

Room	156A	156B	156C	157A	157B	163A	163B
Time	15) Structures & Damage Prediction Chair: Jia Guo,WSU	16) Thermal Sciences Chair: Scott Stouffer,UDRI	17) Biomed. Diagnostics Chair: Tarun Goswami,WSU	18) Renewable Energy Chair: Kevin Hallinan, UD	19) Computer Science Chair: Jonathan Poggie, AFRL	20) Energetic Materials Chair: Tony Corvo, Avetec	21) Electronics Chair: Waruna Kulatilaka, SE
1:20	<i>DESS09-0051</i> Determination of Probability Density Functions of the Cohesive Zone Model Parameters Venkateswaran Shanmugam, WSU Ravi Penmetsa, WSU	<i>DESS09-0065</i> Dynamic Testing of Electromechanical Actuators Nicholas Rolinski, UD Quinn Leland, AFRL Thomas X. Wu, AFRL David Woodburn, UCF Jamie Ervin, UD	<i>DESS09-0101</i> An Evaluation of Variance in Nuchal Translucency (NT) Measurement With an Ongoing Quality Assurance (QA) Program. Angus Acton, WSU Cathy Downing, David McKenna, Jiri Sonek, MVH	<i>DESS09-0139</i> A Methodology to Estimate the Annual Average Daily On-Road Mobile Source Pollutant Emissions Wilbert Meade, MU Ramanitharan Kandiah, CSU	<i>DESS09-0138</i> Cyber Net Event Correlation to Human Networks (CyNCH) Program: Attributing Cyber Events Beyond the Keyboard Philip Maynard, AFRL Michael Haxton, BAH Mr Michael Moore, BAH William Mesaros, BAH	<i>DESS09-0119</i> Quantum Dots Based Large Area Flexible Polymeric Films for Photovoltaic Applications Raj Makote, UDRI Sraavanthi Durganala, UD	<i>DESS09-0069</i> Characterization of Longitudinal Field by Studying the Orbital Rotation of a Trapped Metal Micro-detector Yiqiong Zhao, UD
1:40	<i>DESS09-0088</i> Design Considerations for Structures in Extreme Thermal Environments Joshua Deaton, WSU	<i>DESS09-0076</i> Evaporative Spray Cooling Using a Pulsed Nozzle Larry Byrd, AFRL Lanchao Lin, Roger Carr, UDRI	<i>DESS09-0024</i> Target Recognition: Fusing LWIR and EO Imagery for Detection of Humans in a Scene. Renee Woodyard, WSU Julie A. Skipper, WSU Daniel Repperger, AFRL	<i>DESS09-0112</i> Photovoltaic Module Assembly as Appropriate Technology in Pakistan Faizan Ahmad, UD	<i>DESS09-0134</i> An Attempt to Incorporate Trust and Privacy in Attribute Based Access Control for Cross-Organizational Collaboration Jian Zhu, UD John S. Loomis, UD	<i>DESS09-0098</i> Solar Photovoltaic Charging of Single-Cell Lithium-Air Batteries Peter Kolis, UD Binod Kumar, UDRI	<i>DESS09-0059</i> Recent Advances in Agile Antennas Mark Patterson, UDRI Hai Jiang, UD Guru Subramanyam, UD
2:00	<i>DESS09-0121</i> Application of Probabilistic Methods to Turbine Engine Disk Life Prediction and Risk Assessment Paul Copp, WSU Tarun Goswami, WSU	<i>DESS09-0046</i> Studies of Thermally Conductive Foams Infused with Paraffins for Thermal Storage Applications Douglas Johnson, UD Shar Na Clement, AFRL Quinn Leland, AFRL Jamie Ervin, UDRI	<i>DESS09-0007</i> Evaluation of Quantitative Computed Tomography-Based Measures in Predicting Bone Strength Bino Varghese, WSU Thomas Hangartner, WSU Marvin Miller, WSU	<i>DESS09-0031</i> Reducing Energy Use in the City of Yellow Springs Kevin Hallinan, UD Robert Brecha, UD Kelly Kissock, UD Austin Mitchell, CMU	<i>DESS09-0132</i> Accelerating Image Registration on the SRC-7 MAP Processor William Turri, UDRI David Pointer, SRC	<i>DESS09-0066</i> New Anode Materials for Lithium Ion Batteries Gerard Simon, WSU Tarun Goswami, WSU	<i>DESS09-0053</i> Optimal Design of Interdigitated Capacitors (IDC) on Barium Strontium Titanate (BST) Thin Films Sree Vemulapalli, UD Guru Subramanyam, UD Mark Patterson, UD Chenhao Zhang, UD
2:20	<i>DESS09-0067</i> Challenges of Implementing Retirement for Cause Lifting Philosophy Jace Carter, WSU Paul Copp, WSU Tarun Goswami, WSU	<i>DESS09-0047</i> 3D Finite Element Analysis of a Single Chip SiC Power Module Bang-Hung Tsao, UDRI Katie M. Sondergelt, UDRI Jacob W. Lawson, UDRI James D. Scofield, AFRL	<i>DESS09-0107</i> Utilizing Center of Pressure Measurements from Force-Measuring Platforms in the Prevention of Falls Kimberly Bigelow, UD	<i>DESS09-0077</i> Simulation and Optimization of a Hybrid Geothermal Heat Pump District Heating System in Yukon, Canada Andrew Chiasson, UD	<i>DESS09-0133</i> Optimal Truncation in JPEG 2000 Image Compression William Turri, UDRI Eric Balster, UD Benjamin Fortener, UD	<i>DESS09-0052</i> Sulfur-tolerant Catalysts in the Solid Oxide Fuel Cell Joe Bozeman III, WSU Hong Huang, WSU Ruby P. Mawasha, WSU	<i>DESS09-0128</i> A Parallel Time-Domain Finite-Element Method to Solve Maxwells Equations Joonshik Kim, OSU
2:40	<i>DESS09-0064</i> Comparison of Aero Engine Component Lifing Methods Ashley Whitney-Rawls, WSU Paul Copp, WSU Tarun Goswami, WSU	<i>DESS09-0045</i> 3D Finite Element Analysis of a Multiple Chip SiC Power Module Katie Sondergelt, UDRI Bang-Hung Tsao, UDRI Jacob W. Lawson, UDRI James D. Scofield, AFRL	<i>DESS09-0042</i> Modulation of NF-κB Pathway by Gold Nanoparticles in B cells. Monita Sharma, WSU Laura K Braydich-Stolle, AFRL Saber Hussain, AFRL Courtney Sulentic, WSU	<i>DESS09-0140</i> Sinclair Community College Students use Regression Utility Analysis in Energy Audits Robert Gilbert, SCC	<i>DESS09-0041</i> Tell Us a Story: Supporting the Workforce with Knowledge Preservation David Kancler, UDRI Paul Pieochta, UDRI	<i>DESS09-0093</i> Optical Characterization of Energy Release from Combusting Nanoenergetic Materials Hans Stauffer, AFRL Sukesh Roy, SE James R. Gord, AFRL Christopher E. Bunker, AFRL	<i>DESS09-0016</i> High Speed Encoder for Flash ADC Using Pseudo-Dynamic CMOS logic Vinayashree Hiremath, WSU Saiyu Ren, WSU
3:00	Break	Break	Break	Break	Break	Break	Break

Abbreviations:

ABDA: Aerospace Business Development Associates, Inc.
AFIT: Air Force Institute of Technology
AFRL: Air Force Research Laboratory
AU: Angers University
BAH: Booz Allen Hamilton
BAR: Bihrl Applied Research Inc.
CMU: Carnegie-Mellon University
CSU: Central State University
CU: Clemson University

DCHS: Dayton Christian High School
DECA: Dayton Early College Academy
GE: General Electric Aviation
HPTI: High Performance Technologies Inc.
ISSI: Innovative Scientific Solutions Inc.
ITU: Ibn Tofail University
JK: Jim Klein LLC.
KBC: Kadant Black Clawson Inc.
KMC: Kettering Medical Center

MLPC: Mound Laser & Photonics Center Inc.
MSU: Michigan State University
MU: Miami University
MVH: Miami Valley Hospital
NGC: Northrop Grumman Corp.
OSU: The Ohio State University
OU: Ohio University
PCK&A: PC Krause & Associates
PU: Purdue University
SCC: Sinclair Community College

SE: Spectral Energies LLC
SGC: SynGenics Corp.
SLU: St. Louis University
SRC: SRC Computers Inc.
TA: Tiburon Associates
TE: Tech Edge Inc.
TTI: Taitech Inc.
TXC: Tech-X Corp.
UC: University of Cincinnati
UCF: University of Central Florida
UCT: University of Connecticut

UD: University of Dayton
UDRI: University of Dayton Research Institute
UI: University of Idaho
UND: University of Notre Dame
UWM: University of Wisconsin-Madison
WES: Waibel Energy Systems
WSU: Wright State University

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Time	22) Uncertainty/Solid Mechanics Chair: Paul Copp,WSU	23) Fluid Dynamics Chair: Yanhua Wu,WSU	24) Human Factors Chair: Tommy Baudendistel, PCK&A	25) Manufacturing Chair: Rebecca Hoffman,SIMULA	26) Design & Optimization Chair: B.G. Shiva Prasad,WSU	27) Materials Chair: Joseph D'Angelo, Tiburon Associates	28) Laser Diagnostics Chair: James Gord, AFRL
3:20	<i>DESS09-0058</i> Current State of Metamaterials Mark Patterson, UDRI	<i>DESS09-0070</i> Translation Mapping of the SARL Wind Tunnel Facility Ryan Schmit, AFRL	<i>DESS09-0136</i> Comprehensive Assessment of the Affect of Stress on Cognitive Performance Kristie Nemeth, UDRI <i>Laurie Quill, UDRI</i>	<i>DESS09-0075</i> The Effect on Melt Pool Geometry and Solidification Microstructure In Beam-Based Fabrication of Thin-Wall Structures Due to Free-Edges Joy Davis, WSU <i>Nathan Klingbeil, WSU</i>	<i>DESS09-0020</i> Aerodynamic Shape Optimization of High Speed Train using Surrogate Models Veera Venkata Vytla, WSU <i>George P. Huang, WSU</i> <i>Ravi. C. Penmetsa, WSU</i>	<i>DESS09-0095</i> Yttria Stabilized ZirconiaBased Composites with Adaptive Thermal Conductivity Jamie Gengler , SE <i>James R. Gord, AFRL</i> <i>Sukesh Roy, SE</i> <i>Chris Muratore, John G. Jones, Ajit K. Roy, Andrey A. Voevodin, AFRL</i>	<i>DESS09-0087</i> Single-Beam CARS Spectroscopy of N2 and CO2 using an Ultrashort Laser Pulse James Gord, AFRL <i>Paul Wrzesinski, Dmitry Pestov, Tissa Gunaratne, Marcos Dantus, MSU</i> <i>Sukesh Roy, SE</i>
3:40	<i>DESS09-0012</i> Creation of a Mode Shape Based Damage Metric for Structural Health Monitoring Randy Tobe, WSU <i>Ramana Grandhi, WSU</i>	<i>DESS09-0113</i> Flow Visualization Study of Passive Flow Control Features on a Film-Cooled Turbine Blade Leading Edge Daniel Carroll, AFIT	<i>DESS09-0014</i> Crisis Forecasting Marc Ferguson, AFRL <i>James Ballas, AFRL</i>	<i>DESS09-0074</i> Virtual Design to Part Production, Quickly and Affordably Derek Johnson, UDRI <i>Brian Rice, UDRI</i> <i>Stephen C. Michell, UDRI</i>	<i>DESS09-0006</i> Risk-Based Energy Minimization for Airfoil Design Kenneth Gannon, WSU	<i>DESS09-0061</i> Laser Precision-Based Graphene Growth Processes Sarah Bertke, MLPC <i>David H. Tomich, AFRL</i> <i>John E. Hoelscher, AFRL</i> <i>Ronald L. Jacobsen, MLPC</i>	<i>DESS09-0081</i> Single-Shot Thermometry in Reacting Flows at 1 kHz using Femtosecond CARS Spectroscopy Sukesh Roy, SE <i>Waruna D. Kulatilaka, SE</i> <i>Daniel Richardson, Robert Lucht, PU</i> <i>James R. Gord, AFRL</i>
4:00	<i>DESS09-0091</i> Stochastic Response Of A Curved Beam: A Comparison Of Fokker-Planck Equation Approach With Monte Carlo Simulations Of Reduced Order Models Holly Soper, MU <i>Amit Shukla, MU</i> <i>S.M. Spottswood, AFRL</i>	<i>DESS09-0002</i> Wavelet Analysis of a Highly Irregular Roughness Topography Huiying Ren, WSU <i>Yanhua Wu, WSU</i>	<i>DESS09-0060</i> Human Computer Interaction Analysis of Multiple Small Unmanned Aircraft Systems Jill Ward, AFIT <i>John Colombi, AFIT</i>	<i>DESS09-0127</i> Rotating Contact Fatigue Study of Lubricated Steel Balls on a Steel Rod and Steel Races Under Three Point Ball Loading Abayomi Ajayi-Majebi, CSU <i>Kayode Ajayi-Majebi, UD</i>	<i>DESS09-0055</i> Improved Conceptual Design Tool Steve Mitchell, UDRI	<i>DESS09-0120</i> Molecular Imprinting Techniques in Sol-gel Polymers for Enhanced Selectivity of Sensor and Membrane Materials Sruvanthi Durganala, UD <i>Raj Makote, UDRI</i>	<i>DESS09-0086</i> Fiber-Based CARS Spectroscopy for Gas-Phase Thermometry in Reacting Flows Paul Hsu, AFRL <i>Waruna D. Kulatilaka, SE</i> <i>Anil K. Patnaik, WSU</i> <i>Sukesh Roy, SE</i> <i>James R. Gord, AFRL</i>
4:20	<i>DESS09-0010</i> Uncertainty Quantification of Simulated Residual Stress Induced by a High Strain Rate Process Hemanth Amarchinta, WSU <i>Thaddeus Tarpey, WSU</i> <i>Ramana Grandhi, WSU</i>	<i>DESS09-0036</i> Thermal Analysis of a Human in Action using CFD Jessica Rinderle, WSU <i>Brian Tsou, TE</i> <i>Eric Pitt, MU</i> <i>George Huang, WSU</i> <i>Bo Evans, WSU</i> <i>Josh Anderson, DECA</i>	<i>DESS09-0028</i> Leveraging collaboration technique tradeoffs in complex, multidimensional work environments. Nicole Arbuckle, UDRI <i>Brian Taylor, UDRI</i> <i>David Kancler, UDRI</i>	<i>DESS09-0142</i> Development of a novel femtosecond laser machining/drilling technology based on temporal pulse shaping and in-situ inspection methods Sivaram Gogineni, SE <i>Sukesh Roy, SE</i> <i>Marcos Dantus, MSU</i> <i>James R. Gord, AFRL</i>	<i>DESS09-0130</i> Designing Energy-Waste Out of Industrial Equipment using Innovation, Precision, and Controls Josh Boatwright, KBC <i>Don Greier, KBC</i>	<i>DESS09-0123</i> Deposition of Ordered Arrays of Metal Sulfide Nanoparticles in Nano-Structures Using Supercritical CO2 Joanna Wang, AFRL <i>Alexander Smetana, AFRL</i> <i>John J. Boeckl, AFRL</i> <i>Gail Brown, AFRL</i> <i>Chien M. Wai, UI</i>	<i>DESS09-0092</i> Investigation of Molecular Interference Effects from Broad-Bandwidth Excitation in Fs-CARS Waruna Kulatilaka, SE <i>Sukesh Roy, SE</i> <i>Robert P. Lucht, PU</i> <i>James R. Gord, AFRL</i>
4:40	<i>DESS09-0001</i> Uncertainty Quantification in Vehicle Design Incorporating Aeroelastic Flutter Analysis Jason King, WSU <i>Ramana Grandhi, WSU</i>	<i>DESS09-0033</i> Acoustic Resonance in a Tube with Specified Acoustic Impedance at the Two Ends Christopher Porter, UC <i>Christine Englert, UC</i>	<i>DESS09-0135</i> Development of a DICOM toolkit in IDL for medical data processing and analysis Rohit Bhat, WSU <i>Martin Satter, KMC</i>	<i>DESS09-0078</i> Laser Micro-Fabrication of Micro Air Vehicle(MAV) Components Christopher Taylor, MLPC	<i>DESS09-0080</i> Optimization of Designs for low Size Weight and Power (SWaP) Ken Simone, UDRI	<i>DESS09-0008</i> Development of "Smart Clamp" Sensors to Improve Electrical Wiring Reliability Robert Kauffman, UDRI <i>Douglas Wolf, UDRI</i>	<i>DESS09-0089</i> Comparison of Line-Peak and Line-Scanning Excitation in Two-Color Laser-Induced-Fluorescence Thermometry of OH Stanislav Kostka, SE <i>Sukesh Roy, Terrence R. Meyer, SE</i> <i>Michael W. Renfro, UCT</i> <i>James R. Gord, AFRL</i> <i>Patrick Lakusta, Richard Branam, AFIT</i>
5:00	<i>DESS09-0019</i> Quantification of Modeling Uncertainty in Aeroelastic Design Matthew Riley, WSU <i>Ramana V. Grandhi, WSU</i> <i>Raymond Kolonay, AFRL</i>	<i>DESS09-0082</i> Non Photolithographic Technique for Micro fluidic Channels using Wet Etching in Pyrex Glass Wafer using Paraffin Wax Mask Piyush Shah, WSU <i>Andrew Sarangan, UD</i> <i>Elena Gulliants, UD</i> <i>Chris Bunker, AFRL</i> <i>LaVern Starman, AFIT</i>		<i>DESS09-0126</i> Design, Fabrication Testing and Performance Evaluation of a Solarized Extended Six Passenger Textron EZ-Go Cart Vehicle at Central State University. Abayomi Ajayi-Majebi, CSU <i>Clark Fuller, Gerald T. Noel, Victor Aimiwu, CSU</i> <i>Kayode Ajayi-Majebi, UD</i>	<i>DESS09-0129</i> Design of a Full-Scale Aerial Target Trenton White, AFRL	<i>DESS09-0009</i> Development of Self-Healing Techniques to Improve Electrical Wiring Reliability Robert Kauffman, UDRI	<i>DESS09-0090</i> Controlled Two-Channel Slow Light in a Single Delay Device Anil K. Patnaik, WSU <i>Paul S. Hsu, AFRL</i> <i>Sukesh Roy, SE</i> <i>James R. Gord, AFRL</i>