

2009 AFRL/DAGSI Awards

RB (Air Vehicles)

Topic RB09-3, Letcher and Shen (OSU), sponsors Tuegel and Kolonay: Reliability-Based Multi-Level Multi-Objective Robust Design Optimization Framework

Topic RB09-6, Miller and McNamara (OSU), sponsor Chona: Modeling and Simulation of Aero-Thermo-Structures for Extreme Environments

Topic RB09-6, Soper and Shukla (Miami), sponsor Chona: Enabling Robust and Durable Aerospace Structures for Combined, Extreme Environments

Topic RB09-8, Snyder and Povitsky (UAKron), sponsor Kolonay: Drag Computation Using Vorticity Confinement

RH (Human Effectiveness)

Topic RH09-1, Crossen and He (WSU), sponsor Christensen: Investigation of Day-to-Day and Individual Variability in Physiology-Based Operator Functional State Assessment

Topic RH09-1, Osei and Liu (WSU), sponsor Christensen: Investigation of Day-to-Day and Individual Variability in Physiological-Based Operator Functional State Assessment

Topic RH09-6, Bangert and Chung (WSU), sponsor Cheng: Service-Oriented Integration of Distributed Biomechanical Engineering Resources

Topic RH09-9, Maleszewski and Mukhopadhyay (WSU), sponsor Hussain: Functionalization of Carbon Nanostructures with Metal Based Nanoparticles

RX (Materials and Manufacturing)

Topic RX09-1, Barney and Mukhopadhyay (WSU), sponsor Roy: Thermally Responsive Encapsulated Phase Change Materials

Topic RX09-5, Patel and Kozlowski (WSU), sponsors Boeckl and Eyink: Growth and Characterization of Graphene and Other Carbon Nanostructures on SiC

Topic RX09-7, Bedford and Steckl (UC), sponsor Naik: Electro-Spinning of Biological Materials

Topic RX09-9, Delapasse and Ruggles-Wrenn (AFIT), sponsor Fair: Mechanical Behavior of Advanced SiC/SiC Composites at Elevated Temperatures in Air and in Steam

RY (Sensors)

Topic RY09-1, Schmuland and Jamali (UToledo), sponsor Longbrake: FFT FPGA/ASIC Architecture Simulator/Generator

Topic RY09-4, Kauffman and Raquet (AFIT), sponsor Venable: Precision Indoor and Outdoor Navigation Using Existing Signals of Opportunity and Inertial Navigation Sensors

Topic RY09-8, Sundersingh and Wu (WSU), sponsor Chakravarthy: Frequency Domain Processing Based Chaos Communication for Cognitive Radio

Topic RY09-9, Dill and Uijt de Haag (Ohio U), sponsor Campbell: Integration of Optical and Laser-Based Sensors with an Inertial Measurement Unit

RZ (Propulsion)

Topic RZ09-7, Wertz and Shen (OSU), sponsor Brown: An Energy-Based Thermomechanical Fatigue (TMF) Life Prediction Method for In-Service Gas Turbine Engines

Topic RZ09-13, VonHagen and KN Ghia (UC), sponsor Sondergaard: Development of High-Work, High-Efficiency, Low-Pressure Turbine Technologies

Topic RZ09-14, Schroder and U Ghia (UC), sponsor Ou: Experimental Study and Modeling/Simulation of Counter-Flow Impingement Cooling

Topic RZ09-17, Zinnecker and Serrani (OSU), sponsor Linn: Reduced-Order Model-Based Control of Scramjet Engines