

Registration Fees

Fee includes luncheon & dinner banquet

Current Member ⁺	no cost
New Member or Member Renewal*	\$250.00
Current Retiree Member ⁺	no cost
New Retiree Member or Renewal*	\$100.00
Full Time Students**	\$50.00

⁺ To qualify, member must have dues paid prior to Sept. 1, 2010; registration form submittal still required

* Includes annual membership in The Tire Society & subscription to *Tire Science and Technology Journal*

** Covers only conference activities (students must provide proof of full-time status).

To ensure the timely preparation of the conference materials, advanced registration before September 1, 2010 is highly recommended.

Register online at www.tiresociety.org.

Hotel Accommodations

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

DoubleTree Akron/Fairlawn

3150 W. Market Street.

Akron, Ohio, USA 44333

Telephone: (330) 869-9000

Web: www.doubletreeakron.com

Special Conference Rate: \$99 single

(Rate guaranteed before Sept. 11, 2010.)

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 - Sunday, Sept 19

4:00p ...	Editorial Board Meeting: Oak Room
6:00p ...	Editorial Bd. Dinner: Beau's Grille (Hilton)
6:00p ...	Program & Session Chair Dinner: Beau's

Day 1 - Monday, Sept 20

7:00a ...	Registration: Prefunction Lobby (all day)
7:00a ...	Breakfast: Day 1 Presenters &

Session Chairs: Cafe Bricco

Day 1 Presentations: Aspen Ballroom

8:15a	Opening: Barry Yavari, Program Chair
8:20a	Welcome: Bob Wheeler, President
8:30a ...	Keynote Address: Seung Hwa Suh, CEO & Vice Chairman, Hankook Tire

9:05a ...	Friction & Rolling Resistance: 2 Presenters
10:00a	Break / Refreshments: Prefunction Lobby
10:15a ...	New Light on Tire Tech. 1: 4 Presenters
12:00p ...	Lunch: Provided by Tire Society, Conrad Ballroom (Hilton)

1:15p ...	New Light on Tire Tech. 2: 5 Presenters
3:00p	Break / Refreshments: Prefunction Lobby
3:40p ...	Materials: 3 Presenters
5:00p	Day 1 Technical Sessions Closing

Awards Banquet: Conrad Ballroom (Hilton)

5:30p ...	Reception
6:30p ...	Dinner Banquet
7:00p ...	Best Paper Awards: Gary Tubb, Awards Chr
7:20p ...	Dinner Speaker: David Cole, Center for Automotive Research (CAR)
8:00p ...	End of Day 1

Day 2 - Tuesday, Sept 21

7:00a ...	Breakfast: Day 1 Presenters &
	Session Chairs: Cafe Bricco

8:00a ...	Registration: Prefunction Lobby (half day)
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Day 2 Presentations: Aspen Ballroom

8:00a	Opening: Barry Yavari, Program Chair
8:10a ...	State of Society: Bob Wheeler, President

8:35a ...	NVH (part 1): 3 Presenters
9:55a	Break / Refreshments: Prefunction Lobby
10:10a ...	NVH (part 2): 2 Presenters

11:00a ...	Plenary Lecture: Yukio Nakajima, Kogakuin University
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11:45a	Advisory Board Meeting: Birch Room
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11:45a ...	Lunch Break
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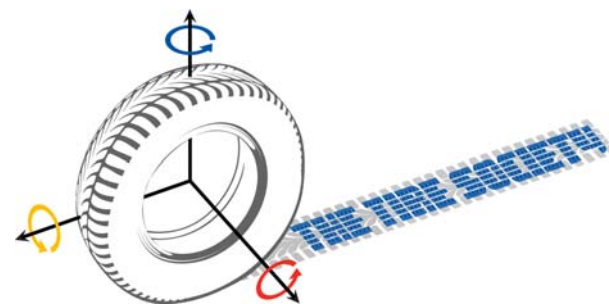
1:15p ...	Simulation: 4 Presenters
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3:00p	Break / Refreshments: Prefunction Lobby
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4:00p ...	Aging & Testing: 4 Presenters
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5:20p ...	Closing Remarks
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Advance Program Schedule & Registration Information



29th Annual Meeting and Conference on Tire Science and Technology

**September 20 & 21, 2010
DoubleTree Akron/Fairlawn
Akron, Ohio, USA**

www.tiresociety.org

Advance Presentation Schedule (Times, Presentation Titles & Presenters)

Conference Program Committee

Chair: *Barry Yavari*, Goodyear Tire
Co-Chair: *Saied Taheri*, Virginia Tech

Monday September 20, 2010

8:30 AM-9:00 AM **Keynote Address: Tire Industry Opportunities and Challenges**
Seung Hwa Suh, CEO & Vice Chairman,
Hankook Tire

9:05 AM-10:00 AM **Friction and Rolling Resistance**
Chair: *Ben Wen*, Goodyear Tire

9:10 AM - 9:35 AM **Investigation of Friction Mechanisms of Siped Tire Tread Blocks on Snowy and Icy Surfaces**,
Stefan Ripka, Leibniz Universität Hannover

9:35 AM - 10:00 AM **Rolling Resistance of a Non-Pneumatic Tire Having a Porous Elastomer Composite Shear Band**,
Jaehyung Ju, Clemson University

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 **Experimental and Numerical Study of Friction and Handling Characteristics of Rolling Tires**
René van der Steen, Eindhoven University of Technology

10:45 AM - 11:10 AM **An Investigation Into Wheel Sinkage on Soft Sand**
Noel Hathorn, MEng, Cranfield University

11:10 AM - 11:35 AM **Derivation of LuGre Tire Parameters Using Laboratory Tests**
Madhura Rajapakshe, University of South Florida

11:35 AM - 12:00 PM **An off-Road Tire Model for Vehicle Handling Studies**
Brad Hopkins, Virginia Tech

1:15 PM-3:25 PM **New Light on Tire Technology 2 (Student Competition)**;
Chair: *Kory Smith*, Bridgestone Americas

1:20 PM - 1:45 PM **Tapered Aluminum Structure Shear Band for a Non-Pneumatic Tire**
Luke Berglind, Clemson University

1:45 PM - 2:10 PM **Tire Surface Vibration and Sound Radiation Resulting From the Tire Cavity Mode**
Andrew Jessop, Purdue University

2:10 PM - 2:35 PM **Piezoelectric Vibration-Based Energy Harvesters for Next Generation Intelligent Tires**
Kanwar Bharat Singh, Virginia Tech

2:35 PM - 3:00 PM **Sensor Module Development for Study of Tire Deformation**
Vijaykumar Krithivasan, Auburn University

3:00 PM - 3:25 PM **Numerical Study of Vibration of An Alternating Spoke Pair Design Concept**
Shashank Bezgam, Clemson University

3:40 PM-5:00 PM **Materials**;
Chair: *Vijayanand Muralidharan*, Goodyear Tire

3:45 PM - 4:10 PM **An Implementation of Component Material Damping for Tire Vibration Simulations**
Bob Wheeler, Hankook Tire

4:10 PM - 4:35 PM **Application of A Simplified Viscoelastic Model to 3-D Simulation of Rubber Extrusion Flow**
Minwu Yao, Goodyear Tire

4:35 PM - 5:00 PM **Mechanics of Bend-Over-Sheave (Shoeshine) Fatigue Testing of Cord-Rubber Laminates**
Philippe van Bogaert, ir, Bogimac

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

7:20 PM-8:00 PM **Awards Banquet - Dinner Speaker: Today's Turbulence: A Foundation for Future Automotive Success**
David Cole, Center for Automotive Research (CAR)

Tuesday September 21, 2010

8:10 AM-8:35 AM **State of The Society**
President: *Bob Wheeler*, Hankook Tire

8:35 AM-11:00 AM **Noise, Vibration, and Harshness (NVH)**
Chair: *Ric Mousseau*, Michelin Americas

8:40 AM - 9:05 AM **Application of Coupled Structural Acoustic Analysis and Sensitivity Calculations to a Tire Noise Problem**
Hamid Aboutorabi, Kumho Tire

9:05 AM - 9:30 AM **Influence of Tire Design Parameters on Vehicle Gravel/Sand Noise**
Kiho Yum, Hyundai Motor Company

9:30 AM - 9:55 AM **Directionality of Tangential Force Variation In High Speed Uniformity**
Desheng Li, Goodyear Tire

10:10 AM - 10:35 AM **A Training Method for Improving Tire Noise Subjective Evaluation Ability**
Dongsoo Kang, KAIST

10:35 AM - 11:00 AM **A New Approach to Tire Parameter Identification**
Dietmar Weber, Fraunhofer LBF

11:00 AM-11:45 AM **Plenary Lecture: Application of Computational Mechanics to Tire Design – Yesterday, Today and Tomorrow**
Yukio Nakajima, Kogakuin University

1:15 PM-3:00 PM **Simulation**
Chair: *Hamid Aboutorabi*, Kumho Tire

1:20 PM - 1:45 PM **Parallel Computing for Tire Simulations**
Harish Surendranath, SIMULIA Corp.

1:45 PM - 2:10 PM **Applications of Abaqus' Coupled Eulerian-Lagrangian Technology to Modeling Tire Interactions**
Vivek Katiyar, SIMULIA Corp

2:10 PM - 2:35 PM **Study on the Indoor Wear Prediction by Using Explicit FE Simulation**
SangHyeub Kim, Hankook Tire

2:35 PM - 3:00 PM **Load Capacity Improvement of the Current Lunar Roving Vehicle(LRV) Nonpneumatic Tire by Finite Element Analysis**
Thulasiram Gobinath, Goodyear Tire

3:15 PM-5:00 PM **Aging & Testing**
Chair: *Sam Knisley*, Hankook Tire

3:20 PM - 3:45 PM **Nitrogen Inflation for Passenger Car and Light Truck Tires**
John Daws, Daws Engineering, LLC

3:45 PM - 4:10 PM **Gas Transport In the Tire Aging Test and Intra-Carcass Pressure Issues**
Vladimir Kerchman, Kumho Tire

4:10 PM - 4:35 PM **The Role of Tire Overturning Moment In Steering**
Douglas Blue, Ford Motor Company

4:35 PM - 5:00 PM **Developing the Next Generation In Tire Testing**
James Cuttino, Camber Ridge, LLC

Please note this is an advance schedule and is subject to change; refer to the web for updates.