



“Advancing Public-Private Partnerships in Aerospace” - Proposed Agenda

Monday, April 21, 2014

WSU Pullman, Compton Union Building – Senior Ballroom

- 8:00 *Breakfast*
- 8:30 **Welcome – Agenda**
 - Alex Pietsch, Director of the Governor’s Office of Aerospace
 - Mehran Mesbahi, JCATI Executive Director
- 8:35 **“Functional Considerations & Opportunities for Nanocomposites & Nanotechnology in Commercial Aerospace”**
 - Russ Maguire, President of Global Nanocomposites and former Technical Fellow with the Boeing Company
- 9:15 **Panel 1 - “Translating Research to Commercialization”**
 - Bill Rodman, Founder/President/CEO of InVision Technology, LLC
 - M. Grant Norton, Professor and Dean Honors College, WSU
 - Travis Woodland, Director of Business Development, WSU
 - Pavlo Rudenko, CTO, TriboTEX
- 10:15 **Coffee Break / Posters / Networking**
- 11:00 **JCATI Research Talk**
 - Hanwu Lei, WSU, “Aromatic Hydrocarbons for Aviation Biofuels from Lignocellulosic Biomass”
- 11:15 **Speaker 2 – “ASCENT of Biofuels - FAA Center of Excellence for Alternative Jet Fuels and the Environment”**
 - Ralph Cavalieri, WSU Associate Vice President for Alternative Energy and Director of the Northwest Advanced Renewables Alliance
- 12:00 **Lunch**
- 1:00 **Speaker 3 – “New Paths Towards Building Our Future In Space”**
 - Robert P. Hoyt, Ph.D., CEO & Chief Scientist, Tethers Unlimited (hoyt@tethers.com)
- 1:45 **Afternoon Tea**
- 1:50 **JCATI Research Talk**
 - Christopher Lum, UW, “Collaboration and Control of Multiple Unmanned Aerial Systems”
- 2:05 **Panel – “Impact of Public-Private Partnerships on Education”**
 - Ana Wieman, UW Engineering Co-op & Internship Program
 - Charles Pezeshki, Professor and Director, Industrial Design Clinic, WSU
 - Madison Peck, Software Engineering Intern, Insitu
 - Art Crowe, Director of Training Solutions, UAS Consultant, Corsair
 - Moderated by Jim Hermanson, Professor and Chair of UW William E. Boeing Department of Aeronautics & Astronautics
- 3:15 **(Thank you – close) Posters / Networking / Reception**
- 5:00 **End**



Research Posters and Presentations

“Additive Manufacturing of High Temperature Composites and Bimetallic Structures for Aerojet's Environmentally Sustainable Rocket Engines”

- PI: Bandyopadhyay, Amit (WSU)
- Co-PI(s): Bose, Susmita
- Industry Partner(s): Aerojet Rocketdyne

“Design of Molecularly Tailored Electrolytes for High Performance Lithium Batteries”

- PI: Banerjee, Soumik (WSU)
- Co-PI(s): Dutta, Prasanta
- Industry Partner(s): The Boeing Company

“High-Performance Aerospace Alloys: Corrosion Resistant Microstructure Design Toolkit”

- PI: Chaudhuri, Santanu (WSU)
- Co-PI: Gupta, Yogendra
- Industry Partner(s): The Boeing Company

“Advanced Bio-Derived Aviation Fuel Combustion: Particulate Emissions, NO_x and Flame Stability”

- PI: Kramlich, John (UW)
- Industry Partner(s): Imperium Renewables, Inc. / E3 Energy Partners / The Boeing Company / Pacific Northwest National Laboratory / U.S. Air Force Propulsion Directorate, Fuels Development Research Laboratory

“Aromatic Hydrocarbons for Aviation Biofuels from Lignocellulosic Biomass”

- PI: Lei, Hanwu (WSU)
- Industry Partner(s): Gen-X Energy Group / MS Sustainable, LLC and USS International Group / Imperium Renewables

“Developing a Battery-Extender Auxiliary Power Unit (BE-APU) for Next-Generation Commercial Airplanes”

- PI: Liu, Chen-Ching (WSU)
- Co-PI(s): Norton, Grant / Ha, Su
- Industry Partner(s): The Boeing Company

“Collaboration and Control of Multiple Unmanned Aerial Systems”

- PI: Lum, Christopher (UW)
- Co-PI(s): Vagners, Juris
- Industry Partner(s): Insitu

“Metallurgical and Mechanical Characterization of Superplastically Formed and Friction Stir Welded Dissimilar Titanium Alloys”

- PI: Mamidala, Ramulu(UW)
- Industry Partner(s): The Boeing Company

“Advanced Attitude Control for Solar Electric Propulsion Spacecraft: Analysis, Modeling, and Simulations”

- PI: Morgansen, Kristi (UW)
- Industry Partner(s): Aerojet Rocketdyne



“Next Generation Resins for Aerospace Composites in Washington”

- PI: Rider, David (WWU)
- Co-PI(s): Hoekstra, Nicole / Larson, Nicole
- Industry Partner(s): Zodiac Cabin and Structures

“Beamforming Transceivers for Mobile Aircraft Communications - a CDADIC Project”

- PI: Ringo, John A. (WSU)
- Co-PI(s): Heo, Deuk / Rudell, Jacques C.
- Industry Partner(s): Linear Signal, LLC / Tower Jazz Semiconductor

“Development of Lead Zirconate Titanate (PZT)-Silane Nano-Composite Thin Film Sensors”

- PI: Shen, I-Yeu (UW)
- Co-PI(s): Cao, Guozhong
- Industry Partner(s): The Boeing Company

“High-Sensitivity Plastic Fiber Optical Transceivers”

- PI: Shi, C.J. Richard (UW)
- Industry Partner(s): The Boeing Company

“Test Facility for Insulator Materials employed in Space Propulsion, Power and Communication”

- PI: Slough, John (UW)
- Industry Partner(s): MSNW LLC / Sienna Technologies

“The Effect of Bond Line Thickness Variation on Joint Strength”

- PI: Smith, Lloyd Victor (WSU)
- Industry Partner(s): The Boeing Company

“Embedded Section Heater for Temperature Control of Composite-Damage Repair”

- PI: Tuttle, Mark (UW)
- Co-PI(s): Devasia, Santosh
- Industry Partner(s): HEATCON / The Boeing Company / AMTAS