	Grand Ballroom A-E

Tuesday, July 16, 2024

7:15-8:15 am	SCIEX Vendor Seminar (pre-registration required)	Grand Ballroom E
8:00 am - 4:00 pm	Registration	Caribbean Foyer
8:00 am – 8:30 am	Early Morning Coffee	Caribbean Foyer
8:45 - 10:45 am	SESSION 4: sponsored by Agilent Residue Analysis in Difficult Matrices Co-Chairs: Holly Lee and Julie Brunkhorst	Grand Ballroom F-K
8:45-8:50 am	Session Sponsorship - Agilent Technologies	
8:50-9:10 am O-11	Anton Kaufmann, Official Food Control Authority of the Canton of Zurick Good Chromatography – A Sometimes Neglected Aspect of Modern M Methods	
9:10-9:30 am	Alicia D. Stell, CEM Corporation, Matthews, NC, USA	
0-12	Automated Solvent Extraction Method of PFAS From Difficult Food and Matrices	l Environmental
9:30-9:50 am	Jerry Mueller, NOW Health Group, Bloomingdale, IL, USA	
0-13	Effective Sample Preparation for LC-MS and GC-MS Multi-Pesticide Res Essential Oils Using Novel Passthrough Cleanup	idue Analysis in

9:50-10:10 am O-14	Zhihong Wang, NOAA/NOS National Centers for Coastal Ocean Science Determination of Microcystins and Nodularins in Ambient Freshwater MS	
10:10-10:30 pm O-15	Kaitlyn Nobles, Trilogy Analytical Laboratory, Washington, MO, USA Quantitative Analysis for the Adsorption and Desorption Capabilities of Mycotoxin Deactivators Containing Multiple Biogenic Amines by LC-MS/MS	
10:30-10:50 am O-16	Shweta Gupta, ImagoAl, Inc., Milpitas, CA, USA Quantification of Mycotoxin Levels in Grains Utilizing Hyperspectral In Intelligence	maging and Artificial
10:50 am-noon	Break - Exhibition and Posters	Caribbean Ballroom
11:00-noon	Poster Session B (authors present for even #s)	Caribbean Ballroom
12 noon	Lunch on your own	
12:15-1:15 pm	Thermo Fisher Scientific Vendor Seminar (pre-registration required)	Grand Ballroom A-D
1:30-3:10 pm	SESSION 5: sponsored by Thermo Fisher Scientific PFAS Contamination: Looking Beyond Environmental Matrices Co-Chairs: Matt Noestheden and Elsie Peprah	Grand Ballroom F-K
1:30-1:35 pm	Session Sponsorship – Thermo Fisher Scientific	
1:35-2:00 pm O-17	Amy Rand, Carleton University, Ottawa, Ontario, Canada PFAS analysis in house dust across socioeconomic factors using targeted LC-MS/MS and total fluorine approaches	
2:00-2:25 pm O-18	Ming Gao, Meriuex/Silliker, Crete, IL, USA Detection and Quantitation of PFAS Substances in food and packaging	g with LC-MS/MS
2:25-2:50 pm	Anton Kaufmann, Official Food Control Authority of the Canton of Zurich, Zurich, Switzerland	
0-19	Fast and easy nontargeted detection of PFAS in complex food matrices	s
2:50-3:15 pm O-20	Thomas Simones, Maine CDC, Augusta, ME, USA PFAS Contamination in Agricultural Settings and Assessment of Human Exposure Pathways through Food Products	
3:15-3:55 pm	BREAK- Exhibition & Posters Poster Session A (authors present for odd #s)	Caribbean Ballroom
4:00-5:00 pm	SESSION 6: FORUM: Overcoming challenges in the lab - sharing the pain Moderators: Scott Krepich and Simon Hird	Grand Ballroom F-K
5:05-6:00 pm	NACRW Organizing Committee Meeting open to all attendees	Caribbean Ballroom

Wednesday, July 17, 2024

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7:15-8:15 am	UCT, LLC Vendor Seminar (pre-registration required)	Grand Ballroom E
7:45 am-noon	Registration	Caribbean Foyer
7:45-8:15 am	Early Morning Coffee	Caribbean Foyer
8:30-10:05 am	SESSION 7: sponsored by Restek Corporation Sampling: Collection, Preparation, and Statistics Co-Chairs: Jana Hepner and Don Shelley	Grand Ballroom F-K
8:30-8:35 am	Session Sponsorship – Restek Corporation	
8:35-8:55 am	Amadeo Fernández-Alba, EURL-FV University of Almería, La Cañada de San Urbano, Almería, Spain	
0-21	Advancements in Miniaturization and Automation for Eco-Friendly Analytical Methods in Pesticide Residue Evaluation in Food	
8:55-9:15 am O-22	Alexis Shelow, Restek, Bellefonte, PA, USA Reduced Instrument Downtime for Organochlorine Pesticide Analysis Optimized SPE Cartridge for Sample Extract Cleanup	by Using an
9:15-9:35 am	Ederina Ninga, EURL-CF, National Food Institute, Technical University of Denmark, Lyngby, Denmark	
0-23	Optimization and validation of new sorbents combination in micro solid phase extraction cartridges for the analysis of pesticides in cereals	
9:35-9:55 am O-24	Volker Bornemann, Avazyme, Inc., Durham, NC, USA New, fully automated analytical method for accurate, extended PFAS screen in water, beverages, and food	
10:00-10:45 am	Student Scholarship Award Presentations	Caribbean Ballroom
10:45-noon	BREAK (Exhibition & Posters)	Caribbean Ballroom
12:00-1:00 pm	Waters Corp. Vendor Seminar (pre-registration required)	Grand Ballroom E
1:05-2:45 pm	SESSION 8: Pesticides: Method Improvements, Deficiencies and Expansions Co-Chairs: Ken Kise and Kyle Heater	Grand Ballroom F-K
1:05-1:25 pm O-25	Jian Wang, Canadian Food Inspection Agency Application of nDATA Work Flow for Semi-Quantitative Screening of 1094 Pesticide Residues in Fruits and Vegetables using UHPLC/ESI Q-Orbitrap Full MS/vDIA	
1:25-1:45 pm O-26	Greg Mercer, US Food and Drug Administration Keeping a Regulatory Pesticide Monitoring Program Current: Extension of 38 Analytes to the FDA Harmonized Pesticide Method	
1:45-2:05 pm O-27	Leah Ritter, Bayer Residues of Glyphosate in Food and Dietary Exposure	

2:05-2:25 pm O-28	Anastasia Andrianova, Agilent Technologies A High-Efficiency Approach to Quantitating 246 Pesticides in Black Tea with GC/MS/MS using a New Electron Ionization (EI) Source for Maximized Uptime	
2:25-2:45 pm O-29	Jon Wong, US Food and Drug Administration, College Park, MD, USA Evaluation of Complex Food Matrices for Multiresidue Pesticide Analysis using QuEChERS Modificatins and GC- and LC-MS/MS	
2:45-3:15 pm	BREAK	Grand Ballroom Foyer
3:15-4:55 pm	SESSION 9: Toxins in Agriculture and Food Safety Co-Chairs: Kai Zhang and Lukas Vaclavik	Grand Ballroom F-K
3:15-3:40 pm O-30	Hans Mol, Wageningen Food Safety Research, Wageningen, The Netherlands Mycotoxins: Measuring Body Fluids versus Food to Assess Dietary Exposure	
3:40-4:05 pm	Lidija Kenjeric, Austrian Competence Centre for Feed and Food Quality and Innovation FFoQSI GmbH, Tulln an der Donau, Austria	Safety
0-31	Exploring Mass Spectrometer Limits: UHPLC-MS/MS Method for Dete in 10 Minutes	rmination of 1,000 Toxins
4:05-4:30 pm O-32	Krista Thomas, National Research Council Canada, Halifax, NS, Canada Multi-Class Analysis of Cyanobacterial Toxins using Hydrophilic Interaction Liquid Chromatography–Mass Spectrometry	
4:30-4:55 pm O-33	Jacolin Murray, National Institute of Standards and Technology, Gaither Development of a Mycotoxin in Animal Feed Reference Material	rsburg, MD, USA
4:55-5:10 pm	Poster Awards and Closing	Grand Ballroom F-K
5:10 pm	Adjourn	

SAVE THE DATE!



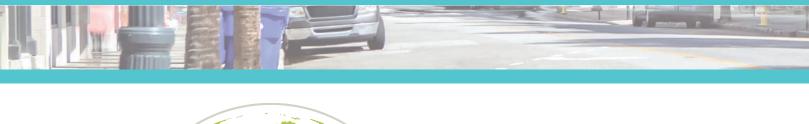
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Connectors:

EXP Reusable Fittings



Sample Preparation

Slim Packets with Free-Flowing Salts, Q-sep QuEChERS Extraction Salts and dSPE Tubes, Resprep SPE Cartridges for Pesticide Residue Cleanup, Thomson SINGLE StEP Filter Vials



Reference Standards

QuEChERS Performance & Internal Standards, LC & GC Multiresidue Pesticide Kits, PAH Standards, MOSH/MOAH Standards, Melamine Analysis Kit, Residual Solvents, trans Fats, Cannabinoids, Terpenes, Furan/Alkylfurans, MCPD and Glycidyl Esters, and **Custom Standard Solutions**



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