

28th Annual Meeting and Conference on Tire Science and Technology

Akron City Centre Hotel, Akron, Ohio, USA

Day 1 – Tuesday, September 15, 2009

All Technical Sessions located on the Plaza Level in the Grand Ballroom

7:30 AM	Registration (<i>Plaza Level Lobby</i>)	
8:15 AM	Conference Opening (<i>Plaza Level – Grand Ballroom</i>)	Ed Terrill, Conference Chair
8:20 AM	Welcome (<i>Plaza Level – Grand Ballroom</i>)	Bob Wheeler, President
8:30 AM	Keynote Address (<i>Plaza Level – Grand Ballroom</i>)	Robert Keegan, CEO Goodyear Tire & Rubber
9:00 AM	Break (<i>Refreshments - Plaza Level Lobby</i>)	
9:15 AM	Session 1: Wear / Friction / Rolling Resistance	John Luchini, Session Chair
9:20 AM	1.1 Fracture Mechanisms Underlying Road Wear	Joe Padovan
9:45 AM	1.2 Validation of Steady State Laboratory Lateral Force Slip Characteristics of Small Tires	Rene van der Steen
10:10 AM	Session 2: Vehicle Dynamics	Russ Moser, Session Chair
10:15 AM	2.1 A Modified Dugoff Tire Model for Combined-Slip Forces	Nenggen Ding
10:40 AM	2.2 A Study on the Influence of Tire Properties on SUV Rollover Using the Dynamic Simulation of Fish-Hook Maneuvers	Taeyun Koo
11:05 AM	Break (<i>Refreshments - Plaza Level Lobby</i>)	
11:15 AM	State of the Society (<i>Plaza Level – Grand Ballroom</i>)	Robert Wheeler, President
11:35 PM	Luncheon (<i>19th floor – City View North</i>) Tire Society Distinguished Achievement Award Presentation	Ric Mousseau, Selection Committee Chair
1:30 PM	Session 3a: New Light on Tire Technology (Student Papers)	Marion Pottinger, Session Chair
1:35 PM	3.1 Design, Construction, and Testing of a Portable Tire Test Rig	Brad Hopkins
2:00 PM	3.2 Characterization of Tire Behavior by a Finite Element Method	Vijaykumar Krithivasan
2:25 PM	3.3 An Alternative Technique to Evaluate Crack Propagation Path in Hyperelastic Materials	Renan Ozelo
2:50 PM	3.4 Evaluation of the Contact Pressure Distribution of a Rear Combine Tyre on a Hard Surface	Paula Misiewicz
3:15 AM	Break (<i>Refreshments - Plaza Level Lobby</i>)	
3:30 PM	Session 3b: New Light on Tire Technology (Student Papers)	Marion Pottinger, Session Chair
3:35 PM	3.5 Use of Orthogonal Arrays for Efficient Evaluation of Geometric Designs for Reducing Vibration of a Non-Pneumatic Wheel During High-Speed Rolling	William Rutherford
4:00 PM	3.6 Parameter Estimation and Evaluation of LuGre Tire Friction Model Using Data Collected at Multiple Pavement Surfaces	Madhura Rajapakshe
4:25 PM	3.7 GIXRD and SIMS Analysis of the Rubber-Steel Tire Cord Interface	Prasan Harakuni
4:50 PM	3.8 Effect of Aging on the Morphology of the Rubber-Brass Interfacial Layer	Ahshay Ashirgade
5:15 PM	End of Tuesday's Technical Sessions	
5:15 PM	Reception (<i>19th floor City View Foyer</i>)	(Cash Bar / Hor d'oeuvres)
6:00 PM	Dinner Banquet (<i>19th floor – City View North</i>)	
7:00 PM	Presentation of 2008 Superior Paper Awards and 2009 Student Paper Award	Gary Tubb, Award Chair
7:20 PM	Dinner Speaker: The GM Chevy Volt: Extended-Range Electric Vehicle	Dr. Terry Woychowski, Vice-President GM Global Vehicle Program Management
8:00 PM	Adjourn	

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Day 2 – Wednesday, September 16, 2009

All Technical Sessions located on the Plaza Level in the Grand Ballroom

8:00 AM		Opening/Announcements (<i>Plaza Level – Grand Ballroom</i>)	Ed Terrill, Conference Chair
8:05 AM		Session 4: Noise, Vibration and Harshness	Jan Terziyski, Session Chair
8:10 AM	4.1	Calculation of Dynamic Tire Forces from Aircraft Instrumentation Data	Gary McKay
8:35 AM	4.2	Uniformity: A Crucial Attribute of Tire/Wheel Assemblies	Marion Pottinger
9:00 AM		Break (<i>Refreshments - Plaza Level Lobby</i>)	
9:15 AM		Session 5: Modeling	Osama Hamzeh, Session Chair
9:20 AM	5.1	Optimization of Reinforcement Turn-up Effect on Tire Durability and Performance for Racing Tire Design Finite Element Analysis	Oluremi Olatunbosom (presented in absentia by Hamid Aboutorabi)
9:45 AM	5.2	Prediction of Cord-Rubber Composite and Tire Response Using Nonlinear Continuum Damage Mechanics Approach	Mahmoud Assaad
10:10 AM	5.3	Carbon Fiber-Polyurethane Self-Supporting Airless Tire	Abraham Pannikottu
10:35 AM	5.4	Modeling Material Storage Modulus for Tire Natural Frequency Prediction	Bob Wheeler
11:00 AM		Break (<i>Refreshments - Plaza Level Lobby</i>)	
11:10 AM		Plenary Lecture (<i>Plaza Level – Grand Ballroom</i>) Advances and Changes in Tire Science and Technology	Marvin Janssen, Retired Tire Engineer
11:50 PM		Lunch – On your own	
1:05 PM		Session 6: Structural Performance	Saied Taheri, Session Chair
1:10 PM	6.1	Inflation Pressures at Less Than Maximum Tire Loads	John Daws
1:35 PM	6.2	Mathematical Model of the Effective Properties of a Fiber Reinforced Composite with a Linearly Graded Transition Zone	Carey Childers
2:00 PM		Session 7: Durability/Tire Testing/Tire Building	Rusty Adams, Session Chair
2:05 PM	7.1	ASTM Committee F09.30 Task Group Update on Commercial Truck/Bus Tire Test Practice Development	Jim Popio
2:30 PM	7.2	Erroneous or Arrhenius - Potential Impact of Oven Temperature Variations on Laboratory Aging of Tires	Greg Altman
2:55 PM	7.3	Correlated Dual Sheet-of-Light Measurement of Preparation Material	Oliver Scholz
3:20 PM		Break (<i>Refreshments - Plaza Level Lobby</i>)	
3:35 PM		Session 8: Materials/Materials Development	John Harris, Session Chair
3:40 PM	8.1	Investigation of the Microscopic Viscoelastic Property for Crosslinked Polymer Network by Molecular Dynamics Simulation	Yuuki Masumoto
4:05 PM	8.2	Network Evolution During Intensive Service in Large OTR Tire Compounds – Evidence for “Double Network” Formation.	Fred Ignatz-Hoover
4:30 PM	8.3	UTQG Tire Traction Rating Comparisons with 0°C Tan Delta and Coefficient of Friction Compound Measurements	Ed Terrill
4:45 PM		Closing remarks (<i>Plaza Level – Grand Ballroom</i>)	
5:05 PM		End of Conference	