



## **AGENDA**

### **FAA Joint Advanced Materials & Structures (JAMS) Center of Excellence 14<sup>th</sup> Annual Technical Review Meeting**

May 23–24, 2018

Hosted by AMTAS

Long Beach Convention Center, Room 201-A/B

Long Beach, CA

#### **WEDNESDAY, MAY 23, 2018**

- 7:00 a.m.                    **Registration and Continental Breakfast**
- 8:00 a.m.                    **Opening Remarks/Welcome,**  
Ahmet Oztekin, JAMS Program Manager; Mark Tuttle, AMTAS Director
- 8:30 a.m.                    **Effect of Surface Contamination on Composite Bond Integrity and Durability,**  
Dwayne McDaniel and Gabriela Gutierrez-Duran, Florida International University
- 9:00 a.m.                    **Improving Adhesive Bonding of Composites through Surface Characterization,**  
Brian Flinn, University of Washington
- 9:30 a.m.                    **Inspection and Teardown of Aged In-service Bonded Repair,**  
Brandon Saathoff, Wichita State University
- 10:00 a.m.                   **Durability of Bonded Aerospace Structure,**  
Lloyd Smith, Washington State University
- 10:30 a.m.                   **Bond Process Qualification Protocols & Adhesive Qualification Guidance for Aircraft  
Design and Certification,**  
Upul Palliyaguru, Wichita State University
- 11:30 a.m.–1:00 p.m      **BREAK**
- 1:00 p.m.                    **CACRC Depot Bonded Repair Round Robin and Process Parameter Evaluation,**  
Royal Lovingfoss, Wichita State University
- 1:30 p.m.                    **Development and Evaluation of Environmental Durability Test Methods for Composite  
Bonded Joints,** Dan Adams, University of Utah
- 2:00 p.m.                    **Guidelines for Characterization of Repair Materials,**  
Rachael Andrulonis, Wichita State University
- 2:30 p.m.                    **FAA Research Requirement on Lightning Strike of Composites,**  
Billy Martin and Alyssa Friend, Wichita State University

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- 3:00 p.m. **Non-destructive Evaluation methods for Detecting Major Damage in Internal Composite Structures**, Francesco Lanza di Scalea, University of California-San Diego
- 3:30 p.m. **Notch Sensitivity and Damage Tolerance of Composite Sandwich Structures**, Marcus Stanfield, University of Utah
- 4:00 p.m. **Effects of Moisture Diffusion in Sandwich Composites**, Mark Tuttle, University of Washington
- 4:30 p.m. **An Engineering Approach for Damage Growth Analysis of Sandwich Structures Subjected to Combined Compression and Pressure Loading**, Shenal Perera, Wichita State University
- 5:00 p.m. **BREAK**
- 5:30–6:30 p.m. **JAMS-only Discussion** (PIs, project participants, cost-share partners, AVS Sponsors, and FAA TC focals should attend)

#### **THURSDAY, MAY 24, 2018**

- 7:30 a.m. **Registration and Continental Breakfast**
- 8:00 a.m. **Advanced Fiber Reinforced Polymer Materials Guidelines for Aircraft Design Certification Process**, Rachael Andrulonis, Wichita State University
- 8:30 a.m. **Safety and Certification of Discontinuous Fiber Composite Structures**, Marco Salviato, University of Washington
- 9:00 a.m. **Fatigue Damage Growth Analysis of Composites under Variable Amplitude Fatigue**, Waruna Seneviratne, Wichita State University
- 9:30 a.m. **Failure of Notched Laminates under Out-of-Plane Bending**, John Parmigiani, Oregon State University
- 10:00 a.m. **Impact Damage Formation on Composite Aircraft Structures**, Hyonny Kim, University of California-San Diego
- 10:30 a.m. **Polymer-Based Additive Manufacturing Guidelines for Aircraft Design and Certification**, Rachael Andrulonis, Wichita State University
- 11:00 a.m.–1:00 p.m. **BREAK**
- 1:00 p.m. **Development of a Building Block Approach for Crashworthiness Testing of Composites**, Dan Adams, University of Utah
- 1:30 p.m. **Crashworthiness Testing & Simulation FY18—Composites & Metallic Biz Jet Sec. Drop**, Gerardo Olivares/Luis Gomez, Wichita State University
- 2:00 p.m. **FAA CSET, CMT, CMfgT, and Adhesive Online Courses— Modifications and Implementation**, Suresh Keshavanarayana, Wichita State University
- 2:30 p.m. **Ceramic Matrix Composite Materials Guidelines for Aircraft Design and Certification**, Rachael Andrulonis, Wichita State University
- 3:00 p.m. **Wrap up/Closing Remarks**