

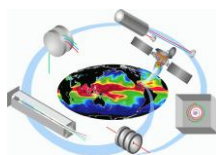
The 15th Harsh-Environment Mass Spectrometry Workshop, Virginia Beach, VA

Monday, September 15

Time	Topic	Location
6:00 – 8:00 pm	Registration - Meet & Greet	Sheraton Virginia Beach Oceanfront Ocean Grand Hallway & Foyer

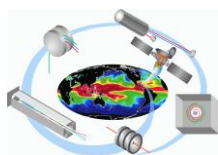
Tuesday, September 16

Time	Topic	Location
7:30 am	Registration	Ocean Grand Hallway
	Corporate Sponsor Set-up	Ocean Grand Ballroom Cape Henry
8:00 – 9:30 am	Continental Breakfast	Ocean Grand Foyer
9:45 – 10:00 am	Welcoming by Dave Vincett	Ocean Grand Ballroom Cape Charles
10:00 – 12:00	Technical Session I	Ocean Grand Ballroom Cape Charles
10:00 – 10:30	Using Classes of Molecules to Identify Air Health (Guido Verbeck, Augusta University)	
10:30 – 11:00	ARAMMIS: Autonomous Robots for Area Mapping, Monitoring and In-situ gas Sensing, focused on Lunar exploration and Earth Science applications (James Fox, INFICON ISS Emerging Technologies and New Markets Research Group)	
11:00 – 11:30	A cart-portable TOF-MS coupled with a thermal desorber for in-field analysis of CBRNE threat materials (Bett Kimutai, Canadian Nuclear Laboratories)	
1:30 – 12:00	Spaceflight Laser Desorption Orbitrap Mass Spectrometry (Madeline Raith, University of Maryland, College Park)	



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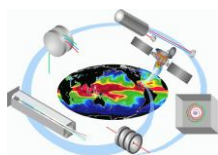
12:00 pm	Lunch	Ocean Grand Foyer
1:30 – 2:00 pm	Sponsor Introductions BaySpec, MassTech, Teledyne FLIR & Pfeiffer	Ocean Grand Ballroom Cape Charles
2:00 – 3:00	Technical Session II	Ocean Grand Ballroom Cape Charles
2:00 – 2:30	A rugged and field deployable multi-laser resonance Single Particle Mass Spectrometer: Ship-based detection of trace metal-containing aerosols in the atmosphere of the Indian Ocean (Aleksandrs Kalamasnikovs, University of Rostock)	
2:30 - 3:00	Non-proximate, Handheld Probe with Positional Feedback for Real-time Analysis of Three-dimensional Object Surfaces (G. Asher Newsome, Smithsonian Museum Conservation Institute)	
3:00 – 3:30 pm	Afternoon Break	Ocean Grand Foyer
3:30 – 4:30	Technical Session III	Ocean Grand Ballroom Cape Charles
3:30 – 4:00	2D MS/MS using a small ion trap mass spectrometer (Joseph Caruso, Purdue University)	
4:00 – 4:30	Instrument Simulation --Why, What to Expect, What tools to use (Bob Jackson, Ashwood Labs)	
4:30 pm	Dinner (on your own)	



The 15th Harsh-Environment Mass Spectrometry Workshop, Virginia Beach, VA

Wednesday, September 17

Time	Topic	Location
7:30 – 8:30 am	Continental Breakfast	Ocean Grand Foyer
8:30 – 10:00	Technical Session IV	Ocean Grand Ballroom Cape Charles
8:30 – 9:00	Novel ship-based and submersible Membrane Inlet-Photo-Ionization Mass Spectrometer (MI-PIMS) for on-line detection of fuel spills, environmental contaminants and TNT in sea water (Ralf Zimmermann, University of Rostock, Helmholtz Zentrum München)	
9:00 – 9:30	Simultaneous MIMS and UV/VIS absorption for chemical reaction kinetic studies exemplified by disinfection byproduct formation from environmental contaminants (Frants Lauritsen, University of Southern Denmark)	
9:30 – 10:00	SPion®: Flexible Ion Guide for Mass Spectrometry (Mazdak Taghioskoui, Trace Matters)	
10:00 – 10:30 am	Mid-Morning Break	Ocean Grand Foyer
10:30 – 11:30	Technical Session V	Ocean Grand Ballroom Cape Charles
10:30 – 11:00	Design and Performance of a Person-portable Two-dimensional Tandem Mass Spectrometer for Machine-Learning Enhanced Identification of Threats (Dalton Snyder, Teledyne FLIR Detection)	
11:00 – 11:30	Integration of the Submersible Under-Ice Mass Spectrometer (SUIMS) with the Icefin ROV for Dissolved Gas Measurements at the Grounding Zone of a Marine-Terminating Glacier (Jorge Coppin-Massanet, Cornell University)	

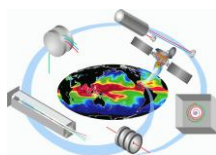


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11:30 am	Lunch (on your own)	
1:30 – 2:30	Technical Sessions VI	Ocean Grand Ballroom Cape Charles
1:30 – 2:00	A New Aerosol Threat Detector (Gottfried Kibelka, Detect-ION)	
2:00 – 2:30	Multimodal Ionization Strategies for Broad-Spectrum Threat Detection with a Miniature Field Mass Spectrometer (Nathan Grimes, BaySpec)	
2:30 - 3:00 pm	Afternoon Break	Grand Ocean Foyer
3:00 - 4:00	Technical Sessions VII	Ocean Grand Ballroom Cape Charles
3:00 – 3:30	Vertical transport of biogenic CO ₂ , O ₂ and DO ₂ /Ar in eddies and at fronts is revealed by submersible mass spectrometer (Brice Loose, URI Graduate School of Oceanography)	
3:30 – 4:00	Development of the Dragonfly Mass Spectrometer (DraMS) for Titan (Desmond Kaplan, KapScience LLC)	
6:30 – 9:30 pm	Workshop Dinner	Ocean Grand Foyer

Thursday, September 18

Time	Topic	Location
7:30 – 8:30 am	Continental Breakfast	Ocean Grand Foyer
8:30 – 10:00	Technical Session VIII	Ocean Grand Ballroom Cape Charles
8:30 – 9:00	Standoff Laser Ablation Mass Analyzer (LAMA) for Lunar Surface Analysis (Xiang Li, NASA Goddard Space Flight Center)	



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9:00 – 9:30	Under Water Coded Aperture Miniature Mass Spectrometer for Measurements of Methane Content in the Ocean (Raphael Bento Serpa or Jason Amsden, Duke University)	
9:30 – 10:00	Extraterrestrial Molecular Indicators of Life Investigation (EMILI): Development of Flight-Like Prototype (William Brinkerhoff, NASA Goddard Space Flight Center)	
10:00 – 10:30 am	Mid-Morning Break	Ocean Grand Foyer
10:30 – 12:00	Technical Session IV	Ocean Grand Ballroom Cape Charles
10:30 – 11:00	Underwater Mass Spectrometry Advancements for Real-time Geochemical Analysis of Deep-sea Cold Seeps (Ryan Bell, Beaver Creek Analytical, LLC)	
11:00 – 11:30	Concurrent Cloud Distributed Simulation with Space Charge using SIMION (Mark Osgood, Ashwood Labs)	
11:30 – 12:00	Surface Induced Dissociation (SID) with Quadrupole Mass Filters: MS/MS without Collision Gas (Randy Pedder, Ardara Technologies, LP)	
12:00 pm	Program Survey and Closing	Ocean Grand Ballroom Cape Charles