

*Tuesday, November 18*

- 8:30 **Wide Temperature and Safer Li-Ion Cell Development**  
*Ramanathan Thillaiyan, Eric Quee, Wujun Fu, and Mario Destephen, Eagle Picher Technologies*
- 9:00 **Performance Testing of Yardney Li-Ion Cells and Batteries in Support of JPL's MSL Curiosity Rover**  
*Marshall Smart, B.V. Ratnakumar, L.D. Whitcanack, E.A. Dewell, L.E. Jones, and R.C. Ewell, Jet Propulsion Laboratory; S. Santee, F. Puglia, and R. Gitzendanner, Yardney Technical Products*
- 9:30 **Performance Validation of Yardney Low Temperature NCA-Based Li-Ion Cells for the NASA Mars InSight**  
*Marshall Smart, S.F. Dawson, R.B. Shaw, and L.D. Whitcanack, Jet Propulsion Laboratory; A. Buonanno, C. Deroy, and R. Gitzendanner, Yardney Technical Products*
- 10:00 **Break**
- 10:15 **In-Orbit Operation of the Lithium-Ion Secondary Cells with Conventional and Advanced Designs**  
*Yoshitsugu Sone, Japan Aerospace Exploration Agency*
- 10:45 **Discussion -- State of Health Monitoring of Li-Ion Batteries During Long Duration Missions**  
*Yoshitsugu Sone, Japan Aerospace Exploration Agency*
- 11:15 **Lunch**
- 1:30 **Characteristics of Quallion's 75-Ah Lithium-Ion Cell for Aerospace Applications**  
*Ashley Harvey, Alex Pal, Joseph Troutman, Kevin Schrantz, and Hiroshi Nakahara, Quallion, EnerSys Advanced Systems*
- 2:00 **Updated Lithium-Ion Batteries for the OSIRIS-Rex and Insight Missions**  
*Rob Gitzendanner, Alex Buonanno, Chad Deroy, Paul Bibo, and Daryl Gast, Yardney Technical Products*
- 2:30 **Design and Qualification of a Universal Battery**  
*Eric Quee, Frank Herrera, and Matt Mahan, Eagle Picher Technologies*
- 3:00 **Break**
- 3:15 **The Electrolyte Effect to the LiB Safety**  
*Jaesik Chung, Kwang Jung, James Park, and Randy Ortanez, PCTest*
- 3:45 **Safety of Lithium-Ion Cells at Different States of Charge**  
*Judith Jeevarajan, Bruce Duffield, and Joe Oriekwu, NASA Johnson Space Center*
- 4:15 **Introductory – Battery Calorimetry**  
*Graham Hibbert and Dr. Jasbir Singh, HEL Inc.*

*Wednesday, November 19*

- 8:30 **Can Cell-to-Cell Thermal Runaway in Li-Ion Modules be Prevented?**  
*Judith Jeevarajan, Carlos Lopez, and Joe Oriekwu, NASA Johnson Space Center*
- 9:00 **NASA Perspective and Modeling of Thermal Runaway Propagation Mitigation in Aerospace Batteries**  
*Rob Button, NASA Glenn Research Center; Paul Shack and Steve Rickman, NASA Johnson Space Center; and Chris Iannello, NASA Kennedy Space Center*
- 9:30 **Thermal Runaway Propagation Mitigation Studies in EVA Batteries**  
*Eric Darcy, NASA Johnson Space Center*
- 10:00 **Break**

- 10:15 **Lithium-Ion Batteries in Aviation: Boston and Takamatsu 787 Boeing Dreamliner Battery Failure Investigations**  
*Robert Swaim and Michael Bauer, National Transportation Safety Board; and Tom Chapin, Underwriters Laboratories Inc.*
- 11:30 **Lunch**
- 1:30 **VES16 Cells and Batteries for LEO & Small GEO**  
*Yannick Borthomieu and Stephane Remy, SAFT*
- 2:00 **Environmental and Performance Testing of the Modular Electric Power System (MEPS)**  
*Greg Semrau, Moog Inc.*
- 2:30 **Energy Storage Terrestrial Developments Potential Benefits to Space Applications**  
*Florence Fusalba, Marianne Chami, Yvan Reynier, Philippe Azais, Marlene Rey, Lise Daniel, Celine Barchasz, Helene Rouault, Gilles Moreau, and Djamel Mourzagh, CEA*
- 3:00 **Break**
- 3:15 **High Energy Solid-State Batteries for Aerospace Applications**  
*Joshua Buettner-Garrett, Heather Platt, Craig Marshall, and Douglas Campbell, Solid Power Inc.*
- 3:45 **Implementation of Ceramics Materials in Solid-State Batteries**  
*Divya Krishnamoorthy, Mailam Engineering College*
- 4:15 **Li-Ion High Voltage Cells (>=4.3V), Technology, Applications, and Market Review 2014**  
*Shmuel De-Leon, Shmuel De-Leon Energy Ltd.*

*Thursday, November 20*

- 8:30 **Long Term LEO Performance of the DigitalGlobe QuickBird2 NiH2 Battery**  
*Brian Uzzle, Tim Toth, and Dale Lister, DigitalGlobe*
- 9:00 **Li-Ion Polymer Intelli-Pack Battery for Mission and Safety Critical Battery Applications**  
*Edmund Burke, Space Information Labs; and Dr. Huitian Lu, South Dakota State University*
- 9:30 **Failure Threshold Prediction from Li-Ion Battery Life Tests**  
*Albert H. Zimmerman, The Aerospace Corporation*
- 10:00 **Influence of 2.5 Years of Storage Conditions (SOC and Temperature) on GEO Cycling of VL48E Cells**  
*Robert Staniewicz and Jan Robak, Saft Batteries; Roger Shepard and David Reuter, Northrup-Grumman*
- 10:30 **Review for the Demonstration of Advanced Lithium-Ion Secondary Cells with Safer Design**  
*Yoshitsugu Sone, Japan Aerospace Exploration Agency*