

VENDOR SEMINARS

Please sign up at the meeting registration desk

Location: Jacaranda Meeting Rooms (across the hall from exhibits)

Food and beverage provided by each company

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 Fumonisin 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.