



October 17-18, 2006  
The Aerospace Corporation  
Building A-1, 1062  
El Segundo, California

## **PROGRAM**

### **Tuesday, October 17, 2006**

- 8:00 Registration Opens
- 9:30 Welcome and Introductions  
Dr. Wei Kao, Conference Chairman,  
Director, Materials Science Department, The Aerospace Corporation  
Col. James Horejsi,  
Director, Engineering and Architecture, USAF Space and Missile Systems Center
- 10:00 Health Monitoring of Composite Structures  
Professor Fu-Kuo Chang, Stanford University
- 11:00 - 1:00 Exhibits and Lunch

### **Session I**

Session Chair, Douglas Chism, The Aerospace Corporation

- 1:00 Some JPL Spacecraft Materials Applications  
Tim O'Donnell, JPL
- 1:30 Critical Tests Needed for Composite Space Structures  
Dr. Ernest Wolff, PMIC
- 2:00 Issues With Composites for Space Applications  
Dr. Karla Strong, Air Force Research Laboratory
- 2:30 Break & Exhibits
- 3:30 Laser Shearography for External Tank Inspection  
John Newman, Laser Technology, Inc.
- 4:00 Thermography  
Dr. Steven Shepard, Thermal Wave Imaging
- 4:30 Reverse Geometry X-ray System  
Richard Albert, Digiray Corporation
- 4:50 Session Ends



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## **Wednesday, October 18, 2006**

7:30 Registration, Exhibits & Refreshments

### **Session II**

Session Chair, Dr. Howard Katzman, The Aerospace Corporation

- 8:30 Lessons Learned in COPV Evolution  
Ernest Robinson, The Aerospace Corporation
- 9:00 COPV  
Tom Delay, NASA Marshall Spaceflight Center
- 9:30 Break and Exhibits
- 10:30 Beryllium and Aluminum Beryllium Materials for Space  
Rob Michel, Brush-Wellman
- 11:00 Reliability of Lead-Free Solders; Issues and Challenges  
Professor King-Ning Tu, UCLA

11:30-12:30 Lunch

### **Session III**

Session Chair, George Epstein, Composites and Adhesives Newsletter

- 12:30 Avoiding Problems With Honeycomb Sandwich and Adhesively-Bonded Structures  
George Epstein, Composites and Adhesives Newsletter
- 1:00 Production Challenges in Manufacturing of Composites  
Anthony Lawson, Hitco Carbon Composites
- 1:30 Lightweighting Structures for Large Robotics  
Dr. Stephanie Buck, JPL
- 2:00 Break
- 2:15 Design Issues of Composites, Lessons Learned  
Dr. Scott Peck, The Aerospace Corporation
- 2:45 Composite Structures for Expendable and Reusable Launch Systems  
Michael Hand and Michael Robinson, Boeing Phantom Works
- 3:30 Conference Ends

### **Exhibit Hours**

Tuesday, October 17th  
11:00 AM - 1:00 PM  
2:30 - 3:30 PM

Wednesday, October 18th  
7:30 - 8:30 AM  
9:30 - 10:30 AM