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The Measure of Confidence

2015 North American Chemical Residue Workshop - NACRW

TradeWinds Island Grand, St. Pete Beach, FL | July 19-22, 2015 | Booth# 15 & 16

Vendor Lunch Workshop | Wednesday, July, 22nd | Sawyer & Tarpon Room | 12:10 p.m. - 1:10 p.m.

Enhanced Matrix Removal: Next Generation Material for Improving the Analysis of Complex Samples

Presenter: Joan Stevens, Ph. D., Agilent Technologies

Authors: Derick Lucas¹; Limian Zhao¹; Bruce Richter¹; Joan Stevens¹ | Agilent Technologies, Inc., 2850 Centerville Rd., Wilmington, DE, 19808, USA

Abstract: Analysis of complex matrices often requires extensive sample preparation to extract analytes of interest at the appropriate concentration, while removing unwanted matrix co-extractives. These co-extracted matrix components, such as lipids, can result in chromatographic interferences, ion suppression/enhancement in mass spectrometry, accumulation in chromatographic flow paths, and other performance hindering issues. This work demonstrates the benefits of using a new dispersive cleanup material with QuEChERS that dramatically reduces matrix co-extractives while maintaining excellent analytical accuracy and precision without additional steps, cost, or hardware. Data will be presented to demonstrate notable improvements on instrumental and chromatographic performance with cleaner sample matrices using the new material. Additionally, data will show the impact of superior cleanliness when conducting multi-residue analyte analysis in complex sample matrices using LC and GC. The ease of use, time and cost savings, minimal method development, and dramatically cleaner samples make this an attractive cleanup option for laboratories conducting trace analysis, especially in complex, fatty matrices.

Maximum registration: 125 | You can register for the Agilent lunch-n-learn workshop when you check-in at NACRW



Agilent Science at NACRW 2015

- POSTER #P-1 **Next Generation Matrix Removal Materials for Multi-Analyte Analysis in Complex Samples**
Author(s): Derick Lucas | Agilent Technologies, Wilmington, DE, USA
- POSTER #P-2 **Optimize Food Analysis with Miniaturized QuEChERS and an Ultra-Efficient Triple Quadrupole GC/MS**
Author(s): Joan Stevens | Agilent Technologies, Wilmington, DE, USA
- POSTER #P-3 **Improving the Robustness of Daily Instrument Analysis through Enhanced Sample Matrix Removal**
Author(s): Limian Zhao | Agilent Technologies, Wilmington, DE, USA
- POSTER #P-4 **Screening for Hundreds of Pesticides in Fruits and Vegetables using a High Resolution Accurate Mass GC/Q-TOF with an Exact Mass Pesticide Library**
Author(s): Philip L. Wylie | Agilent Technologies, Wilmington, DE, USA
- POSTER #P-5 **Identification of Emerging Organic Contaminants in Water by Liquid Chromatography Time-Of-Flight Mass Spectrometry**
Author(s): Jerry Zweigenbaum | Agilent Technologies, Wilmington DE, USA
- POSTER #P-6 **LC/QTOF MS Determination of Pyrrolizidine Alkaloids in Dietary Supplements and Botanicals**
Author(s): Jerry Zweigenbaum | Agilent Technologies, Wilmington DE, USA
- POSTER #P-7 **Improvements in the QuEChERS Method for Multi-residue Analysis of Pesticides in Tobacco**
Author(s): Joan Stevens | Agilent Technologies, Wilmington, DE, USA
- SESSION O-2 **Difficult Residues and Difficult Matrices**
9:55 – 10:15 a.m. Applying Metabolomics Technique to Reveal Matrices in the Pesticide Residue Analysis of Foods
Kuniyo Sugitate | Agilent Technologies, Tokyo, Japan
- SESSION O-18 **Emerging Chemical Contaminants**
1:55 – 2:15 p.m. Comparison of Analytical Methodologies for Analysis of Emerging Organic Contaminants in Water
Tarun Anumol | Agilent Technologies, Wilmington, DE, USA

Agilent User Meeting | Thursday, July 23rd | Citrus Room | 10:30 a.m. - 12:30 p.m.

Agilent invites you to participate in our User Meeting, scheduled on Thursday July 23rd from 10:30 am – 12:30 PM in the Citrus Room. The meeting will feature three presentations and discussions covering allergen contamination, multi-residue pesticide analysis and application consulting services. You can pre-register for the Agilent User Meeting at: www.agilent.com/chem/NACRW



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