



Technical Parallel Session – Manufacturing Systems and Technology (MST)

Day 2: Thursday, 22 January 2009

Location: Shaw Foundation Alumni House

Parallel Session 1

Time	Programme Schedule
1:30 pm – 1:50 pm	Zhiguang Xu, Vijay Shilpiekandula, Kamal Youcef-Toumi, Soon Fatt Yoon <i>Absolute Nano-scale Gap Thickness Measurement by a White-light Scanning Interferometer</i>
1:50 pm – 2:10 pm	Brian W Anthony, Dean M Ljubicic, Nadege Zarrouatzi <i>Inspection and Measurement of Micro-scale Parts for Process Control</i>
2:10 pm – 2:30 pm	H T Pham, S F Yoon, K P Lim, D Boning <i>Molecular Beam Epitaxy of Dilute Nitride Indium Antimonide for Long Wavelength Infrared Detector Application</i>
2:30 pm – 2:50 pm	Shiguang Li, Soon Fatt Yoon, Zhongping Fang, Zhiguang Xu, Vijay Shilpiekandula, Hayden K Taylor, Kamal Youcef-Toumi, Duane S Boning <i>Some Measurement Activities of Microfluidic Devices in MST Programme</i>
2:50 pm – 3:10 pm	Zhiguang Xu, Hayden K Taylor, Duane S Boning, Kamal Youcef-Toumi, Soon Fatt Yoon <i>Image Processing Technique based on Moiré Fringe Approach for Distortion Measurement in Hot-embossing Process</i>
3:10 pm – 3:20 pm	Break
3:20 pm – 3:40 pm	Chen X, Lam Y C, Yue C Y <i>A Microstructurally Based Orthotropic and Transversely Isotropic Hyperelastic Constitutive Model</i>
3:40 pm – 4:00 pm	C SHI, S B Gershwin <i>An Efficient Buffer Design Algorithm for Production Line Profit Maximization</i>
4:00 pm – 4:20 pm	John Foreman, Jérémie Gallien, Julie Alspaugh, Fernando Lopez, Rohit Bhatnagar, Chee Chong Teo, Charles Dubois <i>Implementing Supply Routing Optimization in a Make-To-Order Manufacturing Network</i>
4:20 pm – 4:40 pm	Fernando Tubilla, Stanley B Gershwin <i>Real-Time Scheduling Policy for Manufacturing Systems with Sequence-Dependent Setups</i>
4:40 pm – 5:00 pm	Wasu Glankwamdee, Sivakumar Appa Iyer <i>Optimization Model for Transportation Network Planning</i>



Parallel Session 2

Time	Programme Schedule
1:30 pm – 1:50 pm	Eehern Wong, Jung-Hoon Chun <i>Accelerated Curing and its Dimensional Effects on Microfluidic Devices</i>
1:50 pm – 2:10 pm	R K Jena, C Y Yue, Y C Lam <i>Fabrication and Characterization of Microchannel Imprinted on Cyclic Olefin Copolymer (COC) by Hot Embossing Technique</i>
2:10 pm – 2:30 pm	Sunanda Roy, C Y Yue, Y C Lam <i>Surface Modification and Chemical Characteristics of Plasma treated Topas Surface: Application for Microfluidic Device</i>
2:30 pm – 2:50 pm	Matthew Dirckx, David E Hardt <i>Thermal Stress and Sidewall Friction in Demolding of Hot Embossed Polymer</i>
2:50 pm – 3:10 pm	B Saha, S B Tor, E Liu, D E Hardt, J H Chun <i>Improvement of Replication of Patterns by Using Anti-sticking DLC Coating Micromolds</i>
3:10 pm – 3:20 pm	Break
3:20 pm – 3:40 pm	Sumeet Kumar, Todd Thorsen <i>Thermal Modeling and Validation of a Microfluidic Platform for Continuous Flow Polymerase Chain Reaction</i>
3:40 pm – 4:00 pm	Eehern Wong, Sumeet Kumar, Aaron Mazzeo, Matthew Dirckx, Jung-Hoon Chun, David Hardt <i>Functional Test System Design for Microfluidic Applications</i>
4:00 pm – 4:20 pm	Melinda Hale, David Hardt <i>Development and Testing of a Low-Cost Rapid-cycle Hot Embossing System for Manufacturing Microscale Parts</i>
4:20 pm – 4:40 pm	S B Tor, G Fu, N H LOH, D E Hardt <i>A Universal Development Platform for the Design and Fabrication of Polymeric Microfluidic Devices</i>
4:40 pm – 5:00 pm	David E Hardt, Brian Anthony, Tor Shu Beng <i>A University Based Research Factory for Polymer Microdevices</i>