

Registration Fees

Fee includes luncheon & dinner banquet

Current⁺ or New/Renewing* Members:

Regular.....	\$200.00
Retiree / Unemployed.....	\$100.00
Full-Time Student	\$50.00
Non-Member.....	\$250.00

* A current member renewed membership /paid dues following the previous annual conference and prior to the current conference.

Membership fee also required (see below)

Register online at www.tiresociety.org.

To ensure the timely preparation of the conference materials, advanced registration before September 1, 2011 is highly recommended.

Membership Fees[#]

Regular	\$100.00
Retiree / Unemployed.....	\$25.00
Full-Time Student	\$15.00

Benefits include free online access to journal articles, discounts to printed journal and conference

Hotel Accommodations

A block of rooms has been reserved at special rates for Tire Society conference participants at

Hilton Akron/Fairlawn

3180 W. Market Street.

Akron, Ohio, USA 44333

Telephone: (800) 445-8667

Web: www.akronhilton.com

Special Conference Rate: \$119 single
(Rate guaranteed before Sept. 1, 2011.)

Parking

Free parking is available adjacent to the Hotel.

The Tire Society

P.O. Box 1502

Akron OH 44309-1502, USA

Phone: (330) 972-7814

Fax: (330) 972-5269

Email: office@tiresociety.org

Advance Conference Schedule

Quick Reference

Pre-Conference - Monday, Sept 12

6:00p ... **Editorial Bd. Dinner:** Beau's Grille

6:00p ... **Program & Session Chair Dinner:** Beau's

Day 1 - Tuesday, Sept 13

7:00a **Registration** (all day)

7:00a **Breakfast - Day 1 Presenters, Session Chairs:** Beau's Grille

Day 1 Presentations: Akron/Summit Ballroom

8:00a **Opening:** Saied Taheri, Program Chair

8:10a **Welcome:** Dale Moseley, President

8:15a **Keynote Address:** Terry Connolly,
Director of Tire & Wheel Systems, GM

8:45a **Friction & Wear:** 3 Presenters

10:05a..... **Break / Refreshments**

10:15a... **Student I:** 4 Presenters

12:00p **Lunch:** Provided, Conrad Ballroom

Distinguished Achievement Award Presentation

1:30p **Student II:** 4 Presenters

3:15p **Break / Refreshments**

3:30p **Rolling Resistance:** 3 Presenters

4:50p **Day 1 Technical Sessions Closing**

Awards Banquet: Conrad Ballroom

5:30p **Reception**

6:30p **Dinner Banquet**

7:00p **Best Paper Awards:** Gary Tubb, Awards Chr

7:20p **Dinner Speaker:** Don Palac, NASA Glenn

8:00p **End of Day 1**

Day 2 - Wednesday, Sept 14

7:00a **Breakfast - Day 1 Presenters, Session Chairs:** Beau's Grille

8:00a **Registration** (half day)

Day 2 Presentations: Akron/Summit Ballroom

8:00a **Opening:** Saied Taheri, Program Chair

8:10a **State of Society:** Dale Moseley, President

8:30a **FEA I:** 3 Presenters

9:50a **Break / Refreshments**

10:05a... **FEA II:** 3 Presenters

11:25a... **Plenary Lecture:** Steve Karamihas ,
U. of Michigan Transportation Research Inst.

12:00a **Advisory Board Meeting**

12:00a **Lunch Break**

1:15p **Modeling & Simulation:** 3 Presenters

2:35p **Break / Refreshments**

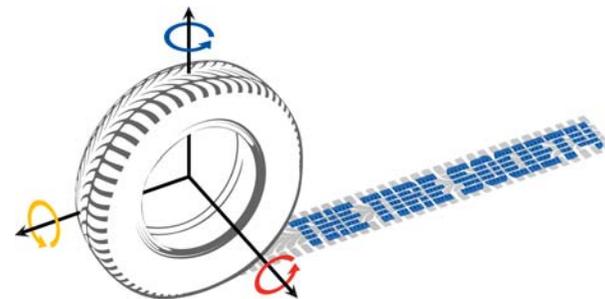
2:50p **Testing:** 3 Presenters

4:10p **Break**

4:15p **Tire Road Contact:** 2 Presenters

5:10p **Closing Remarks**

Advance Program Schedule & Registration Information



30th Annual Meeting and Conference on Tire Science and Technology

September 13 & 14, 2011
Hilton Akron/Fairlawn
Akron, Ohio, USA

www.tiresociety.org

Advance Presentation Schedule (Times, Presentation Titles & Presenters)

Conference Program Committee

Chair: *Saied Taheri*, Virginia Tech
Co-Chair: *Lin Kung*, Nexen Tire

Tuesday September 13, 2011

8:15 AM-8:45 AM **Keynote Address: Does Re-Inventing the Automobile Include Re-Inventing the Tire?**
Terry Connolly, Director, General Motors Tire/Wheel Systems

8:45 AM-10:05 AM **Friction and Wear**
Chair: *James Cuttino*, Camber Ridge, LLC

8:50 AM - 9:15 AM **Analysis of the Influence of Driving Dynamic Parameters On Tire Marks,**
Gunther Seipel, Technische Universität Darmstadt

9:15 AM - 9:40 AM **An Analytic Thermo Dynamical Approach to Friction of Rubber on Ice,**
Klaus Wiese, Continental Tire

9:40 AM - 10:05 AM **Lab Test Based Wear Performance Prediction of Tread Compounds ,**
Frank Schmerwitz, Continental Tire

10:15 AM-12:00 PM **New Light on Tire Technology 1 (Student Competition);**
Chair: *Marion Pottinger*, M'gineering

10:20 AM - 10:45 AM **A Novel Approach for Thermomechanical Analysis of Stationary Rolling Tires within An ALE-Kinematic Framework**
Anuwat Suwannachit, Leibniz Universität Hannover

10:45 AM - 11:10 AM **Anti-Lock Brake System Control Using An Innovative Intelligent Tire-Vehicle Integrated Dynamic Friction Estimation Technique**
Kanwar Bharat Singh, Virginia Tech

11:10 AM - 11:35 AM **Accelerometer Measurements of Tire Carcass Vibrations and Implications to Tire-Pavement Noise**
Tyler Dare, Purdue University

11:35 AM - 12:00 PM **Interaction of Anti-Lock Braking Systems with Tire Torsional Dynamics**
John Adcox, Clemson University

12:00 AM-1:30 PM **Lunch & Distinguished Achievement Award Presentation,**
Award Chair: *Steve Vossberg*, Bridgestone Americas

1:30 PM-3:15 PM **New Light on Tire Technology 2 (Student Competition);**
Chair: *Kory Smith*, Bridgestone Americas

1:35 PM - 2:00 PM **An Implicit to Explicit FEA Solving of Tire F&M with Detailed Tread Blocks**
Zhao Li, University of Science and Technology China

2:00 PM - 2:25 PM **Measurement of Water Film Thickness Due to Sipe Edges of Studless Tire**
Akihiro Takim, Kanazawa University

2:25 PM - 2:50 PM **Evaluation of the Holistic Method to Size a 3-D Wheel-Soil Model**
Timothy Reeves, Clemson University

2:50 PM - 3:15 PM **Observation of Water Behavior in the Contact Area Between Porous Rubber and Mating Surface During Sliding**
Yusuke Minami, Kanazawa University

3:30 PM-4:50 PM **Rolling Resistance;**
Chair: *Patrick Keating*, Yokohama Tire

3:35 PM - 4:00 PM **On Road Fuel Consumption Testing to Determine the Sensitivity Coefficient Relating Changes In Fuel Consumption to Changes In Tire Rolling Resistance**
Calvin Bradley, Michelin Americas

4:00 PM - 4:25 PM **How Low Can We Go - A Study On Minimum Rolling Resistance**
Timothy Rhyne, Michelin Americas

4:25 PM - 4:50 PM **Tire Fuel Efficiency - Rolling Resistance, Traction, Tread Wear - the Optimum Oil to Get You There**
Steven Tranguch, H&R Group US

7:00 PM-7:20 PM **Awards Banquet - Superior Paper Awards Presentation**
Awards Chair: *Gary Tubb*, Goodyear Tire (Retired)

7:20 PM-8:00 PM **Awards Banquet - Dinner Speaker: Future Space Exploration Technology Challenges**
Donald Palac, NASA Glenn

Wednesday September 14, 2011

8:10 AM-8:30 AM **State of The Society**
President: *Dale Moseley*, Goodyear Tire

8:30 AM-9:50 AM **FEA I**
Chair: *Mohammed Sobhanie*, Goodyear Tire

8:35 AM - 9:00 AM **Optimized and Robust Design of Tires Based On Numerical Simulation**
Michael Kaliske, Technische Universität Dresden

9:00 AM - 9:25 AM **Investigating Applicability of the Meshfree Method to the Structural Analysis of Tires**
Takehiro Noda, Toyo Tire & Rubber

9:25 AM - 9:50 AM **Effectiveness of Tetrahedral Finite Elements In Modeling Tread Patterns for Rolling Simulations**
Harish Surendranath, Dassault Systemes SIMULIA

10:05 AM-11:25 AM **FEA II**
Chair: *Josh Herron*, Hankook Tire

10:10 AM - 10:35 AM **Prediction of Temperature Distribution of Steady State Rolling Tires**
Emily Ledbury, Mississippi State University

10:35 AM - 11:00 AM **An Enhanced Finite Element Tire Model for Vehicle Crash Simulations**
Emmanuel Bolarinwa, Federal Highway Administration US

11:00 AM - 11:25 AM **Effects of Road Surface Texture to Tire Structural Borne Noise**
Xianwei Meng, Goodyear Tire

11:25 AM-12:00 PM **Plenary Lecture: The State of Research on Smooth, Safe, and Quiet Pavements in the U.S.**
Steve Karamihas, UMTRI

1:15 PM-2:35 PM **Modeling & Simulation**
Chair: *Victor Li*, Goodyear Tire

1:20 PM - 1:45 PM **Pull: The Science of a Nuisance**
Marion Pottinger, M'gineering, LLC.

1:45 PM - 2:10 PM **Efficient Acquisition of Tire Data & Its Application In Vehicle Handling Simulation**
Henning Olsson, OptimumG

2:10 PM - 2:35 PM **Nonlinear Viscoelastic Constitutive Law for Unvulcanized Carbon Black Filled Rubbers**
Mahmoud Assaad, Goodyear Tire

2:50 PM-4:05 PM **Testing**
Chair: *Randy Cooper*, Yokohama Tire

2:55 PM - 3:20 PM **Advances In Fully Automatic Splice Quality Monitoring**
Oliver Scholz, Fraunhofer Institute for Integrated Circuits IIS

3:20 PM - 3:45 PM **Development of the Measurement Method of a Rotating Tire Surface Strain**
Ryoji Hanada, Tire Performance Simulation Lab. R&D Center, Japan

3:45 PM - 4:10 PM **Tire Testing - Meeting the Needs of Tomorrow**
James Cuttino, Camber Ridge, LLC

4:15 PM-5:10 PM **Tire Road Contact**
Chair: *Xianwei Meng*, Goodyear Tire

4:20 PM - 4:45 PM **Experimental and Computational Studies of Contact Mechanics for Tire Longitudinal Response**
Jacob Kidney, Bridgestone Americas

4:45 PM - 5:10 PM **Towards Tire-Road Contact Stresses and Pavement Design**
Morris De Beer, CSIR, South Africa

This is an advance schedule and is subject to change; refer to the web site for updates.