



29th Asilomar Conference on Mass Spectrometry

ENVIRONMENTAL CHEMISTRY, TOXICOLOGY AND HEALTH

Friday, October 18 - Tuesday, October 22, 2013
Asilomar Conference Center, Pacific Grove, CA

Organizers

Xing-Fang Li

University of Alberta

Susan Richardson

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ASMS Asilomar Committee

Glen Jackson
West Virginia University

Sharon Pitteri
Stanford University

Ryan Julian
UC Riverside

Scott McLuckey
Purdue University

GENERAL INFORMATION

Internet Access. There is complimentary wi-fi access in the session room, sleeping rooms and the Social Hall (main building).

To use the wi-fi in Chapel (session room), please follow these instructions:

- Connect to the Asilomar Conference Network
- Passphrase is the word “conference” - in all lower case.
- Once connected, open your web browser.
- You should see Asilomar Conference Grounds logon page.
- Scroll to the bottom of the page and use the Username and Password below:
Username: conf8690
Password: conf8690

Meals at Asilomar. For attendees lodging at Asilomar you will receive a meal tickets for all meals beginning with dinner on Friday and ending with lunch on Tuesday. Vegetarian option is always available upon request at the meal line. *For Tuesday a box lunch has been requested for you, please use your lunch ticket to pick up your box lunch on Tuesday morning at breakfast.*

For attendees staying off-site you will receive lunch tickets for Saturday, Sunday and Monday. Off-site lodgers wishing to purchase breakfast or dinner meal tickets may purchase them at the Asilomar Conference Center registration area in the Administration Building.

To-Go Lunches on Saturday, Sunday or Monday: If you wish to take your lunch to the beach or elsewhere, please go to the regular lunch window and request a “To-Go Lunch”.

Conference Banquet and After-Dinner Talk. An upgraded meal served in a private room off of the main dining hall served with wine. Banquet ticket is required. Please look for signs directing you to the special outdoor entrance to our private banquet room.

After dinner we will reconvene in the session room for an after-dinner presentations. Dessert will be served after these presentations along with a final opportunity to view the posters.

Evening Mixers and Posters. Friday, Saturday, and Sunday evenings there are social mixers sponsored by ASMS corporate member companies. Complimentary beer, wine, and light snacks are served. These evening mixers are an opportunity to continue lively discussion and visit with poster presenters. Please see pages 10 - 11 for list of posters.

Presenter Guidelines.

Poster Presenters. All posters are located in the session room, Chapel. Poster boards will be labeled. Please mount your poster on Friday starting at 4:00 pm. Please remove your poster after the Monday evening reception. See pages 10 - 11 for listing of posters.

Speakers. Please arrive in the Chapel 15 minutes prior to the start of the session to set up your laptop computer or load your presentation onto the conference computer (PC). If you have a Mac, please bring your own adapters.

Program Overview.

Friday	Evening Session	7:15 – 10:00 pm
Saturday	Morning Session	9:00 – 11:55 am
	Afternoon Session	1:15 – 4:55 pm
	Evening Session	7:15 – 10:00 pm
Sunday	Morning Session	9:00 am – 12 pm
	Free Afternoon	
	Evening Session	7:15 – 10:00 pm
Monday	Morning Session	9:00 am – 12 pm
	Afternoon Session	1:15 – 4:35 pm
	Banquet	6:00 – 7:00 pm
	After-Dinner Talks & Dessert Reception	7:15 – 10:00 pm

Survey. You will receive an email with a link to the online conference survey. Your feedback is appreciated.

Sunday Afternoon. There is a free afternoon scheduled for Sunday. Conference attendees are encouraged to join others for outings (rent bikes and ride on 17-Mile Drive, visit the Aquarium, kayaking in the kelp forest, or....) Suggest your own activity or sign up to join others --look for sign-up sheets in the rear of Chapel. See page 12 of this program for some suggested activities.

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FRIDAY, OCTOBER 18, 2013

3:00 - 6:00 pm: Registration in *Chapel*
Materials will also be available for pick-up during the sessions.

6:00 - 7:00 pm: Asilomar Dinner (onsite lodgers only), *Crocker Dining Hall*
If you are staying offsite, you may purchase a dinner meal ticket at the Asilomar Front Desk.

7:15 - 8:35 pm: **Keynote Presentations**, *Chapel*
Xing-Fang Li and Susan Richardson, presiding

- 7:15 - 7:20 pm Opening Remarks; Susan Richardson and Xing-Fang Li
- 7:20 - 7:55 pm Chemical Contaminants in the Fourth Generation of Urban Water Infrastructure; David Sedlak, *UC Berkeley*
- 7:55 - 8:30 pm Why Ecotoxicologists and Environmental Chemists Should Collaborate; John Sumpter, *Brunel University (UK)*
- 8:30 - 8:35 pm Welcome to Mixer from Agilent Technologies

8:35 - 10:00 pm: **Informal Mixer and Posters**, *Chapel*
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SATURDAY, OCTOBER 19, 2013

7:30 - 9:00 am: Asilomar Breakfast (onsite lodgers only), *Crocker Dining Hall*
If you are staying offsite, you may purchase a breakfast meal ticket at the Asilomar Front Desk.

9:00 - 11:55 am: **Emerging Contaminants** *Chapel*
Susan Richardson, presiding

- 9:00 - 9:35 am Identification of New Persistent Organic Pollutants by Chromatography Coupled with Mass Spectrometry; Guibin Jiang, *Chinese Academy of Sciences*
- 9:35 - 10:10 am Coupling Large Volume Injection for Aqueous Samples and Organic Extracts with Tandem Mass Spectrometry; Jennifer Field, *Oregon State University*
- 10:10 - 10:30 am Coffee Break
- 10:30 - 11:05 am LC Tandem MS Analysis, Characterization Fate and Risk of Fullerenes and Other Carbon-Based Nanomaterials in the Total Environment; Damia Barcelo, *IDAEA-CSIC (Spain)*
- 11:05 - 11:40 am Finding Novel Fluorinated Chemicals of Environmental Interest; Scott Mabury, *University of Toronto*
- 11:45 - 11:55 am Poster Highlight: Transformation of Halobenzoquinones in Water; Wei Wang, *University of Alberta (Canada)*

12:00 - 1:00 pm: Asilomar Lunch (all attendees), *Crocker Dining Hall*

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Extreme quantitative performance



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SATURDAY, OCTOBER 19, 2013

1:15 - 4:55 pm: **Analytical Development Chapel**
Guibin Jiang, presiding

- 1:15 - 1:50 pm Ultrasensitive Proteomics; Norm Dovichi, *University of Notre Dame*
- 1:50 - 2:25 pm Ambient Ionization and Differential Ion Mobility Spectrometry: Application to Environmental Analyses; Gary Glish, *University of North Carolina, Chapel Hill*
- 2:25 - 2:45 pm Coffee Break
- 2:45 - 3:20 pm Evaluation of Halogenated Pharmaceutical Transformation Products in Wastewater Effluent; Cynthia Larive, *University of California, Riverside*
- 3:20 - 3:55 pm Arsenic Species in Chicken; Chris Le, *University of Alberta*
- 3:55 - 4:15 pm Plasma-assisted Reaction Chemical Ionization for Elemental Mass Spectrometry of Organohalogen; Kaveh Jorabchi, *Georgetown University*
- 4:15 - 4:25 pm Poster Highlight: Solid Phase Extraction and Mass Spectrometry Techniques for the Identification of Novel Fluorinated Surfactants in Aqueous Film Forming Foams and Commercial Surfactant Concentrates; Lisa D'Agostino, *University of Toronto*
- 4:25 - 4:35 pm Poster Highlight: Tandem Extraction/Liquid Chromatography-Mass Spectrometry for the Analysis of Acrylamide and Surfactant-Related Compounds in Complex Aqueous Environmental Samples; Amanda DiGoregorio, *U.S. EPA*
- 4:35-4:45 pm Poster highlight: 4-Aminobiphenyl Exposure in Smokers and Nonsmokers in the US Population: NHANES 2005-2006; Tiffany H. Seyler, *Centers for Disease Control and Prevention*
- 4:45-4:55 pm Poster Highlight: Exposure, the Exposome, and Human Health; Anthony Macherone, *Agilent Technologies and Johns Hopkins University School of Medicine*

6:00 - 7:00 pm: Asilomar Dinner (onsite lodgers only), *Crocker Dining Hall*
If you are staying offsite, you may purchase a dinner meal ticket at the Asilomar Front Desk.

7:15 - 8:35 pm: **Multidisciplinary Approaches Chapel**
Bill Mitch, presiding

- 7:15 - 7:50 pm Integrating Analytical Biology and Chemistry in Discovering Molecular Mechanisms of Toxicity for Water Disinfection Byproducts; Michael Plewa, *University of Illinois*
- 7:50 - 8:25 pm Oklahoma Fish Kill Study: Finding a Toxic Needle in an Environmental Haystack; Tammy Jones-Lepp, *U.S. EPA*
- 8:25 - 8:35 pm Poster Highlight: Quantification of DNA Adducts Formed by 1,3-Butadiene in Human Blood Using Nanospray Liquid Chromatography- High Resolution Tandem Mass Spectrometry (nanoLC-HRMS³); Dewakar Sangaraju, *University of Minnesota*
- 8:35 - 8:40 pm Welcome to Mixer by Thermo Scientific

8:40 - 10:00 pm: **Informal Mixer and Posters, Chapel**
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SUNDAY, OCTOBER 20, 2013

7:30 - 9:00 am: Asilomar Breakfast (onsite lodgers only), *Crocker Dining Hall*

9:00 am - 12:00 pm: **Environmental Chemistry and Toxicology**, *Chapel*
Chris Le, presiding

- 9:00 - 9:30 am Identifying Flame Retardant Chemicals in Consumer Products by Mass Spectrometry and Novel Insights into Human Exposure Pathways; Heather Stapleton, *Duke University*
- 9:30 - 10:00 am How Do We Account for Endocrine Disrupting Chemicals in Animal Wastes by LC/MS/MS?; Diana Aga, *University at Buffalo, SUNY*
- 10:00 - 10:30 am High Performance Liquid Chromatography-Inductively Coupled Plasma Mass Spectrometry for Speciation of Arsenic, Mercury and Organotins in Environmental Samples; Bin Hu, *Wuhan University (China)*
- 10:30 - 10:50 am Coffee Break
- 10:50 - 11:20 am Arsenite Induces Compromised DNA Double-Strand Break Repair through Direct Binding to Histone E3 Ubiquitin Ligases; Yinsheng Wang, *University of California, Riverside*
- 11:20 - 11:50 am Potent DNA Damage Caused by Halogenated Quinones and H₂O₂ through a Metal-Independent and Intercalation-Enhanced Mechanism; Hailin Wang, *Chinese Academy of Sciences*
- 11:50 am- 12:00 pm Poster Highlight: Monomethylarsonous Acid-Induced Proteomic Perturbation in Human Skin Fibroblast Cells; Lei Guo, *University of California, Riverside*

12:00 - 1:00 pm: Asilomar Lunch (all attendees), *Crocker Dining Hall*

1:00 - 6:00 pm: Free Afternoon

6:00 - 7:00 pm: Asilomar Dinner (onsite lodgers only), *Crocker Dining Hall*
If you are staying offsite, you may purchase a dinner meal ticket at the Asilomar Front Desk.

7:15 - 8:35 pm: **Environmental Exposure**, *Chapel*
Xing-Fang Li, presiding

- 7:15 - 7:50 pm A Balance of Drugs and Emerging Pollutants "Input" and "Output" of the Three Water Tables of Milano; Enrico Davoli, *Mario Negri Institute (Italy)*
- 7:50 - 8:25 pm Using Mass Spectrometry to Characterize U.S. Population Exposure to Harmful and Addictive Chemicals from Tobacco Products; Ben Blount, *Centers for Disease Control and Prevention*
- 8:25 - 8:35 pm Poster Highlight: Bovine Serum Albumin as a Molecular Sensor for the Discrimination of Complex Metabolite Samples; Timothy Hamerly, *University of Montana*
- 8:35 - 8:40 pm Welcome to Mixer by Bruker

8:40 - 10:00 pm: **Informal Mixer and Posters**, *Chapel*
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MONDAY, OCTOBER 21, 2013

7:30 - 9:00 am: Asilomar Breakfast (onsite lodgers only), *Crocker Dining Hall*

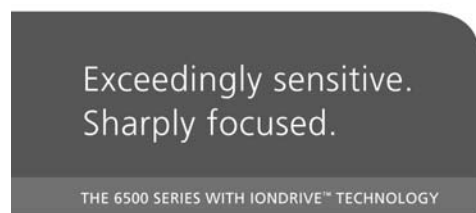
9:00 am – 12:00 pm: **Environmental Science and Technology Chapel**
Enrico Davoli, presiding

- 9:00 - 9:35 am Evaluation of Byproducts Formed from Hypohalous Oxidant Oxidation of Proteins Using LC-MS; Bill Mitch, *Stanford University*
- 9:35 - 10:10 am Boiling of Tap Water: Effect on Polar Brominated Disinfection Byproducts, Halogen Speciation, and Cytotoxicity; Xiangru Zhang, *Hong Kong University of Science and Technology*
- 10:10 - 10:30 am Coffee Break
- 10:30 - 11:00 am Accurate Mass Tools for the Identification of Environmental Contaminants using LC/Q-TOF-MS; Imma Ferrer, *University of Colorado, Boulder*
- 11:00 - 11:30 am The Role of Advanced Mass Spectrometry Techniques in National Scale Monitoring Programs Assessing Organic Contaminants; Ed Furlong, *U.S. Geological Survey*
- 11:30 - 11:40 am Poster Highlight: Can UV Irradiation Remove Halobenzoquinones in Drinking Water?; Yichao Qian, *University of Alberta*
- 11:40 - 11:50 am Poster Highlight: Identification of Phosphate Esters in Air Samples from the Great Lakes Region Using GC-QTOFMS and a Soft Ionization Source; Viorica Lopez-Avila, *Agilent Technologies*
- 11:50 – 12:00 pm Poster Highlight: Analysis of Naphthenic acids in Filtered Oil Sands Process Water Using LC-TOF; Avinash Dalmia, *PerkinElmer*

12:00 - 1:00 pm: Asilomar Lunch (all attendees), *Crocker Dining Hall*

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MONDAY, OCTOBER 21, 2013

1:15 – 4:35 pm: **Environmental MS and Applications**

Ben Blount, presiding

- 1:15 - 1:45 pm Advances and Environmental Applications of Membrane Introduction Mass Spectrometry, Chris Gill, *Vancouver Island University*
- 1:45 - 2:15 pm New Detection Methods for Emerging Environmental Pollutants using LC-MS/MS and Differential Mobility Separation, Andre Schreiber, *AB SCIEX*
- 2:15 - 2:35 pm Detection of Pyrethroid Pesticides and Their Environmental Degradation Products in Duplicate Diet Samples, Denise Macmillan, *U.S. EPA National Health and Environmental Effects Research Laboratory*
- 2:35 – 2:55 pm Coffee Break
- 2:55 – 3:15 pm Accurate Mass Analysis of Ethoxylated Surfactants in Hydraulic Fracturing Water Using Kendrick Mass Defects, Mike Thurman, University of Colorado
- 3:15-3:35 pm Regional Trends and Tendencies of Heavy Metal Concentrations in the American Oyster, Marc Engel , *FDACS, Food Safety*
- 3:35 – 3:55 pm Environmental MS in Systems Neurobiology: Discovering that Secondhand Smoke Perturbs Brain Development, Andrew Ottens, *Virginia Commonwealth University*
- 3:55 – 4:05 pm Poster Highlight: The GC/quadrupole-Orbitrap; Allison Balloon, *University of Wisconsin, Madison*
- 4:05 – 4:15 pm Poster Highlight: Predominant Role of Human CYP2B6 in the Oxidative Metabolism of BDE-100 to Potentially Toxic Metabolites; Michael Gross, *University at Buffalo, SUNY*
- 4:15-4:25 pm Poster Highlight: Reaction Pathways of Pharmaceuticals in Wastewater Treatment; Mary Bedner, *NIST*
- 4:25-4:35 pm Poster Highlight: Combined Charge Exchange Atmospheric Pressure Chemical Ionization and Tandem MS/MS; Douglas Stevens, *Waters Corporation*

6:00 - 7:15 pm: **Banquet Dinner**

*Look for signs guiding you to special private room entrance at Crocker Dining Hall.
Bring your ASMS banquet ticket! If you need a ticket, please see Jennifer in rear of Chapel.*

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7:15 – 10:00 pm: **After-Dinner Talk, Dessert and Posters, Chapel**

Susan Richardson and Xing-Fang Li, presiding

- 7:15 - 8:00 pm Prions: Environmental Fate and Disease Transmission, Joel Pedersen, *University of Wisconsin, Madison*
- 8:00 - 8:20 pm Fossils and Rocks: A Little Science and A Lot of Fun, Susan Richardson
- 8:20 – 10:00 pm Dessert and Wine & Beer

TUESDAY, OCTOBER 22, 2013

7:30 - 9:00 am: Asilomar Breakfast and Box Lunch Pick-up (onsite lodgers only), *Crocker Dining Hall*

POSTERS

The following posters (spaces 1 - 31) will be displayed in the session room, *Chapel*, Friday evening through Monday evening. Posters featured in a 'poster highlight' talk are noted.

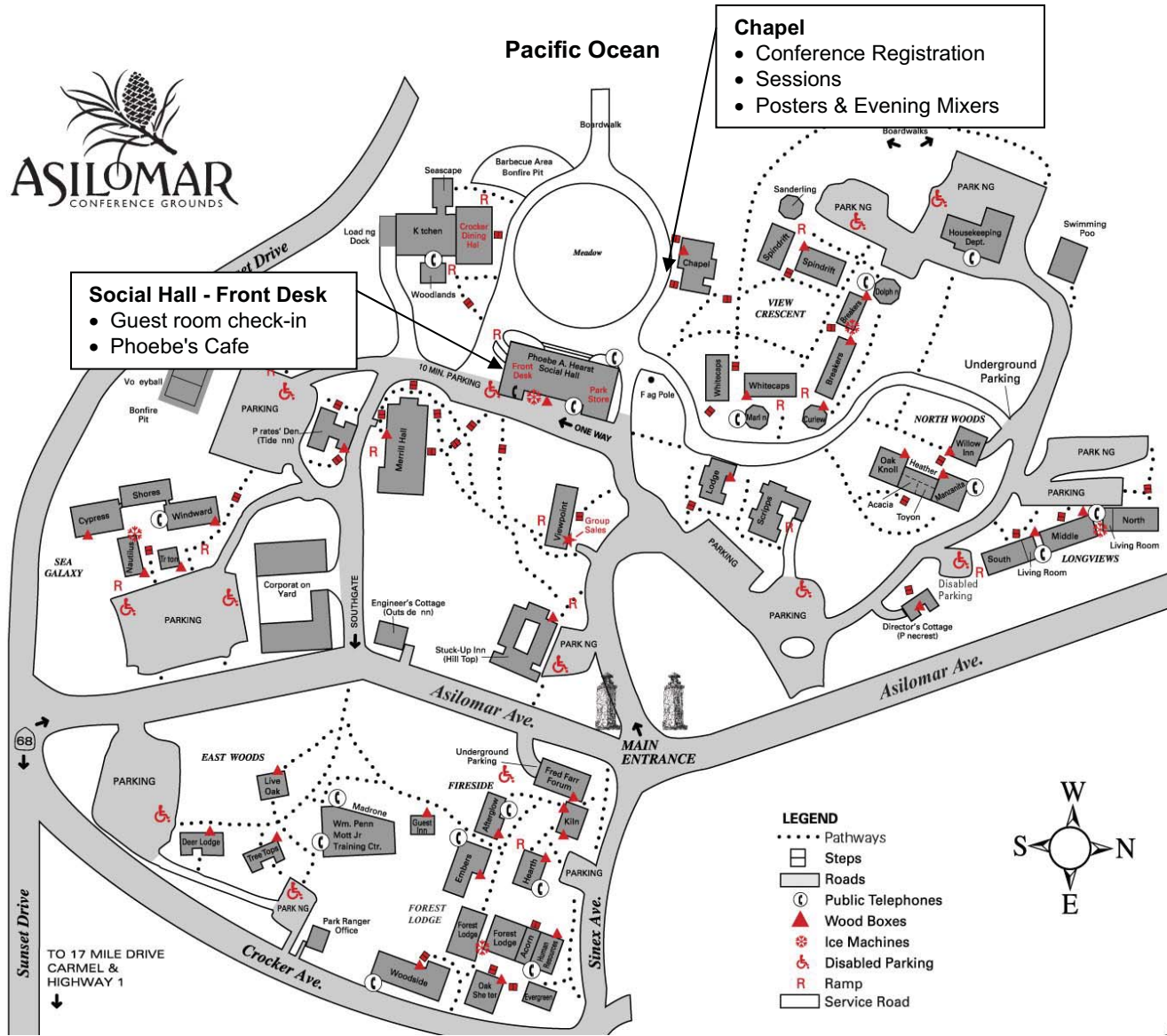
Poster Space	Title, Presenting Author, Affiliation
01	The GC/quadrupole-Orbitrap; Allison Balloon, <i>University of Wisconsin, Madison</i> <i>Featured as a Poster Highlight in Monday afternoon session.</i>
02	Reaction Pathways of Pharmaceuticals in Wastewater Treatment; Mary Bedner, <i>NIST</i> <i>Featured as a Poster Highlight in Monday afternoon session.</i>
03	α -N-methylation of DDB2 and Its Function in Nucleotide Excision Repair; Qian Cai, <i>University of California, Riverside</i>
04	Solid Phase Extraction and Mass Spectrometry Techniques for the Identification of Novel Fluorinated Surfactants in Aqueous Film Forming Foams and Commercial Surfactant Concentrates; Lisa D'Agostino, <i>University of Toronto</i> <i>Featured as a Poster Highlight in Saturday afternoon session.</i>
05	Analysis of Naphthenic acids in Filtered Oil Sands Process Water Using LC-TOF; Avinash Dalmia, <i>PerkinElmer</i> <i>Featured as a Poster Highlight in Monday morning session.</i>
06	How Far Can We Trust Untargeted Exposomics: Significance and Limits of an Exploratory Study on Urinary Pesticide Metabolites Screening for Human Exposure Evaluation; Laurent Debrauwer, <i>Research Centre in Food Toxicology, Toulouse University (France)</i>
07	Tandem Extraction/Liquid Chromatography-Mass Spectrometry for the Analysis of Acrylamide and Surfactant-Related Compounds in Complex Aqueous Environmental Samples; Amanda DiGoregorio, <i>U.S. EPA</i> <i>Featured as a Poster Highlight in Saturday afternoon session.</i>
08	Using Proton Transfer Reaction High Resolution Time-of-Flight Mass Spectrometer (PTR-HRTOF-MS) as a Specific Analyzer for Membrane Interface Probe (MIP) for Advanced Environmental Site Assessment; Vyacheslav N. Fishman, <i>The Dow Chemical Company</i>
09	Biotransformations of Tyrosine Kinase Inhibitor - Imatinib by High Resolution Mass Spectrometry; David Friedecký, <i>Palacký University in Olomouc (Czech Republic)</i>
10	8,5'-Cyclopurine Lesions as Biomarkers for Monitoring the Oxidative Stress Arising from Exposure to 6-Thioguanine; Lijuan Fu, <i>University of California, Riverside</i>
11	Predominant Role of Human CYP2B6 in the Oxidative Metabolism of BDE-100 to Potentially Toxic Metabolites; Michael Gross, <i>University at Buffalo, SUNY</i> <i>Featured as a Poster Highlight in Monday afternoon session.</i>
12	Monomethylarsonous Acid-Induced Proteomic Perturbation in Human Skin Fibroblast Cells; Lei Guo, <i>University of California, Riverside</i> <i>Featured as a Poster Highlight in Sunday morning session.</i>
13	Bovine Serum Albumin as a Molecular Sensor for the Discrimination of Complex Metabolite Samples; Timothy Hamerly, <i>University of Montana</i> <i>Featured as a Poster Highlight in Sunday evening session.</i>
14	A Mass Spectrometry-Based Approach to Study the Repair of DNA Interstrand Cross-link Lesions in Mammalian Cells; Shuo Liu, <i>University of California, Riverside</i>
15	Detection of Arsenic Species in the Muscle of Chicken Fed with Roxarsone by HPLC-ICPMS: The Application to Food Safety; Qinqing Liu, <i>University of Alberta</i>
16	Identification of Phosphate Esters in Air Samples from the Great Lakes Region Using GC-QTOFMS and a Soft Ionization Source; Viorica Lopez-Avila, <i>Agilent Technologies</i> <i>Featured as a Poster Highlight in Monday morning session.</i>
17	Exposure, the Exposome, and Human Health; Anthony Macherone, <i>Agilent Technologies and Johns Hopkins University School of Medicine</i> <i>Featured as a Poster Highlight in Saturday afternoon session.</i>

POSTERS

The following posters (spaces 1 - 31) will be displayed in the session room, *Chapel*, Friday evening through Monday evening. Posters featured in a 'poster highlight' talk are noted.

Poster Space	Title, Presenting Author, Affiliation
18	Identification of Novel Halogenated Contaminants Formed in Fires Using Ultrahigh-Resolution Mass Spectrometry and Two-Dimensional Gas Chromatography as Complimentary Discovery Techniques; Anne L. Myers, <i>University of Toronto</i>
19	Can UV Irradiation Remove Halobenzoquinones in Drinking Water?; Yichao Qian, <i>University of Alberta</i> <i>Featured as a Poster Highlight in Monday morning session.</i>
20	Analysis of Pharmaceuticals and Personal Care Products in Housatonic River Water Samples by UHPLC-TOF; Sharanya Reddy, <i>PerkinElmer</i>
21	Site-Specific Binding between Congo Red and Human Insulin by Pulsed Labeling Hydrogen-Deuterium Exchange Mass Spectrometry; Teerapat Rojsajakul, <i>West Virginia University</i>
22	Quantification of DNA Adducts Formed by 1,3-Butadiene in Human Blood Using Nanospray Liquid Chromatography- High Resolution Tandem Mass Spectrometry (nanoLC-HRMS ³); Dewakar Sangaraju, <i>University of Minnesota</i> <i>Featured as a Poster Highlight in Saturday evening session.</i>
23	Development of surfactants analysis in sterilizer or disinfectants by UPLC and LC-TOF/MS; Seok Heo, <i>National Institute of Food and Drug Safety Evaluation (Korea)</i>
24	4-Aminobiphenyl Exposure in Smokers and Nonsmokers in the US Population: NHANES 2005-2006; Tiffany H. Seyler, <i>Centers for Disease Control and Prevention</i> <i>Featured as a Poster Highlight in Saturday afternoon session.</i>
25	Combined Charge Exchange Atmospheric Pressure Chemical Ionization and Tandem MS/MS; Douglas Stevens, <i>Waters Corporation</i> <i>Featured as a Poster Highlight in Monday afternoon session.</i>
26	Studying the Environmental Chemistry of the Liquid/Vapor Interface Using Novel Ionization Techniques Coupled with Mass Spectrometry; Daniel A. Thomas, <i>California Institute of Technology</i>
27	Transformation of Halobenzoquinones in Water; Wei Wang, <i>University of Alberta</i> <i>Featured as a Poster Highlight in Saturday morning session.</i>
28	Mass Spectrometry Characterization of DNA-Protein Cross-links; Susith Wickramaratne, <i>University of Minnesota</i>
29	Proteome-wide Discovery and Characterizations of Nucleotide-binding Proteins with Isotope-coded Affinity Probes; Yongsheng Xiao, <i>University of California, Riverside</i>
30	Proteomic Analysis of Human Keratinocyte Response to Dioxin Exposure; Bin Zhao, <i>Chinese Academy of Sciences</i>
31	The Measurement of All Choline-Containing Compounds and the Profile of Related Phospholipids in Pulses; Yuan Yuan Zhao, <i>University of Alberta</i>

ASILOMAR GROUNDS MAP



MONTEREY BAY AREA ATTRACTIONS

Sunday afternoon is scheduled free time. You are encouraged to relax on your own or with your fellow attendees. Look for sign-ups in the session room for those interested in group activities. Do you have a car and wish to visit the aquarium, take a hike, or scenic drive? Do you want to rent bikes with others and tour around the area? How about kayaking around Monterey Bay admiring sea otters and the renowned kelp forest as you paddle? Do you want to rent some clubs and play golf? Be an instigator and list your activity on a sign-up sheet for others to join you.

Some Ideas...

Accessible by foot, bus, bike or car:

- In Monterey --Monterey Bay Aquarium, Fisherman's Wharf, Cannery Row, kayaking on the bay.
- Pebble Beach attractions include the 17-Mile Drive which is accessible free-of-charge on foot or bike or enter by car for a fee.

Accessible by car:

- Carmel Valley is home to many wineries, farms, ranches and the historic Carmel Mission. Hiking in Big Sur or Point Lobos.