

Thursday, July 30th 2009

8:00 AM		Breakfast/Exhibitors			
		Mini-Symposia on Cluster/Multi-Port Injection	Mini-Symposia on Sheet/Swirling Sprays	Flashing Sprays and Electrostatic Sprays	Cooling Sprays
		Session Chairs: Chris Edwards and ???	Session Chairs: Marco Marengo and ??	Session Chairs Yun-feng Changand ??	Session Chairs Antonio Moreiraand ??
8:30 AM	Paper 1	<p>Paper Number: 063</p> <p>Paper Title: Microscopic Visualization of Transient Spray from Multi-hole Injector of DISI Engine</p> <p>Paper Authors: M. Esmail¹, N. Kawahara¹, E. Tomita¹, M. Sumida²</p> <p>Affiliation: 1. Okayama University, 2. Mitsubishi Electric Corp</p>	<p>Paper Number: 024</p> <p>Paper Title: The large aspect ratio air-blasted liquid sheet revisited</p> <p>Paper Authors: A. Lozano¹, F. Barreras J.A. Garcia and E. Calvo</p> <p>Affiliation: LITEC, CSIC-Univ. Zaragoza</p>	<p>Paper Number: 236</p> <p>Paper Title: Unsteadiness in Effervescent Sprays: Influence of Operational Conditions and Atomizer Design</p> <p>Paper Authors: J. Jedelsky, Z. Beinstein and M. Jicha</p> <p>Affiliations: Faculty of Mechanical Engineering, Brno University of Technology</p>	<p>Paper Number: 074</p> <p>Paper Title: Droplet Cooling of Heated Surfaces: Experimental and Numerical Analysis</p> <p>Paper Authors: Paolo Tartarini, Mauro A. Corticelli, Paolo E. Santangelo</p> <p>Affiliation: Dipartimento di Ingegneria Meccanica e Civile (DIMeC), Università degli Studi di Modena e Reggio Emilia, Italy</p>
8:55 AM	Paper 2	<p>Paper Number: 004</p> <p>Paper Title: X-Ray Measurements of Mass Distributions in the Near-Nozzle Region of Sprays from Standard Multi-Hole Common-Rail Diesel Injection Systems</p> <p>Paper Authors: Philippe Leick¹, Alan L. Kastengren², Zunping Liu³, Jin Wang³ and Christopher F. Powell²</p> <p>Affiliation: 1 Robert Bosch GmbH, Corporate Research, Gerlingen, Germany. 2 Center for Transportation Research, Argonne National Laboratory 3. Advanced Photon Source, Argonne National Laboratory</p>	<p>Paper Number: 139</p> <p>Paper Title: Promotion of Perforation in a Radial Liquid Sheet by Impingement of a Hot/Cold Airflow</p> <p>Paper Authors: T. Wakimoto¹, K. Nishida and K. Kato</p> <p>Affiliation: Osaka City University</p>	<p>Paper Number: 177</p> <p>Paper Title: Simulation of Flash-Boiling in Pressure Swirl Injectors</p> <p>Paper Authors: K. D. Neroorkar¹, S. Gopalakrishnan¹, D. P. Schmidt¹ and R.O.Grover, Jr.²</p> <p>Affiliation: 1 Department of Mechanical and Industrial Engineering University of Massachusetts - 2 General Motors Research & Development Warren, Michigan</p>	<p>Paper Number: 092</p> <p>Paper Title: Evaluation of the cooling performance of individual droplets impinging onto heated targets.</p> <p>Paper Authors: A. S. Moita¹, M. Morais², A. Spena², A. L. N. Moreira¹</p> <p>Affiliation: 1. Department of Mechanical Engineering, Technical University of Lisbon, Lisbon, Portugal. 2. Department of Enterprise Engineering, University of Rome, Italy</p>
9:20 AM	Paper 3	<p>Paper Number: 142</p> <p>Paper Title: Fundamental Investigation of Diesel Spray-Spray Interaction for Cluster-Hole Nozzles</p> <p>Paper Authors: M. Gauding, A. Pawlowski, C. Felsch, B. Sonntag, R. Kneer and N. Peters</p> <p>Affiliations: Institut für Technische Verbrennung, Institut für Wärme- und Stoffübertragung</p>	<p>Paper Number: 018</p> <p>Paper Title: OPTIMAL FLOWS IN SWIRL ATOMIZERS</p> <p>Paper Authors: L. Craig, N. Barlow, S. Patel, B. Kania, S.P.Lin</p> <p>Affiliation: Clarkson University</p>	<p>Paper Number: 254</p> <p>Paper Title: Nanosized particle synthesis by Flash Boiling Atomization</p> <p>Paper Authors: Koji Sasaki, Jun Hayashi, Iino Kimio, Masahiko Shibahara, Fumiteru Akamatsu</p> <p>Affiliations: Department of Mechanical Engineering, Osaka University, Taiyo Nippon Sanso</p>	<p>Paper Number: 105</p> <p>Paper Title: Multijet spray characteristics for spray cooling</p> <p>Paper Authors: M. R. O. Panão, J. L. C. V. Rosa and A. L. N.</p> <p>Affiliations: Moreira Department of Mechanical Engineering, Instituto Superior Técnico, Technical University of Lisbon</p>
9:45 AM	Paper 4	<p>Paper Number: 125</p> <p>Paper Title: Spray-Spray and Spray-Wall Interactions in Diesel Sprays from Micro-Hole Nozzles under Ultra-High Injection Pressures</p> <p>Paper Authors: Wu Zhang¹, Keiya Nishida¹, and Jiang-Ping Tian²</p> <p>Affiliation: 1. Department of Mechanical System Engineering, University of Hiroshima, Japan 2. Institute of Internal Combustion Engine, Dalian University of Technology, China</p>	<p>Paper Number: 058</p> <p>Paper Title: Experimental Evaluation of a Film Separation Criterion</p> <p>Paper Authors: J. L. Wegener, M. A. Friedrich, J. A. Drallmeier and B. F. Armaly</p> <p>Affiliations: Department of Mechanical and Aerospace Engineering, Missouri University of Science and Technology</p>	<p>Paper Number: 016</p> <p>Paper Title: Further Development in Actuators Designs for Flashing Household Aerosols- Hair Spray</p> <p>Paper Authors: Rajab Shjarief</p> <p>Affiliation: Lionstarcorp /Stockport, England, UK</p>	<p>Paper Number: 144</p> <p>Paper Title: An experimental study of intermittent spray cooling above the Leidenfrost point</p> <p>Paper Authors: S. Fest, J. Schmidt</p> <p>Affiliation: Otto-von-Guericke University Magdeburg, Magdeburg, Germany</p>
10:10 AM	Paper 5	<p>Paper Number: 148</p> <p>Paper Title: Investigation of Particulate Emissions for Cluster-Nozzle Concepts in DI Diesel Engines</p> <p>Paper Authors: Hyun Woo Won¹, Abhinav Sharma¹, Peter Hottenbach¹, Michael Gauding¹, F. X. Robert¹, Norbert Peters¹, Gerd Gruenefeld¹, Russell Durrett² Alejandro H. Plazas T.² and Satbir Singh²</p> <p>Affiliation: 1. RWTH Aachen University, 2. Powertrain Systems Research Laboratory, General Motors</p>	<p>Paper Number: 174</p> <p>Paper Title: Experimental Analysis and 3D-Visualization of Oscillating Hollow-Conical Liquid Sheets in Quiescent Air</p> <p>Paper Authors: E. Musemic, A. Rojek, M. Gaspar, F. Weichert, H. Müller and P. Walzel</p> <p>Affiliations: Department of Biochemical and Chemical Engineering and Department of Computer Science VII, Computer Graphics, Technical University of Dortmund</p>	<p>Paper Number: 100</p> <p>Paper Title: Secondary Atomization of Electrostatically Charged Drops</p> <p>Paper Authors: Daniel R. Guidenbecher, Paul E. Sojka</p> <p>Affiliation: School of Mechanical Engineering, Purdue University,</p>	<p>Paper Number: 192</p> <p>Paper Title: Single Droplet Heat Transfer through Shallow Liquid Pools</p> <p>Paper Author: Henry Vu, Guillermo Aguilar and Richard Jepsen</p> <p>Affiliations: University of California, Riverside, Sandia National Laboratories, Albuquerque</p>

10:35 AM	Paper 6	<p>Paper Number: 156</p> <p>Paper Title: GDI Multi-Hole Injector: Particle Size and Velocity Distribution for Single and Jet-to-Jet Evolution Analysis</p> <p>Paper Authors: L. Allocca, S. Alfuso, L. Marchitto, G. Valentino</p> <p>Affiliation: Istituto Motori, CNR - Via Marconi, 8 - 80125 Napoli, ITALY</p>	<p>Paper Number: 220</p> <p>Paper Title: Experiment Study on the Internal Flow Stability for Tangential Entry Conditions in a Swirl Injector</p> <p>Paper Authors: Sunghyuk Kim, Taock Khil, Hoyeon Choi and Youngbin Yoon</p> <p>Affiliation: School of Mechanical and Aerospace Engineering, Seoul National University, Seoul, 151-742, Korea</p>	<p>Paper number: 229</p> <p>Paper title: The Flow Dynamic Simulation and Experiment of Piezoelectric Printhead</p> <p>Paper authors: Wei-Hsiang Lai, Yeong-Jen Wu</p> <p>Author affiliation: Institute of Aeronautics and Astronautics, National Cheng Kung University, Taiwan</p>	<p>Paper Number: 241</p> <p>Paper Title: Dynamics of the Liquid Film produced by Spray Impact under Various Gravity Levels</p> <p>Paper Authors: O. Kyriopoulos, I. V. Roisman, C. Tropea</p> <p>Affiliations: Chair of Fluid Mechanics and Aerodynamics, Technische Universität Darmstadt, 64287 Darmstadt, Germany</p>
11:00 AM	Break/Exhibitors				

Thursday, July 30th 2009 continued AFTER BREAK...

		Mini-Symposia on Cluster/Multi-Port Injection	Mini-Symposia on Sheet/Swirling Sprays	Spray Measurements and Validation	Spray Control
		Session Chairs: Yasuo Moriyoshi and Greg Smallwood	Session Chairs: Stephanie Fest and ??	Session Chairs ??	Session Chairs ??
11:25 AM	Paper 7	<p>Paper number: 119</p> <p>Paper Title: Effect of injection conditions on the spray characteristics of gasoline direct injection (GDI) injectors with different multi-hole configuration</p> <p>Paper authors: Hyung Jun Kim, Su Han Park, and Chang Sik Lee</p> <p>Affiliation: Department of Mechanical Engineering, Hanyang University Seoul, Republic of Korea</p>	<p>Paper Number: 093</p> <p>Paper Title: Image particle sizing of an air blasted liquid sheet of kerosene at intermediate pressure</p> <p>Paper Authors: Christoph Hennig¹, Fabrice Giuliani¹, Stefan Freitag², Christoph Hassa²</p> <p>Affiliation: 1Graz University of Technology, Graz, Austria; 2German Aerospace Center (DLR), Cologne, Germany</p>	<p>Paper number: ICLASS2009-094</p> <p>Paper title: Spray Plume Characteristics at Multiple Cross-Flow Angles, Experimental and Computational Assessments</p> <p>Paper authors: K. M. Bade, W. Kalata, and R. J. Schick</p> <p>Author affiliation: Spray Analysis and Research Services, Spraying Systems Co., Wheaton, IL USA</p>	<p>Paper Number: 115</p> <p>Paper Title: Applying Composite Disturbances to Control Breakup of Capillary Circular Liquid Jets.</p> <p>Paper Authors: Mina Rohani, Derek Dunn-Rankin, Faryar Jabbari_</p> <p>Affiliation: University of California, Irvine</p>
11:50 AM	Paper 8	<p>Paper Number: 135</p> <p>Paper Title: Optimization of Orifices Arrangement for the Maximized Spray Tip Penetration of Wall-Impinging Sprays Injected by Group-Hole Nozzles</p> <p>Paper Authors: S. Moon, Y. Matsumoto and K. Nishida, J. Gao</p> <p>Affiliations: Department of Mechanical System Engineering, University of Hiroshima, Department of Mechanical Engineering, University of Wisconsin-Madison</p>	<p>Paper Number: 050</p> <p>Paper Title: Primary Atomization in Water and Kerosene Liquid Sheets At High Pressure</p> <p>Paper Authors: V. G. Fernandez¹, P. Berthoumieu, G. Lavergne</p> <p>Affiliation: ONERA (French National Aerospace Research Centre), Heterogeneous Multiphase Flows Unit, Aerodynamic and Energetic Models Department, France</p>	<p>Paper Number: 223</p> <p>Paper Title: Quantification of the Transient Mass Flow Rate in a Simplex Swirl Injector</p> <p>Paper Authors: T. Khil, S. Kim, S. Cho and Y. Yoon</p> <p>Affiliation: School of Mechanical and Aerospace Engineering, Seoul National University, Seoul, Korea</p>	<p>Paper Number: 075</p> <p>Paper Title: Feasible Study of Spray and Combustion Control Using Dual Component Fuel Based on Multicomponent Spray Model</p> <p>Paper Authors: Yoshimitsu KOBASHI, Jiro SENDA</p> <p>Affiliation: 1 Department of Mechanical Engineering, Kanazawa Institute of Technology. 2 – Department of Mechanical Engineering, Doshisha University</p>
12:15 PM	CLOSE of Conference				

