FPRW 2009

46th Florida Pesticide Residue Workshop

Trade Winds Island Grand Resort
St. Pete Beach, Florida
July 19-22, 2009

“Bringing Scientists Together to Develop and Validate Better Methodologies”
Dear Attendees and Exhibitors,

Welcome to the 46th Annual Florida Pesticide Residue Workshop.

We want to say hello to old friends and extend a hand in greeting to first-time attendees. The Organizing and Program Committees have worked very hard to pack these next few days with many learning and networking opportunities. We hope you take advantage of them all. Be sure to join us Monday evening for a scrumptious get-acquainted reception (complements of the TradeWinds Island Grand Resort). You may also join friends to play volleyball on Tuesday evening.

This year’s FPRW focuses on emerging issues in food safety and technology solutions. Join us for the Keynote Address on Monday morning as Jonathan DeVries of Medallion Laboratories launches this conference with his views on “Protecting the Nation’s Food Supply - Challenges for the Testing Laboratories”.

On Monday morning we launch the program with a session on Emerging Food Safety Issues chaired by Alex Krynitsky. Monday afternoon is devoted to QuEChERS and Other Novel Approaches to Sample Preparation, chaired by Jon Wong. On Tuesday we offer more insight into potential solutions to food safety problems with a morning session on LC/MS/MS for Multi-residue Testing, chaired by Paul Yang, followed by an afternoon devoted to Mass Spectrometry Emerging Technologies, chaired by Steven Lehotay. The very popular MS User’s Meeting will be held Tuesday afternoon, coordinated by Bill Holmes. Wrapping up the meeting, on Wednesday morning will be devoted to Other Residue Analysis Challenges including veterinary drugs, chaired by Jack Cochran.

The FPRW Organizing Committee will be holding its annual Planning Meeting and Elections of Officers on Tuesday evening at 5:35. We hope that many of you will be interested in helping to plan next year’s meeting. We ask that you send a representative from your organization so you can have a hand in the future of FPRW.

This year we will also have contributions from authors to a special issue of Journal of Food and Agricultural Chemistry. In this way the scientific dialogue can be recorded and continue with the broader community.

Many thanks go to the Program Committee and you, our attendees, exhibitors, and authors. We have an outstanding program, and we look forward to all the discussions, solutions, and new directions this will launch. Our presenters hail from government, academic and private sectors around the globe, resulting in a very comprehensive program indeed.

We hope you will enjoy the Florida sunshine and make lasting friendships!

Your FPRW Committee,

Yolanda Fintschenko, Jo Marie Cook, W. George Fong, Kevin Armbrust, and Lynda Podhorniak
Technical Sessions: Long Key / Bird Key and Indian Key Ballrooms

Exhibits, Posters, Reception: Banyan Breezeway (adjacent to Courtyard)

Vendor Seminars: Jacaranda Meeting Rooms (across the hall from exhibits)
# 2009 - 46th Florida Pesticide Residue Workshop

## MEETING AT-A-GLANCE

### Sunday Evening, July 19, 2009

- **6:00 - 8:00 pm** Registration
- **6:30 – 8:00 pm** Restek Evening Seminar
- **5:00 – 10:00 pm** Exhibition Set Up Begins
- **6:00 pm** Poster Session A Set Up Begins
- **6:00 - 10:00 pm** Technical Session Setup
- **7:00 - 8:00 pm** Moderator Training

### Monday, July 20, 2009

- **All Day** Exhibition
- **All Day** Session “A” Posters
- **7:30 - 8:30 am** Registration
- **7:30 - 8:30 am** Early Morning Coffee
- **7:30 - 8:15 am** Waters Corporation Breakfast Seminar
- **8:30 – 12:00 noon** FPRW Technical Session – Emerging Food Safety Issues
- **12:15 - 1:15 pm** LECO Corporation Luncheon Seminar
- **1:30 – 4:50 pm** FPRW Technical Session – QuEChERS and Other Novel Approaches in Sample Preparation
- **6:00 - 7:00 pm** Evening Reception & Poster Session “A” sponsored by TradeWinds Island Grand

### Tuesday, July 21, 2009

- **All Day** Exhibition
- **All Day** Session “B” Posters
- **7:30 - 8:30 am** Registration
- **7:30 - 8:30 am** Early Morning Coffee
- **7:30 - 8:15 am** ThermoFisher Scientific Breakfast Seminar
- **8:30 - 11:30 am** FPRW Technical Session - LC/MS/MS for the Multi-Residue Testing of Pesticides, Antibiotics, and Toxins
- **11:35 am - 12:05 pm** Poster Session “B”
- **12:15 - 1:15 pm** Agilent Technologies Luncheon Seminar
- **1:30 - 4:30 pm** FPRW Technical Session – Emerging Technologies Regarding Mass Spectrometry
- **4:35 - 5:35 pm** MS Users Meeting Refreshments Provided by Waters Corporation
- **5:35 – 7:00 pm** Organizing Committee Planning Meeting
- **6:00 pm** Beach Volleyball

### Wednesday, July 22, 2009

- **7:30 - 8:30 am** Early Morning Coffee
- **7:30 - 8:15 am** Pickering Laboratories Breakfast Seminar
- **8:30 - 12:00 noon** FPRW Technical Session – General Topics Regarding Residue Analysis
GENERAL INFORMATION

Registration
Check in once at the registration desk at your earliest opportunity
Sunday - 6:00-8:00 PM
Monday - 7:30-8:30 AM
Tuesday - 7:30-8:30 AM

KEY to Presentation Numbering System
FPRW talks are numbered 1, 2, 3 ...
FPRW Session “A” posters are numbered, A1, A2, A3 ...
FPRW Session “B” posters are numbered, B1, B2, B3 ...
Presenters’ addresses are cross-indexed to these numbers.

Poster Session
Hang Posters for Session “A” on Sunday evening, beginning at 6:00 pm
Take down Session “A” posters immediately following the reception on Monday evening.
Hang Posters for Session “B” immediately following the reception on Monday evening or
Tuesday morning, beginning at 7:30 am
Take down Session “B” posters on Tuesday, 5:00 pm
Posters may be viewed at any time, but authors will be at their posters
  for Poster Session “A” during the reception on Monday evening
  for Poster Session “B” on Tuesday, 11:35 am - 12:05 pm

Exhibition
Monday - 7:30 am - 5:00 pm
Monday evening reception with cash bar 6:00-7:00 pm  Sponsored by TradeWinds Island Grand Resort
Tuesday - 7:30 am - 5:00 pm

Coffee and Breaks
Coffee will be available 7:30 - 8:30 am each morning. There will be morning refreshment
breaks each day and afternoon refreshment breaks on Monday and Tuesday. All Monday and
Tuesday breaks will be served in the Banyan Breezeway in conjunction with the Exhibition. On
Wednesday the morning breaks will be served in the Grand Palm Colonnade.

Announcements
Moderators will make general announcements from the podium. If you need to convey such
information to a moderator, you must fill out an announcement form and submit it to W. George
Fong. These announcement forms will be available at the registration desk.
Door Prizes
Technical session door prizes will be drawn at the end of each morning and afternoon technical session. You must be ON TIME at the beginning of each technical session to receive a door prize ticket. You must be present at each drawing to win.

Job Placement Bulletin Board
Self-serve message board for those offering or seeking employment.

Abstracts
You can contact the authors using the contact information in the program. With presenter permission, we publish speaker presentations on our website following the meeting. A selected number of abstracts will be published in the Journal of Agricultural and Food Chemistry.

Copies of Presentations
Oral Presentations: Following the meeting, if time and resources permit, some of the oral presentations will be posted on our website. 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 PowerPoint files are converted to PDF format, 2 slides per printed page. The file conversion is necessary due to limited server space (the file size of PDF format is roughly 10-20% that of PPT 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. If this does not meet your need, then please contact the speaker directly.
Poster Presentations: Drop your business card in the “reprint request” envelope available at each individual poster board. The author will mail you a reprint.

Attendee List
After the meeting (approximately two weeks) an attendee list will be available, but only by request. Please contact W. George Fong at Gandwfong@comcast.net

Meeting Website
www.flworkshop.com - the website includes information on current and future FPRW meetings, as well as archives going back to 2005.

FUTURE FPRW DATES
2010 July 18-21 TradeWinds Island Grand Resort, St. Pete Beach, Florida

Add www.FLworkshop.com to your browser favorites
MODERATORS and PROGRAM COMMITTEE
(C=PROGRAM COMMITTEE, M=Moderator)

M, C. Alex Krynitsky, U.S. FDA-CFSAN, Alex.Krynitsky@fda.hhs.gov
M, C. Jon Wong, U.S. FDA-CFSAN, Jon.Wong@fda.hhs.gov
M, C. Paul Yang, Ontario Ministry of Environment, Paul.Yang@ontario.ca
M, C. Steve Lehotay, USDA-ARS, Steven.Lehotay@ars.usda.gov
M, C. Jack Cochran, Restek Corporation, Jack.Cochran@restek.com
M, C. William Holmes, Mississippi State Chemical Lab, wholmes@ra.msstate.edu
C. Yolanda Fintschenko, Thermo Fisher Scientific, yolanda.fintschenko@thermofisher.com
C. Lynda Podhoniak, EPA/OPP/Analytical Chem Lab, Podhorniak.lynda@epa.gov
C. Sarah McMullen, U.S. FDA, Southeast Regional Laboratory, Sarah.Mcmullen@fda.hhs.gov
C. Frank Schenck (Emeritus), U.S. FDA, Southeast Regional Laboratory, fschenck@live.com
C. Kevin Armbrust, Office of the State Chemist and Mississippi State University, MS, Armbrust@mscl.msstate.edu
C. André de Kok, National Reference Laboratory for Pesticide Analysis, Amsterdam, The Netherlands, Andre.de.kok@vwa.nl
C. Lawrence Zintek, U.S. EPA, Zintek.lawrence@epa.gov

Alex Krynitsky, 2009 FPRW Program Chair
Steve Lehotay, 2010 FPRW Program Chair

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**2009 FPRW EXHIBITORS**

Exhibition Location: Banyan Breezeway

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**ADPEN Laboratories, Inc.**
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**Waters Corporation**
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1. **Sunday Evening, July 19**

   6:30 p.m. – 8:00 p.m.       Restek

   **True Confessions of a Splitless Injector: Optimizing Your GC Inlet for Pesticide Residue Analysis**
   Jack Cochran, Julie Kowalski, and Scott Grossman; Restek Corporation

   A wealth of published information exists on splitless injection, still the most widely used GC injection technique for pesticide analysis, but how much of it is accurate? This seminar will review splitless injection in detail, using recently collected data for purge valve times, injector temperatures, liner packing materials and positions, solvent vapor volumes and backflash, and the nut warmer cup. Yes, the nut warmer cup! Myths will be busted and suggestions will be offered for optimization. Test your knowledge of splitless injection with a seminar quiz and win prizes. Enjoy a snack and a beverage.

2. **Monday Breakfast, July 20**

   7:30 a.m. - 8:15 a.m.       Waters Corporation

   **Using UPLC QToF MS to Investigate Illegal Poisoning of Animals in Scotland**
   Michael J Taylor, SASA (Science and Advice for Scottish Agriculture), a Division of the Scottish Government, Edinburgh, Scotland UK

   Routine monitoring of the impact of pesticide use on vertebrate wildlife, domestic animals and livestock often reveals a deliberate and illegal attempt to poison animals.

   This presentation will show how we are using our UPLC Xevo QToF MS system to enhance our ability to provide evidence essential for the successful detection and prosecution of wildlife crime in Scotland.

3. **Monday Lunchtime, July 20**

   12:15 p.m. - 1:15 p.m.       LECO Corporation

   **Time-of-Flight MS Strategies for High Throughput Screening of Pesticides**
   Mike Riley, Brian Shofran, and Joe Binkley

   Fast acquisition rates and spectral continuity make time-of-flight systems ideal for the analysis of pesticides in complex sample matrices as they allow for accurate identification of narrow peaks and more optimal performance of mass spectral deconvolution algorithms. This vendor seminar, sponsored by LECO Corporation, will highlight the benefits of using time-of-flight MS combined with GC, GCxGC, or LC chromatographic systems for pesticide research, and will also discuss some of the differences between time-of-flight and quadrupole systems. Additional research will be presented on the use of an LC-TOFMS system to identify chemical contaminants in food. Lunch will be provided.
4. **Tuesday Breakfast, July 21**

7:30 a.m. - 8:15 a.m.  **Thermo Fisher Scientific**

**GC and LC-MS/MS Solutions to the Challenges of Multi-residue Pesticide Analysis**
Dr. Kurt-Peter Raezke, Melanie Vogel, and Reinhard Michel, Intertek Food Services
Bremen, Germany, kurt-peter.raezke@intertek.com

Trace-analysis of pesticides in food is challenging due the variety of chemicals. The (EC) 396/2005 maximum residue levels (MRL) are defined for hundreds of pesticides, and a default maximum residue level of 0.01 mg/kg takes effect if there is no specific MRL established. The QuEChERS-method for extraction combined with LC- and GC-MS/MS detection ensures efficient analysis of a broad pesticides residue spectrum. Shared here are strategies for chromatography with MS/MS method development and validation, according to the SANCO guidelines with particular emphasis on GC-and LC-MS/MS solutions to the challenges of matrix effects and quantitation for pesticide residue analysis in food.

5. **Tuesday Lunchtime, July 21**

12:15 p.m. - 1:15 p.m.  **Agilent Technologies**

**New LC/MS, LC/MS/MS, GC/MS and GC/MS/MS Solutions from Agilent for Pesticide Residue Analysis**
Jerry Zweigenbaum, Ph.D. and Philip Wylie, Ph.D.

Solutions for screening large numbers of pesticides have been developed for both LC/TOF or QTOF and LC/QQQ. These included large databases of both exact masses and a QQQ MRM database to facilitate customized screening. For GC/MS pesticide residue analysis two complementary approaches have been developed. Agilent offers broad screening of 926 pesticide residues and endocrine disruptors, a new Pesticide Analyzer using Deconvolution Reporting Software, a Retention-Time-Locked Library, and column backflushing. For target compound analysis, Agilent's 7000A GC/MS/MS is an ultra-sensitive and rugged solution. Based on the 5975 MSD, the 7000A has been designed specifically as a detector for GC. Each of these solutions will be described.

6. **Wednesday Breakfast, July 22**

7:30 a.m. - 8:15 a.m.  **Pickering Laboratories**

**Effective Sample Cleanup, Preparation and Guaranteed Chemistry: Keys to an effective analytical method**
Laszlo Torma and Wendy Rasmussen

Efficient and Reproducible Sample Preparation is key to an effective analytical method. GPC Sample prep and Immunoaffinity clean-up are very effective for a wide range of matrices and analytes. We present tools for the clean-up of samples for Aflatoxin and Ochratoxin A for a variety of matrices including grains, coffee, spices and dried distillers grain using our Immunoaffinity clean-up columns, AflaCLEAN and OtaCLEAN. Recoveries and matrix interference are discussed. A single, multi-residue Mycotoxin method for the analysis of Aflatoxin, Ochratoxin, DON, Zeralenone and Fumonisins using the Pinnacle PCX is suitable for Distillers Grain and other alcohol products. Other analysis techniques using the UVE Photochemical derivatization instrument and ELISA test kits each have unique characteristics making them ideal for the determination of mycotoxins. Using the GPC Ultra, a laboratory can efficiently and reproducibly clean up Environmental, food, and beverage samples for the analysis of PCBs, Mycotoxin, PAHs, Phthalates. The GPC Cleanup systems are designed to eliminate carry-over and cross-contamination of samples.
### Emerging Food Safety Issues

**Chair: Alexander J. Krynitsky, FDA-CFSAN, College Park, MD**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:30 – 8:30 AM</td>
<td>Waters Corporation Breakfast Seminar</td>
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<tr>
<td>8:30 – 8:45</td>
<td>Welcome</td>
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</table>
| 8:45 – 9:20   | **Keynote Address:** Protecting the Nation's Food Supply-Challenges for the Testing Laboratories  
                  *Jonathan DeVries, Medallion Laboratories, Minneapolis, MN* |
| 9:25 – 9:40   | **Mycotoxin Analysis and Food Safety**  
                  *Mary Trucksess, FDA-CFSAN, College Park, MD* |
| 9:45 – 10:00  | **Genomic Approach to Aflatoxin Degradation**  
                  *William Holmes, State Chemical Laboratory – Office of the State Chemist and Mississippi State University, MS* |
| 10:05 – 10:50 | **Break (w/ refreshments) - PLEASE VISIT EXHIBITORS**  
                  Location: Banyan Breezeway                                         |
| 10:50 – 11:05 | Innovative Biosensors for Pre-Screening of Pesticide Residues in Water Samples to Support Laboratory Analysis  
                  *Katia Buonasera, National Research Council, Crystallography Institute, Monterotondo Scalo – Rome, Italy* |
| 11:10 – 11:25 | Multiresidue Pesticide Determination in Milk and Cream Using Modified QuEChERS Extraction Followed by Comprehensive GCxGC-TOF MS  
                  *Douglas G. Hayward, FDA-CFSAN, College Park, MD* |
| 11:30 – 11:45 | The Analysis of Difficult Pesticides and Matrices by GC-MS Detection Techniques and Modes  
                  *André de Kok, National Reference Laboratory for Pesticide Analysis, Amsterdam, The Netherlands* |
| 12:15 – 1:15 PM | LECO Corporation Luncheon Seminar                                      |
### QuEChERS and Other Novel Approaches in Sample Preparation

**Chair: Jon W. Wong, FDA-CFSAN**

<table>
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<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Institution</th>
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<tbody>
<tr>
<td>7:00 PM</td>
<td>Multiresidue Analysis of 168 Pesticides in Fruits and Vegetables by Dispersive SPE and GC-MS/MS</td>
<td>Kai Zhang, FDA-CFSAN, College Park, MD</td>
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<tr>
<td>8:00 PM</td>
<td>Two Modified QuEChERS Methods for the Multiresidue Determination of Pesticides in Produce Samples</td>
<td>Frank Schenck, FDA-ORA (Emeritus), Atlanta, GA</td>
</tr>
<tr>
<td>9:00 PM</td>
<td>Determination of formetanate HCl in Peach and Nectarine Samples Using Liquid Chromatography/Mass Selective Detection</td>
<td>Lynda V. Podhorniak, U.S. EPA, Office of Pesticide Programs, Fort Meade, MD</td>
</tr>
<tr>
<td>10:00 PM</td>
<td>Refined Methodology for the Determination of Imidacloprid and its Metabolites in Bees and Bee Products by LC-MS/MS</td>
<td>Alaa Kamel, U.S. EPA, Office of Pesticide Programs, Fort Meade, MD</td>
</tr>
<tr>
<td>11:00 PM</td>
<td>How DPX and Micro Luke Works at SCDA to Screen Produce for Pesticide Residues</td>
<td>Sherry T. Garris, South Carolina Dept. of Agriculture, Columbia, SC</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>Comparison of Various QuEChERS Approaches for the Determination of Pesticide Residues in Produce</td>
<td>Jeremy Shia, Waters Corporation, Milford, MA</td>
</tr>
<tr>
<td>13:00 PM</td>
<td>Application of the QuEChERS Extraction Method for the Analysis of Pyrethrins and Pyrethroids in Fin and Non-Fin Fish</td>
<td>Veronica Roscoe, Health Canada, Winnipeg, Manitoba, Canada</td>
</tr>
<tr>
<td>14:00 PM</td>
<td>Comparison of Acetonitrile and Ethyl Acetate, and Other Aspects, in the QuEChERS Method</td>
<td>Steven J. Lehotay, USDA-ARS, Wyndmoor, PA</td>
</tr>
<tr>
<td>6:00 PM</td>
<td>Evening Reception sponsored by Trade Winds Island Grand Resort</td>
<td>Location: Banyan Breezeway</td>
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Tuesday Morning, July 21, 2009
Location: Long / Bird / Indian Key Ballrooms

**LC/MS/MS for the Multi-Residue Testing of Pesticides, Antibiotics, and Toxins**

Chair: Paul Yang, Ontario Ministry of the Environment

7:30 – 8:15 AM  ThermoFisher Scientific Breakfast Seminar

8:30 - 8:45 AM  Use of LC-MS/MS as a Practical Tool for FDA Regulatory Laboratories

8:50 – 9:05 Single Extraction Multi-Class, Multi-Residue Drug Analysis, including Aminoglycosides, in Animal Tissue, using Liquid Chromatography coupled to Tandem Mass Spectrometry


9:30 – 9:45 Proposed and Recently Approved ASTM Methods for Nonvolatile Compounds Analyzed by Liquid Chromatography/Mass Spectrometry

9:50 – 10:35 Break (w/ refreshments) - PLEASE VISIT EXHIBITORS

10:35 – 10:50 Development and Inter-Laboratory Validation of a Liquid Chromatography/Tandem Mass Spectrometry Method for Multiresidue Pesticides Analysis

10:55 – 11:10 The Development and Application of a Pesticide Library for the Identification and Confirmation Analysis in Various Sample Matrices by LC/MS/MS

11:15 – 11:30 Applications of LC/ESI-MS/MS and UPLC QqTOF MS for the Determination of 148 Pesticides in Berries

11:35 – 12:05 PM  Poster Session “B”

12:15 – 1:15 PM  Agilent Technologies Luncheon Seminar
Emerging Technologies Regarding Mass Spectrometry

Chair: Steven J. Lehotay, USDA-ARS

22 1:30 – 1:45 PM  High Resolution Full Scan with a Benchtop Orbitrap MS – The Ideal Tool for Complex Pesticide Analysis
Helmut Muenster, ThermoFisher Scientific, Waltham, MA

23 1:50 – 2:05  New LC/MS/MS Tools and Technology to Simplify the Use of LC/MS/MS for High Throughput Screening and Quantitation
Christopher Borton, Applied Biosystems, Concord, Ontario

24 2:10 – 2:25  The Application of UPLC TOF and UPLC Q-TOF MS for the Quantitative and Qualitative Determination of Pesticide Multi-Residues in Fruit & Vegetables and Poisoned Animals
Michael J. Taylor, Science and Advice for Scottish Agriculture, Edinburgh, Scotland, UK

25 2:30 – 2:45  The Practical Application of Concurrent LC & GC-MS/MS for the Rapid Analysis of Multiple Pesticides in a High Throughput Laboratory
Don Brown, Exova, Birmingham, UK

2:50 – 3:35  Break (w/ refreshments) - PLEASE VISIT EXHIBITORS
Location: Banyan Breezeway

26 3:35 – 3:50  Optimizing Recoveries of Planar Pesticides in Spinach
Joan M. Stevens, Agilent Technologies, Wilmington, DE

Robert Classon, Shimadzu Scientific Instruments, Columbia, MD

28 4:15 – 4:30  Analysis of Pesticides in Smokeless Tobacco Extracts by Comprehensive Multi-Dimensional Gas Chromatography-Time of Flight Mass Spectrometry (GCxGC-TOFMS)
Joe Binkley, LECO Corporation, St. Joseph, MI

4:35 – 5:35  MS Users Meeting – refreshments sponsored by Waters Corporation
Moderator: William Holmes, State Chemical Laboratory – Office of the State Chemist and Mississippi State University, MS

5:35 – 7:00  Organizing Committee Planning Meeting
**Wednesday Morning, July 22, 2009**  
*Location: Long / Bird / Indian Key Ballrooms*

**General Topics Regarding Residue Analysis**

*Chair: Jack Cochran, Restek Corporation*

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<td>7:30 – 8:15 AM</td>
<td>Pickering Laboratories Breakfast Seminar</td>
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</tbody>
</table>
| 8:30 – 8:45 AM | Increasing Sample Throughput in Pesticide Residue Analysis Using a Geno/Grinder Extractor and LC-MS/MS Detection-Part II  
*Joseph P. McClory, Dupont Crop Protection, Newark, DE* |
| 8:50 – 9:05   | High Throughput Screening of Veterinary Drugs: Challenges and Successes  
*Sherri B. Turnipseed, FDA-Animal Drug Research Center, Denver, CO* |
| 9:10 – 9:25   | Analysis of Veterinary Drug Residues using QuEChERS and a Unique Biphenyl Stationary Phase  
*Julie Kowalski, Restek Corporation, Bellefonte, PA* |
| 9:30 – 9:45   | Pharmaceuticals and Other Emerging Contaminants in Source and Finished Drinking Water  
*Susan Glassmeyer, U.S. EPA, Cincinnati, OH* |
| 9:50 – 10:35  | **Break (w/ refreshments) - PLEASE VISIT EXHIBITORS**  
*Location: Banyan Breezeway* |
| 10:35 – 10:50 | Comprehensive Pesticide Screen for Fruit Juice using On-Line Sample Extraction with LC-MS/MS  
*Matthew Berube, ThermoFisher Scientific, Franklin, MA* |
| 10:55 – 11:10 | Development of a GC-MS Multiresidue Analysis Method for High Lipid Content Grains  
*Robert Trengove, Murdoch University, Perth, Australia* |
| 11:15 – 11:30 | Extraction of POPs and Acidic, Neutral, and Basic Compounds in Particulate Laden Aqueous Samples with a Single Extraction Step Using a Fully Automated Extraction System  
*Naomi Reid, Horizon Technology, Salem, NH* |
*Richard J. Fussell, Food and Environmental Research Agency, York, UK* |

**FPRW Meeting Adjourns**

*See you at next year’s meeting July 18-21, 2010 at TradeWinds Island Grand Resort*
FPRW POSTERS - SESSION A

All Day Monday

Location: Banyan Breezeway

A1 Persistence of Bensulide Residues in Soil and Runoff Water from Agricultural Soil
Antonious, George, Kentucky State University

A2 Analysis of Cyromazine in Feed Using QuEChERS Method Coupled with LC/MS
Atkins, Jack, MSCL

A3 Food and Environmental Contaminant Analysis Using an Innovative Atmospheric Pressure GCMS Interface
Barrett, Brad; Newton, Anthony and Stevens, Douglas, Waters Corporation

A4 LC-MS/MS analysis of selected perfluorinated alkyl acids in drinking water, EPA Method 537, a validation study
Beck, Jonathan, Thermo Scientific

A5 Taking the solvent out of extractions for multi-residue pesticide analysis
Chang, James; Phillips, Eric; Huebschamn, Hans-Joachim; and Steiniger, David, Thermo Fisher Scientific

A6 Monitoring of Residual Pesticides in Commercial Agricultural Products by Liquid Chromatography-Mass Spectrometry
Kim, Mi Ok, Gyeongin Regional Food and Drug Administration

A7 Microwave-assisted Derivatization of Acidic Herbicides for GC-MS
Klopper, Reynhardt, Anton Paar USA

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