

SAE International Journal of Fuels and Lubricants
 Volume 8, Issue 1 (April 2015)
 Table of Contents



Methodology for Predictive Friction Modeling in Direct-Acting Mechanical Bucket Valvetrain System (2015-01-0677).....	1
Marcin Marek Okarmus, Rifat Keribar, Rob Zdrodowski, and Arup Gangopadhyay	
Scuffing Test Rig for Piston Wrist Pin and Pin Bore (2015-01-0680).....	16
Rong Zhang, Qian Zou, Gary Barber, Ben Zhou, and Yucong Wang	
Effect of Surface Roughness and Lubrication on Scuffing for Austempered Ductile Iron (ADI) (2015-01-0683).....	21
Jiman Han, Qian Zou, Gary Barber, and Xichen Sun	
Boosting the Friction Performance of Amine Friction Modifiers with MoDTC (2015-01-0684).....	27
Sarah M. Lundgren, Katja Eriksson, and Brenda Rossenaar	
Wear Properties of Car Engine Shaft in Actual Engine Environment (2015-01-0686).....	31
Kenji Matsumoto, Hideharu Koga, and Yuji Mihara	
Mechanical, Tribological Properties and Surface Characteristics of Developed Polymeric Materials Reinforced by CNTs (2015-01-0690).....	35
Salah H. R. Ali and Badr S. N. Azzam	
Proposed Metrological Method for Identifying Automotive Brake Discs (2015-01-0691).....	41
Salah H. R. Ali, Sarwat Z. A. Zahwi, and Hassan H. Dadoura	
Compatibility Assessment of Elastomeric Infrastructure Materials with Neat Diesel and a Diesel Blend Containing 20 Percent Fast Pyrolysis Bio-oil (2015-01-0888).....	50
Michael D. Kass, Chris Janke, Raynella Connatser, Sam Lewis, James Keiser, and Timothy Theiss	
On the Potential of Oxygenated Fuels as an Additional Degree of Freedom in the Mixture Formation in Direct Injection Diesel Engines (2015-01-0890).....	62
Barbara Graziano, Florian Kremer, Stefan Pischinger, Karl Alexander Heufer, and Hans Rohs	
Compatibility Assessment of Plastic Infrastructure Materials with Off-Highway Diesel and a Diesel Blend Containing 20 Percent Fast Pyrolysis Bio-Oil (2015-01-0893).....	80
Michael D. Kass, Chris Janke, Raynella Connatser, Sam Lewis, James Keiser, and Timothy Theiss	
Compatibility Assessment of Plastic Infrastructure Materials with Test Fuels Representing E10 and iBu16 (2015-01-0894).....	95
Michael D. Kass, Chris Janke, Timothy Theiss, James Baustian, Leslie Wolf, and Wolf Koch	
Experimental and Kinetic Study on Ignition Delay Times of Diethyl Ether (2015-01-0897).....	111
Zihang Zhang, Erjiang Hu, Cheng Peng, and Zuohua Huang	
A Fuel Surrogate Validation Approach Using a JP-8 Fueled Optically Accessible Compression Ignition Engine (2015-01-0906).....	119
Xin Yu, Xi Luo, Marcis Jansons, Doohyun Kim, Jason Martz, and Angela Violi	
Recent Developments in X-ray Diagnostics for Cavitation (2015-01-0918).....	135
Daniel Duke, Andrew Swantek, Alan Kastengren, Kamel Fezzaa, and Christopher Powell	
LES of Diesel and Gasoline Sprays with Validation against X-Ray Radiography Data (2015-01-0931).....	147
Zihan Wang, Andrew Swantek, Riccardo Scarcelli, Daniel Duke, Alan Kastengren, Christopher F. Powell, Sibendu Som, Ronald Reese, Kevin Freeman, and York Zhu	
Quantification of Shot-to-Shot Variation in Single Hole Diesel Injectors (2015-01-0936).....	160
Andrew Swantek, Alan Kastengren, Daniel Duke, Zak Tilocco, Nicolas Sovis, and Christopher F. Powell	

A Novel Approach to Assess Diesel Spray Models using Joint Visible and X-Ray Liquid Extinction Measurements (2015-01-0941)	167
Gina M. Magnotti and Caroline L. Genzale	
Coupled LES Jet Primary Breakup - Lagrangian Spray Simulation of a GDI Multi-Hole Fuel Injector (2015-01-0943)	179
Bizhan Befrui, Mario D'Onofrio, Lee E. Markle, and Peter Spiekermann	
Experimental Characterization of the Thermodynamic Properties of Diesel Fuels Over a Wide Range of Pressures and Temperatures (2015-01-0951)	190
JM Desantes, FJ Salvador, M Carreres, and D Jaramillo	
Effects of Fuel Physical Properties on Auto-Ignition Characteristics in a Heavy Duty Compression Ignition Engine (2015-01-0952)	200
Michael A. Groendyk and David Rothamer	
A Pilot Study of Fuel Impacts on PM Emissions from Light-Duty Gasoline Vehicles (2015-01-9071)	214
Rafal A. Sobotowski, Aron D. Butler, and Zuimdie Guerra	
Experimental Investigation to Study the Influence of Fuel Additive with Pre-Heated Straight Vegetable Oil (SVO) by Comparing the Injection, Combustion and Emission Characteristics of Diesel Engine Based on IR Diagram (2015-01-9072)	234
Pinkesh R. Shah and Anuradda Ganesh	