



# NEWSLETTER

July 2022

*Please forward our Tire Society newsletters to any colleagues and friends you think might be interested in learning more about the Tire Society and our mission to increase and disseminate knowledge of the science and technology of tires.*

**Register today to qualify for Early Bird Discount!**

## Wide-Ranging list of papers expected at Tire Society Conference

The [Tire Society](#) has scheduled a wide array of interesting and significant original works for presentation at the **41<sup>st</sup> Conference on Science and Technology**, to be held September 12<sup>th</sup> and 13<sup>th</sup> at the University of Akron. To see the papers, go to the [Conference Site](#) and click the “[Draft Program](#)” button on the right. This annual Conference attracts engineers and scientists from around the world, representing the tire and vehicle industries, academia and governmental agencies. The papers will cover a wide range of tire applications, ranging from passenger, high performance, truck and electric vehicles to off-highway, including aircraft to the *really, really, really far* off-highway Mars Rover. Register by the end of July and you'll qualify for the **Early Bird discount**.



Author affiliations include five tire companies, six vehicle manufacturers, ten universities, eight software and testing providers and five institutes/consultants. As expected with this year's theme of *New Horizons in Tire Evaluation*, papers will cover the characterization of tire performance, both physically and with vehicle simulators. Other subjects include numerical predictive methods, data analytics, tire performance and tire construction and rubber compound development.

As featured in last month's Newsletter, our invited speakers will include Alexis Garcin, Chairman and President, Michelin North America, for the Keynote Address; Tracey Norberg, Senior Vice President and General Counsel, US Tire Manufacturers Association, for the Plenary Lecture; and Nohoon Ki, Engineering Manager at John Deere, for the Awards Banquet.

As an informative and thought-provoking change of pace, we look forward to an engaging panel discussion, entitled *The Future of Tire Testing*. The eclectic panel will be moderated by Heather Bobbitt, Tire Modeling Group Manager, General Motors, and she will be joined by (in alphabetical order) Christian Bachmann, Senior Manager Tyre Technology, FKA GmbH; Henning Olsson, Director of Technology, Calspan Corporation; Jonathan Darab, Operations Director, Global Center for Automotive Performance Simulation (GCAPS); Matt Kent, Technical Director of Tire & Wheel Test Lab, Smithers, USA; Sonny Huisman, Manager, Siemens Digital Industries Software.

These experts will discuss the challenges ahead for the Tire Industry and will provide insights into the next steps in tire testing. Predictive methods in our emerging “digital twin” era require improved testing methods to understand the physics of tire mechanical behavior under circumstances that can cause uncertainty in virtual assessment. Temperature effects, wear behavior, wet surfaces, soil interaction and snow sinkage are some of the factors that are not necessarily well understood or integrated when a vehicle-level assessment is concerned. The testing requirement in development of specialty tires for racing, agricultural or heavy industrial applications will remain a challenge for both characterization and parameterization. Big data, machine learning algorithms and databasing methods and increased leverage of simulation environments are key enablers for faster turnaround in early vehicle development, which is emerging as a OEM requirement.

We are excited about returning to in-person conferencing after a two-year hiatus due to the pandemic. Recognizing that travel may not be possible for all potential attendees, the Society will be leveraging some of the learning from the last two years' virtual conferences. This year's conference will feature a hybrid format, where registrants, whether able to attend in person or not, will be able to re-play on demand the videotaped papers, lectures and events. For more information or to register, please visit <https://www.tiresociety.org/conference>.

# Tire Week in Akron is Proclaimed!

With the return of the Tire Society Conference to the University of Akron, where it started, and with the International Tire Exhibition and Conference (ITEC), the largest tire manufacturing event in North America, being held at the John S. Knight Center, visitors gain a broader understanding of the different aspects of the Tire Industry by taking advantage of **“Tire Week in Akron”**, which is officially proclaimed by the Mayor of Akron to be September 12-16.

Hosting the Conference at the University of Akron provides additional benefits beyond the nostalgia of returning to where it was hosted from 1982 through 1997. It gives an “up close and personal” opportunity for the assembled tire experts to interact with a younger generation of energetic minds. One entertaining and informative addition will be the “Zips Racing” display by the University’s Formula SAE team. These inventive students that assemble award-winning racing cars will set up right outside the hall where the papers are being presented. Student Papers have been a mainstay of the Society for years, but, a new feature being added to the program, working jointly with the University, is a Student Poster contest. Like the Student Papers, the Student Posters will be judged competition and the best poster will receive an award. Organized by Dr. Jae-Won Choi of the University of Akron, the poster session provides an opportunity for student presenters from top universities to meet, present their ideas and engage in discussions with technologists from the tire industry. Expected topics include Future Trends and Emerging Technologies, Tire Materials, Tire Performance, Tire Road Interaction, Tire Data Science and Virtual Design. The students with their posters which will also be set up right outside the Conference Hall and there will be time in the program for lively and eye-opening discussion with the presenters.

One mile away, the International Tire Exhibition and Conference, organized by Rubber News, features a three-day trade show with key suppliers to the industry showcasing their latest solutions and an additional technical conference program with more than 50 presenters. There will be keynote presentations from The Goodyear Tire and Rubber Company and the U.S. Tire Manufacturers Association, and additional presentations covering topics including sustainable solutions for tires, characterization tools and techniques, developments in tire testing, advances in machinery, automation, quality control, and much more. Additional ITEC event features include the 2022 Harold Herzlich Award presentation, Women’s Breakfast and Seminar, ITEC Brews & Bites networking, and the Tire Mechanics Short Course (certified by The University of Akron). Free registration for entry to the exhibition is available through August 12, 2022. For more information, visit [itec-tireshow.com](http://itec-tireshow.com).

## What you are missing besides Conference if you are not a member

The non-profit Tire Society’s core mission is to disseminate knowledge and to stimulate scientific and engineering development in the science and technology of tires, and at the heart of this is the authoritative, critically reviewed Journal of [Tire Science and Technology](#). As a member, you would have unlimited on-line, searchable access to 49 years of groundbreaking original works in tire technology and research. Membership is economical at \$150 per year, with discounted rates of \$40 and \$25 for retirees and students respectively and it is a pre-requisite for Conference Registration. Print access is also available, for an additional fee. In addition to the articles, members enjoy access to the Newsletter archive.

As a member you can expect access to quarterly issues each of which typically has four to five critically-reviewed original works. And with the new OnLine First feature, members can read the articles as soon as they are accepted and through the review process. Examples of the range of top-quality research in the Journal are the latest works posted on OnLine First: Friction Law for Rubber from Laboratory Abrasion Tester; Data-Driven Multiscale Science for Tread Compounding; and Active and Semiactive Suspension Systems for Minimizing Tire Wear in Articulated Vehicles.

For more information or to become a member, visit <https://www.tiresociety.org/membership>.



### Proclamation

To The People of Akron:

**Whereas:** Tires are an indispensable component of our transportation system and are relied upon by 92% of American households in their daily lives; and

**Whereas:** Akron, the historically and aptly named *Rubber Capital of the World*, remains the hub for tire technology, with Technical Centers for some of the top twenty-five tire companies located in greater Akron; and

**Whereas:** During a single week this September, approximately 1,500 experts and technologists from around the world are expected to attend several tire industry events in Akron including:

The Tire Society’s 41<sup>st</sup> Annual Science and Technology Conference to be held at The University of Akron;

The 15<sup>th</sup> Biennial International Tire Exhibition & Conference, the largest tire manufacturing show in North America, to be held at the J.S. Knight Center;

The 51<sup>st</sup> Tire Mechanics Short Course, hosted by The University of Akron’s College of Engineering and Polymer Science.

**Now, Therefore:** I, Daniel Harrigan, Mayor of the City of Akron, Ohio, do hereby proclaim September 12-16, 2022, as:

### “Tire Week in Akron”

and welcome those who will travel to our city to attend a tire industry event.

**In Witness Whereof:** I have hereunto set my hand and caused the Seal of the City of Akron to be affixed hereon this 20<sup>th</sup> day of July 2022.



*[Signature]*  
Mayor  
City of Akron



**2022 Conference Sponsors:**  
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