

36th Annual Meeting and Conference on Tire Science and Technology

Day 1 - Tuesday September 12, 2017

All Sessions take place in Akron/Summit Ballroom

7:00 AM		Registration (Fairlawn Hilton until 5pm)	
8:00 AM	10	Welcome (Akron/Summit Ballroom)	Randy Jenniges, <i>President of Society</i>
8:10 AM	60	Keynote Speaker	
		<i>The Future of Mobility: How Customer Requirements will Shape Tire Technology</i>	Dr. Juan Botero <i>Continental AG</i> <i>VP Sales, OE Passenger & Light Truck Tires, The Americas Tire Division</i>
9:10 AM	5	Opening Remarks	Joshua Herron, <i>Conference Chair</i>
9:15 AM	5	Session 1: Tire Performance	Brian Steenwyk, Bridgestone
9:20 AM	30	1.1 3-D Modal Analysis of a Loaded Tire	Ipar Ferhat <i>Virginia Tech</i>
9:50 AM	30	1.2 Experimental Investigation of the Tractive Performance of Pneumatic Tires on Ice	Emilio Jimenez <i>Virginia Tech</i>
10:20 AM	20	Break / Refreshments	
10:40 AM	5	Session 2: Material Technology	Janice Tardiff, Ford Motor Co.
10:45 AM	30	2.1 A Study of Compounding and Mixing methodology for Good Performance of EPDM in Tyre Sidewalls	Zhaoya Qiu <i>ARLANXEO USA</i>
11:15 AM	30	2.2 Characterizing the Intrinsic Strength of Natural Rubber / Butadiene Rubber Blends	Chris Robertson <i>Endurica</i>
11:45 AM	30	2.3 Modified Soybean Oil as a Processing Oil for SBR Tire Tread Compounds	Dean C. Webster <i>North Dakota State Univ.</i>
12:15 PM	75	Lunch (Provided)	
1:30 PM	5	Session 3: New Light on Tire Technology	Celal Batur, Univ. of Akron
1:35 PM	30	3.1 A Calculation Aero-Acoustic Study of Spokes of an Isolated Non-Pneumatic Tire	Mufeng Huang <i>Jiangsu University</i>
2:05 PM	30	3.2 Designing a New Dynamic Mechanical Analysis (DMA) System for Testing Viscoelastic Materials at High Frequencies	<i>Roja Esmaeeli</i> <i>University of Akron</i>
2:35 PM	30	3.3 On Isogeometric Analysis for Tire Simulation at Steady State Rolling	Mario A. Garcia <i>Univ. Dresden</i>
3:05 PM	20	Break / Refreshments	
3:25 PM	5	Session 4: New Light on Tire Technology	Bart Kimble, Goodyear
3:30 PM	30	4.1 Tire Contact Stress/Health Assessment using Acoustic Emissions	Arash Nouri <i>Virginia Tech</i>
4:00 PM	30	4.2 Tire particle emissions: demand on reliable characterization	Maria E. Dalmau <i>Technische Universität Ilmenau</i>
4:30 PM	30	4.3 The Effect of Rubber Hardness and Tire Size on Tire-Pavement Interaction Noise	Tan Li <i>Virginia Tech</i>
5:00 PM	60	Reception	
6:00 PM		Awards Banquet	
		<i>Racing toward perfection (R2P) 50+ Years of Winning at Team Penske</i>	John Moloeny <i>General Manager - Penske Racing Team</i>
8:00 PM	5	Close of Day 1	

Day 2 - Wednesday September 13, 2017

All Sessions take place in Akron/Summit Ballroom

7:30 AM		Registration (Fairlawn Hilton until 5pm)	
8:00 AM	5	Opening Remarks	Joshua Herron, <i>Conference Chair</i>
8:05 AM	20	State of the Society	Randy Jenniges, <i>President of Society</i>
8:25 AM	5	Session 5: Simulations	Kejing Li, Hankook Tire Co.
8:30 AM	30	5.1 Accounting for Thermal Effects in Tire Durability via a Critical-Plane-Analysis-compatible Microsphere Model	Will Mars <i>Endurica</i>
9:00 AM	30	5.2 Effect of cam parameters in the tandem cam enveloping model on short obstacles using DOE approach	Vikas Birajdar <i>Kettering Univ./GM</i>
9:30 AM	30	5.3 Optimization of tire design and construction parameters for cornering stiffness of temporary spare tires in passenger car vehicle category	Deepti Soni <i>JK Tyre</i>
10:00 AM	20	Break / Refreshments	
10:20 AM	5	Session 6: Simulations	Chris Robertson, Endurica
10:25 AM	30	6.1 On the development of creep law for rubber in the Parallel Rheological Framework	G. Sagar <i>Continental</i>
10:55 AM	30	6.2 Viscoelastic Material Calibration Procedure for Rolling Resistance Calculation	Pablo Zitelli <i>Fate Tire</i>
11:25 AM	90	Lunch (Provided)	
1:00 PM	60	Plenary Lecture	
		<i>Tire finite element modeling - how we got where we are and where we are headed.</i>	Dr. Ron Kennedy <i>Managing Director - Center for Tire Research (CenTiRe)</i>
2:00 PM	5	Session 7: Tire Vehicle System	Yusheng Chen, Cooper Tire
2:05 PM	30	7.1 Tire Vibration Considerations in Vehicle Based Tire Testing	Anton Albinsson <i>Chalmers University of Technology,</i>
2:35 PM	20	Break / Refreshments	
2:55 PM	5	Session 8: Experimental Technologies	Matt Schroeder, Cooper Tire
3:00 PM	30	8.1 Actual Measurement of Inner Surface Deformation of Tire during Getting Over Steps	Tomoaki Iwai <i>Kanazawa University</i>
3:30 PM	30	8.2 Characterization of Thermal Influences on Tire Force and Moment Properties	Henning Olsson <i>Calspan</i>
4:00 PM	30	8.3 Experimental Measurement of In-plane Rolling Tire Vibrations Using High Speed Imaging	Meghashyam Panyam <i>Clemson/Michelin</i>
4:30 PM	5	Close of Conference	Joshua Herron, <i>Conference Chair</i>

Speakers and times are subject to change