



ASME Early Career Technical Conference

ASME ECTC 2008

**Miami, Florida
October 3-4, 2008**

PROGRAM OVERVIEW

**Friday, October 3, 2008
Room EC 2300**

8:00-9:00 am	Registration
9:00-9:10	Welcome
9:10-10:50	Session 1
10:50-11:10	Coffee Break
11:10-12:30 pm	Session 2
12:30-1:30	Lunch Break
1:30-2:30	Lab Tour to Mechatronics, Robotics, MAIDROC, Plasma & Nanotechnology Labs
2:30-3:30	Innovation in the Workplace, Burt Dicht
3:30-4:50	Session 3
4:50-5:10	Coffee Break
5:10-6:30	Session 4
6:30	Conference Dinner

**Saturday, October 4
Room EC 1115**

9:00-10:20 am	Session 5
10:20-10:40	Coffee Break
10:40-11:10	How to Advance Your Career, Burt Dicht
11:10-12:30 pm	Session 6
12:30	Closing Remarks

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TECHNICAL PRESENTATIONS

Session 1

Friday, October 3, 2008 • 9:10 am – 10:50 am • Room EC 2300

9:10 – 9:30	P. Rodriguez, H. Perez, J. E. Labarga, and A. Vizan, "Research on Tool Life in Micro End Milling as Related to Workpiece Quality Criteria," University of Leon, Leon, Spain, and Madrid Polytechnic University, Madrid, Spain
9:30 – 9:50	Kimberly Bickraj, Mustafa Demetgul, Ibrahim N. Tansel, Bulent Kaya, and Babur Ozcelik, "Detection of the Development of Chatter in End Milling Operations by Using Index Based Reasoning (IBR)," Florida International University, Miami, Marmara University, Istanbul, Turkey, and Gebze Institute of Technology, Kocaeli, Turkey
9:50 – 10:10	Tammanit Piputsitee, and Brian D. Landrum, "UA-Huntsville Flight Simulation Development," University of Alabama, Huntsville
10:10 – 10:30	Ehsan Yakhshi Tafti, Kevin Law, Ranganathan Kumar, Hyoungh J. Cho, "Effect of Surfactants on Droplet Formation in Microchannels," University of Central Florida, Orlando, and New College of Florida, Sarasota
10:30 – 10:50	Sudhir Reddy Posireddy, Sai Priya Ramanujam, Kelvyn Guzman, and Sabri Tosunoglu, "Vision Guided GPS Navigation in a Distributed Intensity Domain," Florida International University, Miami

Session 2

Friday, October 3, 2008 • 11:10 am – 12:30 pm • Room EC 2300

11:10 – 11:30	Calvin M. Stewart, and Ali P. Gordon, "Modeling the Temperature Dependence of Tertiary Creep Damage of a Ni-Base Alloy," University of Central Florida, Orlando
11:30 – 11:50	J. C. Lesage, and M. L. Liu, "On the Investigation of a Restrained Cargo System Modeled as a Duffing Oscillator of Various Orders," Lakehead University, Thunder Bay, Ontario, Canada
11:50 – 12:10	Mohammad Shadap Siddiqui, and Sanjeev Bhargava, "Cold Compaction and Sintering of Iron Copper Mechanically Alloyed Powder," Florida International University, Miami, and IIT Kanpur, Kanpur, India
12:10 – 12:30	M. Bidabadi, and A. Rahbari, "Combustion Modeling of the Premixed Flame Propagation," Iran University of Science and Technology, Tehran, Iran

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Session 3

Friday, October 3, 2008 • 3:30 pm – 4:50 pm • Room EC 2300

3:30 – 3:50	Scott G. Keller, and Ali P. Gordon, "The Effect of Uniform Flexure Loading on Helixes," University of Central Florida, Orlando
3:50 – 4:10	Benjamin Swanson, James H. Fletcher, and William Lear, "Analysis of Solar Thermal Water Heaters on Peak Demand," University of Florida, Gainesville, and University of North Florida, Jacksonville
4:10 – 4:30	Syeda Kazmi, Luis Gonzalez, Amrit Harripaul, and Sabri Tosunoglu, "Mine Tracker Mobile Robot," Florida International University, Miami
4:30 – 4:50	Carlos Andres Velez, Diego Valencia, Ibrahim Tansel, and Sabri Tosunoglu, "Design of a Midi Compatible Drumming Robot," Florida International University, Miami

Session 4

Friday, October 3, 2008 • 5:10 pm – 6:30 pm • Room EC 2300

5:10 – 5:30	Justin Karl, and Ali P. Gordon, "Qualitative Analysis of Conductive Coating under Cyclic Loading," University of Central Florida, Orlando
5:30 – 5:50	William J. Harrington, James H. Fletcher, and Joseph L. Campbell, Low-Speed Wind Tunnel Improvements at the University of North Florida, University of Florida, Gainesville, and University of North Florida, Jacksonville
5:50 – 6:10	Carlos Andres Velez, and George Dulikravich, "Internal Flow Optimization of an Air Intake Manifold for a Formula SAE Race Car," Florida International University, Miami
6:10 – 6:30	P. Bahemmat, A. Rahbari, M. Haghpanahi, and M. Besharati, "Experimental Study on the Effect of Rotational Speed and Tool Pin Profile on AA2024 Aluminum Friction Stir Welded Butt Joints," Iran University of Science and Technology, Tehran, Iran

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Session 5

Saturday, October 4, 2008 • 9:00 am – 10:20 am • Room EC 1115

9:00 – 9:20	Mustafa Demetgul, Wendy Pino, and Ibrahim N. Tansel, "Morphing Design for Ornihopters," Florida International University, Miami
9:20 – 9:40	P. Rodriguez, A. I. Fernandez, J. Garcia, J. E. Labarga, "Estimation of Optimal Cutting Conditions for Austenitic Stainless Steels Machining," University of Leon, Leon, Spain
9:40 – 10:00	Narciso Gomez, and Sabri Tosunoglu, "Labview Simulation of an Electric Vehicle with Force Feedback Control," Florida International University, Miami
10:00 – 10:20	Juan Camilo Medina, Marcel Milanés, and John Pouwels, "Development of a Quadruped Gait for a Modular Robot," Florida International University, Miami

Session 6

Saturday, October 4, 2008 • 11:10 am – 12:30 pm • Room EC 1115

11:10 – 11:30	Carlos Andres Velez, Michelle Suarez, and Ibrahim Tansel, "Implementation Feasibility of Piezo-Electric and Carbon Nano-Tube Based Sensors in Unmanned Aerial and Ground Vehicle Applications, Part I: Sensor Evaluation, and Part II: Design of a Simple Autonomous Ground Vehicle for Vibration Sensor Testing," Florida International University, Miami
11:30 – 11:50	Pradeep Shinde, Srikanth Korla, Tanvi Ajrawat, and Sabri Tosunoglu, "Design and Development of a Flipping Biped Robot," Florida International University, Miami
11:50 – 12:10	Alfonso Leonardi, Andres Escobar, and Juan Villar, "Six-Legged/Wheeled Security Robot," Florida International University, Miami
12:10 – 12:30	Felix Mendez, Arsenio Alfonso, Thomas Schaefer, and David Crawford, "Inverse Stability Analysis of a Biped Robot," Florida International University, Miami