NACRW

NORTH AMERICAN
CHEMICAL RESIDUE WORKSHOP

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"

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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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Future Meeting Dates

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
2016 Amy Brown
2017 Jo Marie Cook
2018 Julie Kowalski
2019 Steven Lehotay
2023 André de Kok

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Jian Wang, Canadian Food Inspection Agency

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Poster Committee Members

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Mark Engel, FDACS
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Holly Lee, SCIEX
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Raegyn Taylor, Syngenta Crop Protection LLC
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Scott Krepich, SCIEX
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- Inspiring keynote speakers
- Cutting-edge research presentations
- Networking with experts
- Interactive workshops

LAPRW 2025 Argentina

10th Latin American Pesticide Residue Workshop

Buenos Aires

May 4th – 8th, 2025

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

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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

Oral Presentations: 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.

Poster Presentations: 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.

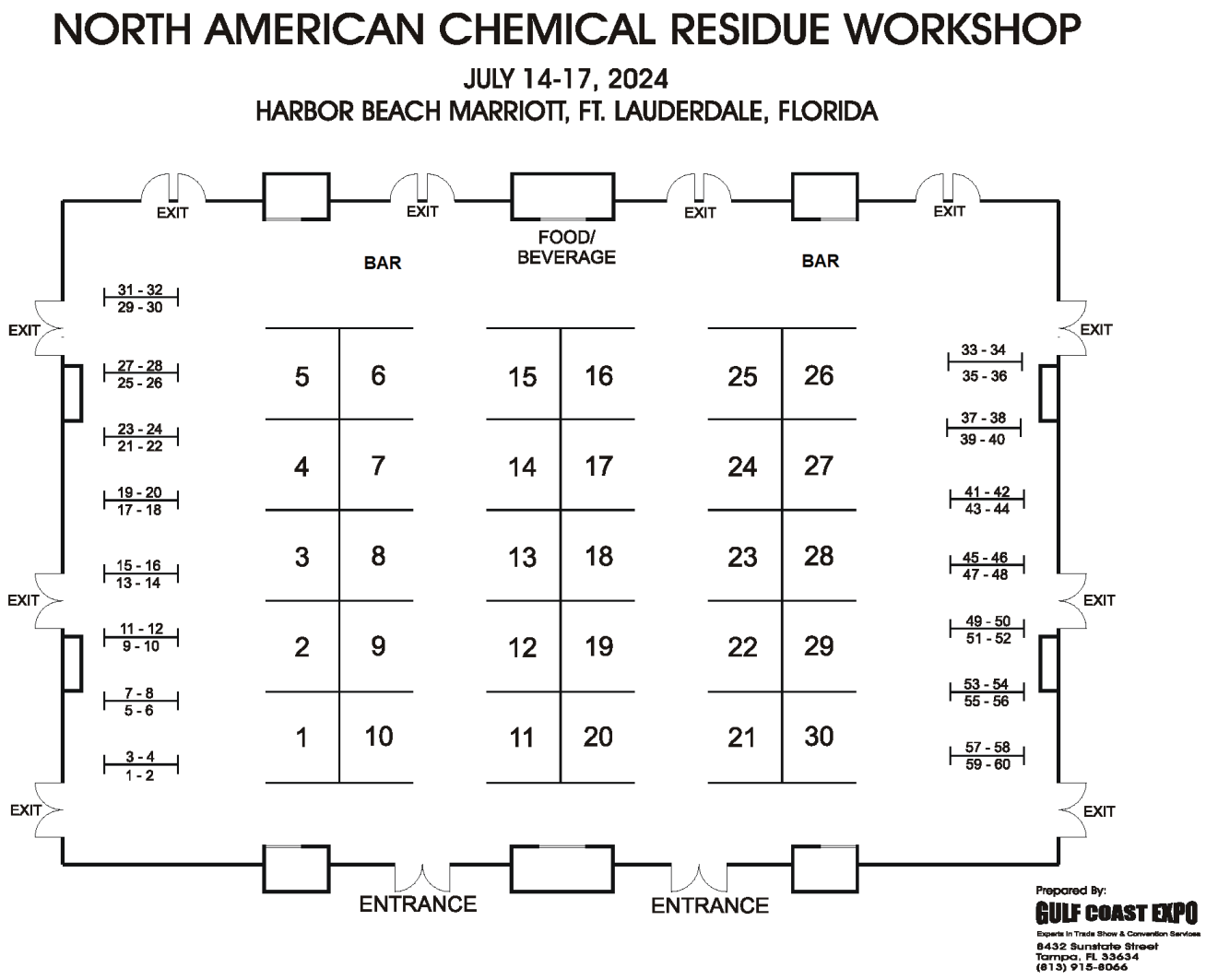
A BIG THANK YOU TO ALL OF OUR VOLUNTEERS, SPONSORS & EXHIBITORS!
The workshop would not be possible without your valuable assistance.

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



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
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Booth #25
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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 7:15-8:15 am

SCIEX

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 12:15-1:15 pm

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

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 7:15-8:15 am

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

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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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.

2024 - 60th ANNUAL NORTH AMERICAN CHEMICAL RESIDUE WORKSHOP

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 **VDWG-02**	Robin Kämpf and **Anton Kaufmann**, KLZH, Official Food Control Authority of the Canton of Zurich, Zürich, Switzerland; **Maïwenn Le Floch** and Eric Verdon, ANSES, the French Agency for Food, Environmental and Occupational Health & Safety, Laboratory of Fougeres; France; and **Alejandra Rodríguez Haralambides**, University of the Republic, Montevideo; Uruguay **Progress of the Veterinary Drug Residue Collaborative Study, 2023-2024 (Rounds 1 & 2)**	
3:00-3:15 pm **VDWG-03**	**Eric Verdon**, the French Agency for Food, Environmental and Occupational Health & Safety, Laboratory of Fougeres; France **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 14, 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**	

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**	**Grand Ballroom F-K**
8:40-8:45 am	**Session Sponsorship – SCIEX** **Matt Noestheden**	
8:45-9:40 am **Keynote Speaker**	**Antony Williams**, US EPA, Durham, NC, USA **Accessing Data to Support Pesticide Residue and Emerging Contaminant Analysis from US-EPA Online Dashboards**	
9:45-10:10 am **O-01**	**Carsten Prasse,** Johns Hopkins University, Baltimore, MD, USA **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 **O-02**	**Julien Parinet,** ANSES, Montreuil, France **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**	
10:45 - noon	**Break - Exhibition and Poster Opening**	**Caribbean Ballroom**
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:** **Non-Pesticide Residues** **Co-Chairs: Eric Verdon and Jessica Krank**	**Grand Ballroom F-K**
1:30-1:50 pm **O-03**	**Dr. Simon Hird**, Waters Corporation, Wimslow, Cheshire, UK **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 **O-04**	**Dr. Jana Hepner,** Restek Corporation, Bellefonte, PA, USA **Exploration of new Low-Pressure GC columns for food and environment emerging contaminants**	
2:10-2:30 pm **O-05**	**Frank Kero,** Bruker, Billerica, MA, USA **A novel approach for monitoring multi-classes of POPs in a single run by GC-Ion Mobility-HRMS**	
2:30-2:50 pm **O-06**	**Dr. Wiley Hall**, US Department of Agriculture, Agricultural Research Service, Parlier, CA, USA **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 **O-07**	**Spencer Walse**, US Department of Agriculture, Agricultural Research Service, Parlier, CA, USA **Regulatory Challenges to the Use of Postharvest Fumigants in the Global Trade of Agricultural Commodities**	
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 **O-09**	**Alejandra Rodriguez-Haralambides**, Facultad de Química-IPTP, Universidad de la República-Uruguay, Pando, Canelones, Uruguay **Mapping of Mycotoxins Profiles in Wheat Production Regions of Uruguay**	
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 Zurich, Zurich, Switzerland **Good Chromatography – A Sometimes Neglected Aspect of Modern Multiresidues Methods**	
9:10-9:30 am **O-12**	**Alicia D. Stell**, CEM Corporation, Matthews, NC, USA **Automated Solvent Extraction Method of PFAS From Difficult Food and Environmental Matrices**	
9:30-9:50 am **O-13**	**Jerry Mueller,** NOW Health Group, Bloomingdale, IL, USA **Effective Sample Preparation for LC-MS and GC-MS Multi-Pesticide Residue Analysis in Essential Oils Using Novel Passthrough Cleanup**	

9:50-10:10 am **O-14**	**Zhihong Wang**, NOAA/NOS National Centers for Coastal Ocean Science, Charleston, SC, USA **Determination of Microcystins and Nodularins in Ambient Freshwater and Seawater by LC-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**, ImagoAI, Inc., Milpitas, CA, USA **Quantification of Mycotoxin Levels in Grains Utilizing Hyperspectral Imaging and Artificial Intelligence**	
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 with LC-MS/MS**	
2:25-2:50 pm **O-19**	**Anton Kaufmann,** Official Food Control Authority of the Canton of Zurich, Zurich, Switzerland **Fast and easy nontargeted detection of PFAS in complex food matrices**	
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

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 **O-21**	**Amadeo Fernández-Alba,** EURL-FV University of Almería, La Cañada de San Urbano, Almería, Spain **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 by Using an Optimized SPE Cartridge for Sample Extract Cleanup**	
9:15-9:35 am **O-23**	**Ederina Ninga,** EURL-CF, National Food Institute, Technical University of Denmark, Lyngby, Denmark **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 **Anastasia Andrianova**, Agilent Technologies
O-28 **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 **Jon Wong**, US Food and Drug Administration, College Park, MD, USA
O-29 **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:** **Grand Ballroom F-K**
Toxins in Agriculture and Food Safety
Co-Chairs: Kai Zhang and Lukas Vaclavik

3:15-3:40 pm **Hans Mol**, Wageningen Food Safety Research, Wageningen, The Netherlands
O-30 **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,Safety and Innovation FFoQSI GmbH, Tulln an der Donau, Austria
O-31 **Exploring Mass Spectrometer Limits: UHPLC-MS/MS Method for Determination of 1,000 Toxins in 10 Minutes**

4:05-4:30 pm **Krista Thomas,** National Research Council Canada, Halifax, NS, Canada
O-32 **Multi-Class Analysis of Cyanobacterial Toxins using Hydrophilic Interaction Liquid Chromatography–Mass Spectrometry**

4:30-4:55 pm **Jacolin Murray**, National Institute of Standards and Technology, Gaithersburg, MD, USA
O-33 **Development of a Mycotoxin in Animal Feed Reference Material**

4:55-5:10 pm **Poster Awards and Closing** **Grand Ballroom F-K**

5:10 pm **Adjourn**

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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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