Mon, 26 Sep	
18:00 - 21:00	**Opening Reception - Sandbar Sports Grill** 4301 Ocean Beach Blvd, Cocoa Beach, FL
Tue, 27 Sep	
07:30 - 08:30	**Sponsor Set-up** MARS
08:00 - 08:45	**Breakfast** LOBBY
08:45 - 09:00	**Welcome** MERCURY
09:00 - 10:00	**Plenary Lecture** Room: MERCURY
	Tue-MERCURY-01 **Giving humanity a platform in Space to improve life on Earth** *Nate Wood* *Director Of Operations -Advanced Programs, Sierra Space*
10:00 - 10:30	**Coffee Break** LOBBY
10:30 - 12:00	**Technical Session I** Room: MERCURY
	Tue-MERCURY-01 **Breath Markers of Disease Identifiers for Portable Mass Spectrometry** *Guido Verbeck* *University of North Texas*
	Tue-MERCURY-02 **Development of mass spectrometer for organic molecule detection in the future space life search missions** *Dejan Maletic, Victor Abrahamsson, Jurij Simcic, Dragan Nikolic, Stojan Madzunkov* *NASA Jet Propulsion Laboratory, California Institute of Technology, 4800 Oak Grove Dr, Pasadena, CA 91109*

	Tue-MERCURY-03 **Development of the Dragonfly Mass Spectrometer (DraMS) and Cryogenic Sample Testing in Laser Desorption Mass Spectrometry (LDMS) Mode** *Xiang Li [1], Friso van Amerom [2], Andrej Grubisic [1], Jacob Graham [1], Ryan Danell [3], Desmond Kaplan [4], Marco Castillo [5], Matthew Francom [1], Peter Barfknecht [1], William Brinckerhoff [1], Melissa Trainer [1]* *[1] NASA Goddard Space Flight Center, [2] Mini-Mass Consulting, Inc, [3] Danell Consulting, Inc, [4] KapScience, [5] ATA Aerospace*
12:00 - 13:00	**Lunch Sponsored by Pfeiffer** LOBBY
13:00 - 14:00	**Technical Session II** Room: MERCURY
	Tue-MERCURY-01 **Investigation of disinfection byproduct formation during advanced water treatment using a transportable chemical reactor membrane inlet mass spectrometer** *James N. McPherson [1], Freja T. Larsen [2], Christine J. McKenzie [2], Frants R. Lauritsen [2]* *[1] Technical University of Denmark, [2] University of Southern Denmark*
	Tue-MERCURY-02 **Multi-dimensional Portable Mass Spectrometry for Biological Detection** *Ethan McBride [1], Zachary Sasiene [1], William Hlavacek [2], Nileena Velappan [1], Erick LeBrun [1], Nathan Patterson [3], Martin Dufresne [3], Melissa Farrow [3], Jeremy Norris [4], Richard Caprioli [3], Trevor Glaros [1]* *[1] Biochemistry and Biotechnology Group, Bioscience Division, Los Alamos National Laboratory, Los Alamos, NM 87545, USA., [2] Theoretical Biology and Biophysics, Theoretical Division, Los Alamos National Laboratory, Los Alamos, NM 87545, USA., [3] Mass Spectrometry Research Center, Vanderbilt University, Nashville, TN 37240, [4] Bruker Corporation, Billerica, MA 01821*
14:00 - 15:00	**Coffee & Sponsor introductions** MERCURY
15:00 - 16:30	**Technical Session III** Room: MERCURY

	Tue-MERCURY-01 **Two-Dimensional Tandem Mass Spectrometry as a Method for Bacterial Profiling** *Lucas Szalwinski, L. Edwin Gonzalez, Thomas Sams, Eric Dziekonski, Graham Cooks* *Department of Chemistry, Purdue University, West Lafayette, Indiana, 47907, United States*
	Tue-MERCURY-02 **Planar Design Differential Ion Mobility Spectrometer (DMS) as a Prefilter for Portable Atmospheric Pressure Ionization Mass Spectrometers.** *Erkinjon Nazarov [1, 2], James Alberti [1], Peter Fowler [2], Gary Eiceman [2], Bradley Schneider [3], Thomas Covey [3]* *[1] MicroPlasma Systems, LLC, [2] GP Ionics, LLC, Las Cruces, NM, 88003, [3] SCIEX, Concord, ON L4K 4V8, Canada*
	Tue-MERCURY-03 **MT Explorer 30: A Portable Tandem Mass Spectrometer - Development and Applications** *Venkateswarlu Panchagnula [1, 2], Konstantin Novoselov [1], Victor Laiko [1], Caleigh O'Connor [1], Madhuri Gupta [2], Vishal Mahale [2], Vladimir Doroshenko [1]* *[1] MassTech Inc. 6992 Columbia Gateway Dr, Ste 160, Columbia, MD 21046, [2] Barefeet Analytics Pvt. Ltd., & MassTech LAS Applications Development Laboratory, 100 NCL Innovation Park, Dr. Homi Bhabha Rd., Pune 411 008, India*
18:00 - 21:00	**Dinner @ Fishlips Sponsered by IMI Adaptas - Fishlips Waterfront Bar & Grill** 610 Glen Cheek Dr, Port Canaveral, FL
Wed, 28 Sep	
07:45 - 08:45	**Breakfast** LOBBY
09:00 - 10:00	**Technical Session IV** Room: MERCURY
	Wed-MERCURY-01 **MS field applications in CBSA operations**

	Marie-Josée Binette *Canada Border Services Agency*
	Wed-MERCURY-02 **Structural Content in Field Induced Fragmentation Spectra from Tandem Ion Mobility Spectrometry toward Molecular Identification** *Gary Eiceman [1], Peter Fowler [1], Hossein Shokri [1], Erkin Nazarov [1], Ben Gardner [2]* *[1] Department of Chemistry and Biochemistry New Mexico State University Las Cruces, NM 88003, [2] Collins Aerospace 960 Overland Ct. San Dimas, CA 91773*
10:00 - 10:30	**Coffee Break** LOBBY
10:30 - 12:00	**Technical Session V** Room: MERCURY
	Wed-MERCURY-01 **Overview and Testing of the Mars Organic Molecule Analyzer (MOMA), a Gas Chromatograph and Laser Desorption Mass Spectrometer.** *Friso van Amerom [1, 2], Andrej Grubisic [1], Marco Castillo [1, 3], Desmond A. Kaplan [1, 4], Xiang Li [1], Ryan M. Danell [1, 5], Stephanie A. Getty [1], William B. Brinckerhoff [1], Arnaud Buch [6], Fabien Stalport [7], Naila Chaouche [8], Clara Azemard [8], François Raulin [8], Noel Grand [8], Caroline Freissinet [9], Melissa Guzman [9], Cyril Szopa [9], Teresa Fornaro [10], John Robert Brucato [10], Sandra Siljeström [11], Walter Goetz [12], Fred Goesmann [12], and the MOMA team [12]* *[1] NASA Goddard Space Flight Center, Greenbelt, MD 20771, United States, [2] Mini-Mass Consulting, Inc., [3] ATA Aerospace, Greenbelt, MD 20770, United States, [4] KapScience, LLC, Tewksbury, MA 01876, United States, [5] Danell Consulting, Winterville, NC 28590, United States, [6] Laboratoire Genie des Procedes et Materiaux (LGPM), CentraleSupelec, University Paris-Saclay, 91190 Gif-sur-Yvette, France, [7] Université Paris Cité and Univ Paris Est Creteil, CNRS, LISA, F-75013 Paris, France, [8] Univ Paris Est Creteil and Université Paris Cité, CNRS, LISA, F-94010 Créteil, France, [9] LATMOS/IPSL, UVSQ Université Paris-Saclay, Sorbonne Universite, CNRS, 78280 Guyancourt, France, [10] INAF-Astrophysical Observatory of Arcetri, 50125 Firenze FI, Italy, [11] RISE Research Institutes of Sweden, Bioscience and*

	Materials/Chemistry and Materials, Stockholm, 417 56 Göteborg, Sweden, [12] Max Planck Institut für Sonnensystemforschung, 37077 Göttingen, Germany
	Wed-MERCURY-02 **Plasma Ion Source for Atmospheric Pressure Ionization Mass - Spectrometry** *Jim Alberti [1], Erkin Nazarov [1], Peter Fowler [2], Gary Eiceman [2, 3]* *[1] MicroPlasma Systems, LLC, Odessa, FL 33556, [2] GP Ionics, LLC, Las Cruces, NM 88003, [3] New Mexico State University, Las Cruces, NM 88003*
	Wed-MERCURY-03 **A Ruggedized, Portable Triple Quadrupole Mass Spectrometer for Mobile Detection of Chemical Threats in Urban Environments** *Alexandra Wrobel [1], Kevin Tangen [1], Geoffrey Geurtsen [1], Jeffrey Werlich [1], Anthony Castellanos [2], Vladimir Kekukh [2], Alla Ostrinskaya [1], Ta-Hsuan Ong [1], Ken Ribeiro [2], Roderick Kunz [1]* *[1] MIT Lincoln Laboratory, Lexington, MA, [2] Bruker Detection Corporation, Billerica, MA*
12:00 - 13:00	**Lunch** LOBBY
15:00 - 15:30	**Coffee** LOBBY
15:30 - 16:30	**Technical Session VI** Room: MERCURY
	Wed-MERCURY-01
	Wed-MERCURY-02 **Chip-Scale Mass Spectrometry: Yet another contender for Harsh Environments? OR can it help redefine “Harsh Environments”?** *Ashish Chaudhary* *Detect-Ion*
	Wed-MERCURY-03 **Europan Molecular Indicators of Life Investigation (EMILI)** *Desmond Kaplan [1, 2], M. Fernanda Mora [3], Tomas Drevinskas [3], Ryan Danell [1, 4], Andrej Grubisic [1], Aaron Noell [3], Bethany Theiling [1], Friso van Amerom [1, 5], Marco Castillo [1, 6], Xiang Li [1], Antonio Ricco [7], Richard Quinn [7], Cyril Szopa [8], Caroline Freissinet [8], Arnaud Buch [9], Fabien Stalport [10], Peter Willis [3],*

	William Brinckerhoff [1] *[1] NASA Goddard Space Flight Center, Greenbelt MD 20771, [2] KapScience, LLC, Tewksbury, MA, [3] NASA Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, [4] Danell Consulting, Winterville, NC, [5] Mini-Mass Consulting, Hyattsville, MD, [6] ATA Aerospace, Greenbelt, MD, [7] NASA Ames Research Center, Moffett Field, CA, [8] Laboratoire Atmosphères, Milieux, Observations Spatiales (LATMOS), Guyancourt, France, [9] CentraleSupélec, Gif-sur-Yvette, France, [10] Laboratoire Interuniversitaire des Systèmes Atmosphériques (LISA), Université Paris-Est, Créteil, France*
Thu, 29 Sep	
07:30 - 08:30	**Breakfast** LOBBY
08:30 - 10:00	**Technical Session VII** Room: MERCURY
	Thu-MERCURY-01 **Instrument Modeling: Simulation, Field Analysis, Synthesis, and Space-Charge** *Robert Jackson, Mark Osgood* *Ashwood Labs, 626 Abbot Hill Road, Wilton New Hampshire*
	Thu-MERCURY-02 **Lunar Cube Sat Mass Spectrometer** *Stojan Madzunkov, Dragan Nikolic* *Jet Propulsion Laboratory, Caltech*
	Thu-MERCURY-03 **An optimized membrane inlet system (MIS) for underwater sensors. - From idea to product** *Torben Gentz, Malte Höhn* *Alfred-Wegener-Institute for Polar and Marine Research, Bremerhaven, Germany*
10:00 - 10:30	**Coffee Break** LOBBY
10:30 - 11:30	**Technical Session VIII** Room: MERCURY

	Thu-MERCURY-01 **Portable MALDI-TOF Mass Spectrometer for Bioaerosol Detection** *Vadym Berkout, Stuart Collymore, Scott Ecelberger, Mike McLoughlin, Wayne Bryden, et al.* *Zeteo Tech, Inc., 6935 Warfield Ave, Sykesville, MD 21784*
	Thu-MERCURY-02 **RF-Only Quadrupole Mass Spectrometry for High Sensitivity at High Mass Resolution.** *Randy Pedder, Luke Metzler* *Ardara Technologies L.P.*
11:30 - 11:45	**Program Closing & Survey** MERCURY