

TECHNICAL PRESENTATIONS – THURSDAY, MAY 13, 2010

7:30

REGISTRATION - LOBBY

8:00

GENERAL SESSION:

9:00

Introduction / Undergraduate Award / Palmer Award - 30th Anniversary

Keynote Address: Professor John Goodpaster

Indiana University – Purdue University at Indianapolis

“What Do Explosives Smell Like? Characterizing the Volatile Compounds Available to Explosive-Detecting Canines Using Gas and Liquid Chromatography”

10:00

EXHIBITS AND POSTERS - CARRIAGE HALL

Time	Captain's Room	Tack A (lower level)	Tack B (lower level)
	HPLC I	Food & Flavors I	Environmental I
10:40	*** A DEBATE *** High Temperature HPLC vs Ultra High Pressure HPLC	*** FOCUS SESSION *** Food and Chromatography Frank Amore 3	GC Column and Sample Flow Path Inertness Considerations for Optimizing Semi-Volatiles Analysis D. Decker 6
11:00	Professor Dwight Stoll, Gustavus Adolphus College	Screening of Off Flavors in Food Using Automated Headspace Solid Phase Microextraction and GC-MS K. Kierzek 4	“Green” Thermal Desorption Methods for the Analysis of Triglycerides, Phthalates and Bisphenol A R. Freeman 7
11:20	and Dr. Todd Mahoney, Eli Lilly Company 2	Case Studies in Light Scattering and Related Techniques: Revealing the Molecular Details of Polymers, Copolymers & Protein Complexes 5	Characterization of Biofuels using GC with Simultaneous Flame Ionization and MS Detection J. Stavova 8
11:40	LUNCH (11:40-1:00)		
	HPLC II	2D-HPLC	Environmental II
1:00	*** FOCUS SESSION *** Qualification of HPLC Instrumentation for Operating High Performance Columns	Considerations Involved in Choosing the 1 st Dimension Column for Comprehensive 2DLC H. Gu 11	Heterogeneous Ozonation and Nitration Reactions of PAH Using GC/MS S. Haddadi 14
1:20	R. Henry 9	Review of 1 st Dim. Separation Meth for Complex Peptide Mixtures: OFFGel vs. SCX vs. RP- high pH: Prior to 2 nd Dimension RP LC-MS L. Higgins 12	Screening for Targeted and Non- Targeted Environmental Pollutants Using LC/MS/MS with Statistical Data Analysis A. Schreiber 15
1:40	Impurity Profiling – Improvements in Chromatog. (Peak Capacity) Combined with Advances in MS A. Sausen 10	Experimental Support for a Simple Approximate Equation for Peak Capacity Estimation in 2D-LC Y. Huang 13	Evaluation of Dioxin Patterns to Apportion Pollution Sources B. Rohrback 16
2:00	2009 MCF Undergraduate Research Awardee – Scott W. Simpkins Gustavus Adolphus College, St. Peter, MN “Analysis of Phenytoin in Wastewater Treatment Plant Effluent: A Multidimensional Chromatographic Approach” Captain's Room 17		
	AFTERNOON RECEPTION (2:00-2:40)		
	HPLC (Sample Prep & LC Phases)	Food & Flavors II (Fats, UHPLC-MS, GC-MS)	BioMedical Analysis by LC-MS and GC-MS
2:40	*** FOCUS SESSION *** Optimization of Sample Preparation Solvent for Improved HPLC Separation and Method Recovery	Oilseed Research at the USDA/ARS L. Cook 21	LC/MS Analysis of a Variety of Anti-Carcinogenic Drugs in Plasma and Tissue D. Doster 25
3:00	Jianwei Li 18	Fat: Getting a Handle B. Rohrback 22	Quantitation of α,β -Unsaturated Aldehydes in Biological Matrices by GC-ECNI/MS and LC-MS/MS E. Long 26
3:20	Pharma Method Development Made Easier Through the Use of Alternative Selectivity in RP-HPLC J. Rhoads 19	Ultra Fast LC with MRM Detection to Quantify & Identify Pesticides in Food & Environmental Samples A. Schreiber 23	
3:40	A Novel Method for Preparing Robust Carbon Phases for RP-LC C. Paek 20	Analysis of Niacin in Food by Ultra Pressure LC-MS J. Stevens 24	

***** 2010 MCF Spring Symposium – Posters *****

SIMULTANEOUS ANALYSIS OF 14 MYCOTOXINS, AND 163 PESTICIDES IN CRUDE EXTRACTS OF GRAINS BY LC/MS/MS

Andrea Voller, Juergen Kunze, Kristin von Czapiewski, André Schreiber (AB SCIEX) Poster 1

ANALYSIS OF CARBAMAZEPINE AND ITS METABOLITES IN PLASMA BY LIQUID CHROMATOGRAPHY-MASS SPECTROMETER

Usha Mishra , James Cloyd (Dept of Clinical Pharmacology, University of Minnesota) Poster 2

LIQUID CHROMATOGRAPHY MASS SPECTROMETRY ASSAY FOR ANALYSIS OF TOPIRAMATE AND STABLE ISOTOPE ANALOGUE OF TOPIRAMATE IN HUMAN PLASMA

Usha Mishra , James Cloyd, and Annie Clark (Dept of Clinical Pharmacology, University of MN) Poster 3