

Meeting-at-a-Glance

Sunday - June 8, 2008

3:00 p.m. - 5:00 p.m. Exhibit Set-up Grand Ballroom

Monday - June 9, 2008

10:00 a.m. - 5:00 p.m. Casper-Hefle Memorial Golf Tournament Bridger Creek Golf Course
12:00 p.m. - 5:30 p.m. Exhibit Set-up Grand Ballroom
5:00 p.m. - 6:00 p.m. Midwest AOAC Board Meeting Birch
6:00 p.m. - 9:00 p.m. Vendor's Exposition and Mixer Grand Ballroom

Tuesday - June 10, 2008

7:00 a.m. - 8:30 a.m. Continental Breakfast Grand Ballroom
8:00 a.m. - 11:30 a.m. Pesticides/Contaminants Tamarack
8:30 a.m. - 11:30 a.m. Elemental/Mineral Analysis Aspen
8:00 a.m. - 11:30 a.m. QA/QC & LIMS Applications Ponderosa
11:00 a.m. - 2:00 p.m. Vendor's Exposition and Posters Grand Ballroom

12:00 p.m. - 1:00 p.m. Lunch - "AOAC Update" by Jon DeVries Atrium

1:30 p.m. - 5:00 p.m. Pesticides/Contaminants Tamarack
1:30 p.m. - 5:00 p.m. AAFCO ICP Workshop Aspen
1:30 p.m. - 5:00 p.m. Mycotoxins Ponderosa
6:00 p.m. - 10:00 p.m. Dinner at Deer Park Chalet Bridger Ski Area

Wednesday - June 11, 2008

7:00 a.m. - 8:30 a.m. Continental Breakfast Grand Ballroom
8:00 a.m. - 11:30 a.m. Feeds/Fertilizers/Forage Aspen
8:00 a.m. - 11:00 a.m. Vendor Presentations Ponderosa
8:00 a.m. - 11:30 a.m. Veterinary Toxicology Tamarack
11:00 a.m. - 2:00 p.m. Vendor's Exposition and Posters Grand Ballroom

12:00 p.m. - 1:00 p.m. Lunch Atrium

1:30 p.m. - 5:00 p.m. Mass Spectrometry Applications Ponderosa
1:30 p.m. - 5:00 p.m. AAFCO Electrode Workshop Aspen
1:30 p.m. - 4:30 p.m. Veterinary Toxicology Tamarack
2:00 p.m. - 3:00 p.m. Vendor Feedback Meeting Grand Ballroom
2:00 p.m. - 4:00 p.m. Exhibit Dismantled Grand Ballroom

Daily Planner

Tuesday - June 10, 8:00 a.m. - 11:30 a.m.

7:00 a.m.- 8:30 a.m. **Continental Breakfast** **Grand Ballroom**

8:00 a.m.- 11:30 a.m. **Session I** **Pesticide/Contaminants** **Tamarack**
Heidi Hickes, MDA

8:00 a.m. - 8:30 a.m. Analytical Chemistry in the Toxicology Field - Applications to Pesticide Residue Determinations?
Charles Powley, DuPont

8:30 a.m. - 9:00 a.m. Utilizing the Polar Organic Integrative Sampler for Determination of Polar Pesticides by LC/MS/MS
Katie Steward, MDA

9:00 a.m. - 9:30 a.m. Determination of 12 Pharmaceutical Compounds in Ground Water and Surface Water Using Solid Phase Extraction and Ultra Performance Liquid Chromatography/Mass Spectrometry/Mass Spectrometry
Jona Verreth, MDA

9:30 a.m. - 10:00 a.m. **Break**

10:00 a.m. - 10:30 a.m. Pesticide Detections at the Part-per-Trillion Level in Water - So What?
Terry Councill, USDA Pesticide Data Program (PDP)

10:30 a.m. - 11:00 a.m. Montana Department of Agriculture Groundwater Program
Amy Bamber, MDA

11:00 a.m. - 11:30 a.m. Determination of Glyphosate and AMPA in Soil and Vegetation by Liquid Chromatography-Electrospray/Mass Spectrometry/Mass Spectrometry
Angela Schaner, MDA

8:30 a.m. - 11:30 a.m. **Session II** **Elemental/Mineral Analysis** **Aspen**
Craig Lacher, ARS USDA

8:30 a.m. - 9:00 a.m. Total X-Ray Reflectance "PICOFOX"
Michael Rider, Bruker AXS Inc., The Woodlands, TX

9:00 a.m. - 9:30 a.m. Novel Focused Semi Open Microwave Instrument for Elemental Speciation Studies
David Barclay, CEM Corporation, Matthews, NC

9:30 a.m. - 10:00 a.m. **Break**

10:00 a.m. - 10:30 a.m. Analysis of Agricultural Samples Utilizing a Simultaneous ICP-OES System
Doug Shrader, Varian, Inc., Wood Dale, IL

10:30 a.m. - 11:00 a.m. Multi-Elemental Speciation by ICP-MS-HPLC
Randy Hergenreder, PerkinElmer

11:00 a.m. - 11:30 a.m. Low level selenium determinations in biological samples using hydride generation sample introduction to inductively coupled mass spectrometry
Craig Lacher, Research Center, ARS USDA

Daily Planner

Tuesday - June 10, 8:00 a.m. - 11:30 a.m.

8:00 a.m.- 11:30 a.m.	Session III	QA/QC & LIMS Applications Lawrence Novotny, SDSU & Craig Lacher ARS USDA	Ponderosa
8:00 a.m. - 8:30 a.m.		<u>Quality System Management and Accreditation of US Animal Health Laboratories</u> Dr. David Zeman, South Dakota Animal Disease Research and Diagnostic Laboratory	
8:30 a.m. - 9:00 a.m.		<u>AAFCO QA/QC Guidelines</u> Louise Ogden, Minnesota Department of Agriculture	
9:00 a.m. - 9:30 a.m.		<u>The Database as an Electronic Enhancement to Laboratory Quality Assurance</u> Craig Lacher, Research Center, ARS USDA	
9:30 a.m.- 10:00 a.m.	Break		
10:00 a.m.- 10:30 a.m.		<u>The Laboratory Perspective on Implementing a LIMS</u> Doug Winters, Food and Drug Analysis, Covance Laboratories	
10:30 a.m.- 11:00 a.m.		<u>What Works in Labworks at MDA</u> Laura Luckey, Montana Department of Agriculture	
11:00 a.m.- 11:30 a.m.		<u>In the Know When Purchasing Your LIMS</u> Marcus Svec, PerkinElmer	

Tuesday - June 10, 1:30 p.m. - 5:00 p.m.

1:30 p.m.- 5:00 p.m.	Session I	Pesticide/Contaminants Heidi Hickes, MDA	Tamarack
1:30 p.m.- 2:00 p.m.		<u>Evolution in Pesticide Residue Testing</u> Martha Lamont, USDA PDP	
2:00 p.m.- 2:30 p.m.		<u>Observations about the European and Latin American Pesticide Residue Programs</u> Laszlo Torma, Pickering	
2:30 p.m.- 3:00 p.m.		<u>How Risk Assessors Use Analytical Chemistry That Pushes the Detection Limits</u> Jerome Schleier III, MSU Grad Student	
3:00 p.m.- 3:30 p.m.	Break		
3:30 p.m.- 4:00 p.m.		<u>Environmental Concentrations of Pesticides and Their Use in Risk Assessment</u> Bob Peterson, Entomology, MSU	
4:00 p.m. - 4:30 p.m.		<u>The Utility of Accurate Mass and High Resolution LC/MS/MS for the Analysis of Chemical Residues in the Environment</u> Michael C. Zumwalt, Agilent Technologies, Inc.	

1:30 p.m.- 5:00 p.m.	Session II	AAFCO ICP Workshop Randy Hergenreder, PerkinElmer	Aspen
		<u>Theory, Optimization and Troubleshooting of ICP-OES</u> Topics will include plasma emission theory and how it relates to optimizing signals for axial and radial views, the benefits of different sample introduction systems and troubleshooting tips for common problems.	



Daily Planner

Tuesday - June 10, 1:30 p.m. - 5:00 p.m.

1:30 p.m.- 5:00 p.m.	Session III	Mycotoxins Charlene Wolf-Hall, NDSU	Ponderosa
1:30 p.m. - 1:50 p.m.		<u>Fumonisin Toxicosis in Domestic Animals: Current Knowledge and Research Needs</u> Wanda Haschek-Hook, University of Illinois	
1:50 p.m. - 2:10 p.m.		<u>Accumulation of Deoxynivalenol and Fungal Biomass in Wheat Infected with the Head Scab Pathogen, <i>Fusarium graminearum</i></u> Gretchen Kuldau, Pennsylvania State University	
2:10 p.m. - 2:20 p.m.		<u>Real Time PCR Assay Applications for Distillers Grain</u> Charles Woloshuk, Purdue University	
2:20 p.m. - 2:40 p.m.		<u>Age and Sex Differences in Apparent Adaptation to Immunotoxicity of Deoxynivalenol in BALB/c Mice</u> Suzanne Hendrich, Iowa State University	
2:40 p.m. - 3:00 p.m.		<u>Masked Mycotoxins</u> Charlene Wolf-Hall, North Dakota State University	
3:00 p.m. - 3:30 p.m.	Break		
3:30 p.m. - 3:50 p.m.		<u>Understanding the Impact of Amylase Production on the Life Cycle of <i>Fusarium Graminearum</i></u> Frances Trail, Michigan State University	
3:50 p.m. - 4:10 p.m.		<u>Responding to Fusarium Head Blight and Grain Deoxynivalenol in Montana</u> William Grey, Montana State University	
4:10 p.m. - 5:00 pm		NC-1025 Business Meeting—all are welcome for input, but only official participants can vote.	

Wednesday - June 11, 8:00 a.m. - 11:30 a.m.

7:00 a.m.- 8:30 a.m.	Continental Breakfast		Grand Ballroom
8:00 a.m.- 11:30 a.m.	Session I	Feeds/Fertilizers/Forage Nancy Thiex, SDSU Terri Van Erem, Moderator	Aspen
8:00 a.m. - 8:30 a.m.		<u>Importance and Pitfalls of Starch Assays: Selection of Methods</u> Mary Beth Hall, USDA ARS, U.S. Dairy Forage Research Center, Madison, WI	
8:30 a.m. - 9:00 a.m.		<u>Analysis of Mono and Di Saccharides in Animal Feed using High Capacity Ion-Exchange and Electro-Chemical Detection</u> Jay Gandhi, Metrohm-Peak, LLC	
9:00 a.m. - 9:30 a.m.		<u>Automated Sample Preparation for the Analysis of Animal Feed</u> Jay Gandhi, Metrohm-Peak, LLC	
9:30 a.m.- 10:00 a.m.	Break		
10:30 a.m. - 11:00 a.m.		<u>Bound and Free Amino Acid Analysis in Food and Feeds</u> Donald A. Trinite, Sr., Waters Corporation	
11:00 a.m. - 11:30 a.m.		<u>Open Discussion on Feed, Forage and Fertilizer Poster Topics and Other Issues</u> Nancy Thiex, South Dakota State University	

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Wednesday - June 11, 8:00 a.m. - 11:30 a.m.

8:00 a.m.- 11:00 a.m.	Session II	Vendor Presentations	Ponderosa
8:00 a.m.- 8:20 a.m.		<u>Total Kjeldahl Nitrogen: Automation for a Robust, Popular Method</u> Darvin L. Martin, Buchi Corporation	
8:20 a.m. - 8:40 a.m.		<u>The Use of LC/QQQ Mass Spectrometry for the Simultaneous Screening and Confirmation of More than 200 Pesticide Residues in Food</u> Michael C. Zumwalt, Agilent Technologies, Inc.	
8:40 a.m. - 9:00 a.m.		<u>Sample Preparation for Aflatoxins and Ochratoxin A in Foods and Feeds</u> Mike Gottschalk, Pickering Laboratories	
9:00 a.m. - 9:20 a.m.		<u>Optimizing Conditions for the Use of the Recently Promulgated Method 3546 for Microwave Assisted Extraction of Organic Compounds from Soils, Clays, Sediments, Sludges and Solid Wastes</u> Elaine Hasty, CEM Corporation, Matthews, NC	
9:20 a.m. - 9:40 a.m.		<u>New Test Kits for Mycotoxin Detection - FluoroQuant Afla IAC and AgraStrip DON</u> Donna Houchins, Romer Labs, Inc.	
9:40 a.m.- 10:00 a.m.	Break		
10:00 a.m. - 10:20 a.m.		<u>Applications For Food Safety And Quality Control Testing</u> Dustin Walker, bioMerieux Industry, Inc.	
10:20 a.m. - 10:45 a.m.		<u>Collision Reaction Interface - A Simple Approach to Interference Management in ICP-MS</u> Doug Shrader, Varion Inc., Wood Dale, IL 60191	
10:45 a.m. - 11:00 a.m.		Questions/Discussions	

8:00 a.m.- 11:30 a.m.	Session III	Veterinary Toxicology	Tamarack
8:00 a.m. - 8:50 a.m.		<u>Understanding Plant Pathogenic Fungi and Anticipating the Incidence of Mycotoxins</u> Dr. Barry Jacobsen, Plant Pathology, Montana State University	
8:50 a.m. - 9:10 a.m.		<u>Analysis of Selenium in Biological Matrices by ICP-MS</u> Roger Siemion, University of Wyoming, Wyoming State Veterinarian Laboratory, Toxicology	
9:10 a.m. - 9:30 a.m.		<u>What Veterinary Toxicologists Ask Chemists to Do</u> Dr. Robert Poppenga, CAHFS Toxicology Laboratory, School of Veterinary Medicine, University of California	
9:30 a.m.- 10:00 a.m.	Break		
10:00 a.m. - 10:30 a.m.		<u>Toxicology and Pathology: Review of Oxalate and Melamine/Cyanuric Acid Nephrosis</u> Dr. Bill Layton, Montana Veterinary Diagnostic Laboratory	
10:30 a.m. - 10:50 a.m.		<u>Toxicity and Analysis of Metabolites in the Lichen <i>Xanthoparmelia chlorochroa</i></u> Rebecca Dailey, Department of Veterinary Sciences, University of Wyoming	
10:50 a.m. - 11:10 a.m.		<u>Diagnostic Analysis for Metal Phosphide Compounds in Stomach Content by SPME-GC/MS</u> Mike Filigenzi, CAHFS Toxicology Laboratory, School of Veterinary Medicine, University of California	
11:10 a.m. - 11:30 a.m.		<u>Evaluating Cardiac Troponins and Serum Levels of Lasalocid to Assess Exposure in Cattle</u> Dr. Paula Imerman, College of Veterinary Medicine, Veterinary Diagnostic Laboratory, Iowa State University	



Daily Planner

Wednesday - June 11, 1:30 p.m. - 5:00 p.m.

1:30 p.m. - 5:00 p.m.	Session I	Mass Spectrometry Applications Wayne Ellefson, Covance Laboratories	Ponderosa
1:30 p.m. - 2:00 p.m.	<u>The Potential of Mass Spectrometry for Food Authenticity and Origin Testing</u> Dr. Diana Uria, Waters Corporation		
2:00 p.m. - 2:30 p.m.	<u>LC/MS/MS “Mega-Methods” Part One: Quantitative Screening of Hundreds of Pesticides in a Single Injection</u> Greg Eppink, Applied Biosystems/MDS-Sciex		
2:30 p.m. - 3:00 p.m.	<u>LC/MS/MS “Mega-Methods” Part Two: Veterinary Drug Residues</u> Greg Eppink, Applied Biosystems / MDS-Sciex		
3:00 p.m. - 3:30 p.m.	Break		
3:30 p.m. - 4:00 p.m.	<u>Simultaneous Determination of Water Soluble Vitamins in Dietary Supplements and Fortified Foods by LC/MS</u> Wayne R. Wolf, USDA		
4:00 p.m. - 4:30 p.m.	<u>Considerations for Method Development Using LC/MS/MS for Food Analysis</u> Doug Winters, Covance Laboratories		
4:30 p.m. - 5:00 p.m.	<u>Determination of B Vitamins in Infant Formula and Adult Nutritional Products Using HPLC/MS/MS</u> Don Gilliland, Abbott Nutrition		

1:30 p.m. - 5:00 p.m.	Session II	AAFCO Electrode Workshop Rachel Brooks, Brinkmann	Aspen
<u>Electrodes: They Get No Respect!</u> Electrode Selection, Care and Maintenance: Bring your electrode! Topics will include: Chloride potentiometric measurements, pH, Ion Selective, Karl Fischer and others.			

1:30 p.m. - 4:30 p.m.	Session III	Veterinary Toxicology Michelle Mostrom, NDSU	Tamarack
1:30 p.m. - 2:20 p.m.	<u>Multi-Element Analysis of Blood and Serum/Plasma by ICP-MS</u> Nick Schrier, Animal Health Laboratory, University of Guelph, Ontario, Canada		
	<u>FTIR - Uses for Toxicology Cases</u> Nick Schrier, Animal Health Laboratory, University of Guelph, Ontario, Canada		
2:20 p.m. - 2:40 p.m.	<u>Detection of Ricin in Animal Tissues Using a Monoclonal Antibody-Based Enzyme Immunoassay</u> Gwen Gonzales, CAHFS Toxicology Laboratory, School of Veterinary Medicine, University of California		
2:40 p.m. - 3:00 p.m.	<u>Mycotoxin Analysis of Complex Feedstuffs Utilizing Commercial Affinity Column Cleanup with HPLC Analysis</u> Dr. George Rottinghaus, Veterinary Medical Diagnostic Laboratory, University of Missouri		
3:00 p.m. - 3:30 p.m.	Break		
3:30 p.m. - 4:00 p.m.	<u>Water Arsenic and Dairy Food Safety</u> Michael Murphy, Veterinary Medicine, University of Minnesota		
4:00 p.m. - 4:30 p.m.	<u>Development of a LC/MS/MS Method for the Screening and Confirmation of Multiclass Antibiotic Residues in Animal Tissues</u> Tom Thompson, Alberta Agriculture & Rural Development, Food Safety Division		



Posters

Tuesday - June 10, 2008

Pesticide/Contaminants

Determination of Fluroxypyr, 3,5-Dichloropyridinol and Methoxyppyridine in Soil by Solid-Phase Extraction and Liquid Chromatography-Electrospray/Mass Spectrometry/Mass Spectrometry

Jona Verreth, Angela Schaner, Montana Department of Agriculture

Determination of Pinoxaden as the NOA-407854 and SYN-505164 Metabolites in Vegetation by LC-ES/MS/MS

Cathy Bauder, Angela Schaner, Montana Department of Agriculture

Mycotoxins

The Fungal Metabolite, Pyrrocidine A, Induces Apoptosis in HepG2 Hepatocytes and PK15 Renal Cells

Wanda M. Haschek, Pathobiology, University of Illinois at Urbana-Champaign, Urbana, IL

Feeds/Fertilizers/Forage

Determination of Lasalocid Sodium in Animal Feeds and Premixes By Reversed Phase Liquid Chromatography: Collaborative Study Report

Charles Focht, Nebraska Department of Agriculture

The Determination of Oxytetracycline in Animal and Fish Feeds, Feed Premixes, and Animal Remedies by Liquid Chromatography with Fluorescence Detection: Collaborative Study

Richard Larson and Nancy Thiex, South Dakota State University

Forage: a Study in Variability

Heidi Hickes, Montana Department of Agriculture

Wednesday - June 11, 2008

Feeds/Fertilizers/Forage

The Agricultural Community, Feed Additives and Contaminants Group Priority Methods Progress Report

Nancy Thiex, Olson Biochemistry Laboratories, South Dakota State University

Comparison of Gravimetric, ICP-OES and Combustion Methods for Determining Sulfur in Distillers Grain, Animal Feed and Feed Ingredients

Terri Van Erem, Harold Manson, and Nancy Thiex, South Dakota State University

The Determination of Calcium, Cobalt, Copper, Iron, Potassium, Magnesium, Manganese, Molybdenum, Sodium, Phosphorus, Sulfur and Zinc in Animal Feed and Pet Food by Microwave Digestion and ICP-OES

Terri Van Erem, Nancy Schilling, and Nancy J. Thiex, South Dakota State University

The Determination of Mercury in Fertilizers by Cold Vapor Atomic Fluorescence

Nancy Anderson, Lawrence Novotny, and Nancy Thiex, South Dakota State University

Determination of Sulfur in Feed Materials Using ICP-OES and Microwave Digestion

Sally Mullins, James Bartos, and Natalie Newlon, Office of the Indiana State Chemist

Determination of Sulfur in Fertilizers by Combustion and Comparability to the Official Gravimetric Method

Harold Manson, Terri Van Erem, and Nancy Thiex, South Dakota State University

Evaluation of AOAC Method 2006.3: For Microwave Digestion of Feeds and Fertilizers

Elaine Hasty, CEM Corporation

Reference Methods for Distillers Dried Grains

Nancy Thiex, Olson Biochemistry Laboratories, South Dakota State University

The Use of Thermal Decomposition, Gold Amalgamation and Atomic Absorption Spectroscopy for the Determination of Mercury in a Variety of Environmental Matrices

David L. Pfeil, Teledyne Leeman Labs, Hudson, NH