The Tire Technology Conference is the most highly regarded annual tire conference in the world, with attendees coming from more than 45 countries. Delegates will have the opportunity to see presentations over three days. Speakers are selected from among the world’s leading experts on tire development and manufacturing. This respected conference, coupled with an impressive exhibition, makes the event essential for anyone involved in the tire-making process! Read on for more information…
Speakers at the 2015 conference will include:

The Robert William Thomson Lecture
Kozaburo Nakaseko, director of research, Sumitomo Rubber Industries

Opening Address
Dr Jean-Pierre Jeusette, general director, Goodyear Technical Center Luxembourg

Ali Hines, Global Witness
Dr Andreas Topp, VP material and process development and industrialization Tires, Continental Reifen Deutschland GmbH
Rudi Hein, executive advisor, standards and regulations, Bridgestone Europe
Dr Joachim Neubauer, manager of standards, rules and regulations, Michelin
Lieven Larmuseau, Executive Vice President, Bekaert
Seyfullah Bozkurt, MD, Uzer Makina
Dr Federico Mancosu, independent consultant
Venu Kishore Kadiyala, assistant manager, Balkrishna Industries Limited
Dipl Ing Florian Schreiber, sales director, tire industry, 4JET Technologies GmbH
Dipl Ing Arto Niskanen, doctoral student, Aalto University School of Engineering

BRAD RICHARD, ENGINEER, TRANSPORT CANADA
What is the pilot study you’ve conducted, on which your presentation is based? In Canada, consultations to develop a tire consumer information program have begun and industry has agreed that winter tires should be included. Recently, the Government of Canada undertook a pilot project, for which I was project leader, on a small sample of winter tire models. The pilot project begins to answer several questions with respect to test procedures, methodologies and approaches to report the fuel efficiency of winter tires in cold ambient temperatures, and the relationship between a winter tire’s rolling resistance and traction on wet and snow-covered surfaces.

What did it involve? The pilot project involved randomly selecting 10 winter tire models from those available on the Canadian market, and testing the tires for rolling resistance, snow traction, and wet traction. Preliminary results, which we hope to present at the show, will give an indication of the relationship between tire performance parameters, and the quantity of tires required to give statistically valid results.

FRANK PAPP, LEHIGH TECHNOLOGIES
What is the background to your presentation? We hope to encourage rubber manufacturers to use micronized rubber powder and our new product EkoDyne functional compound in high-performance applications (for low rolling resistance and high wet grip) like the silica-silane, S-SBR rubber tire treads. We have done some basic testing of physical properties and dynamic testing for predictions of wet grip, rolling resistance and snow traction. These materials are sustainable and more environmentally friendly, and can be used to achieve performance targets. We will discuss different incorporation and formula modifications for optimizing performance.

What stage of development is the EkoDyne compound in? Right now it’s in the experimental phase and we are performing validation tests with selected customers for feedback. If this feedback is positive, we’re planning to produce pilot samples in the first half of 2015, with commercialization at the end of the year. This will include Europe, where we are setting up a production facility to supply our customers there.

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The basic idea is to change or modify the surface of the fiber in such a way that new interactions with rubber are possible. The latex that is applied currently under development for rayon only, but we are convinced that we can extend it to other fibers too. We have fine-tuned the formulations. The more advanced approach replaces the RF-free dipping solution not to be banned from use in Europe years to come. Our intention was to create a resorcinol formaldehyde (RF)-free dipping solution not only for polyester and polyamid, which most tire manufacturers need, but also for rayon. Our target is to have a solution that is REACH compliant and comparable to the current available technology, which is the industry standard.

What stage has development reached and what have you discovered?

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What stage has development reached and what have you discovered?

We are focusing on two types. We have relied on techniques used in the past but we have fine-tuned the formulations. The more advanced approach replaces the RF-free dipping solution not to be banned from use in Europe years to come. Our intention was to create a resorcinol formaldehyde (RF)-free dipping solution not only for polyester and polyamide, which most tire manufacturers need, but also for rayon. Our target is to have a solution that is REACH compliant and comparable to the current available technology, which is the industry standard.

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Short courses at Tire Technology Conference 2015

**NEW for 2015!** Cords and Steel Wire: their properties and performance in tires

**Tire Mechanics Short Course**
This four-day course will provide engineers and scientists with the latest developments surrounding tire engineering. The basic aspects of the mechanics of pneumatic tires will be introduced by internationally renowned experts in tire mechanics.

**Foundations of rubber behavior for modeling tires and other applications**
The conflicting demands of weight reduction and reduced rolling resistance, coupled with increases in abrasion resistance and wet and dry friction performance, make the tire designer’s life difficult. This course is designed specifically to give a detailed overview of all the core concepts involved in the design of rubber products.

**Tire Regulations Short Course**
The course will be delivered by Lars Netsch of TÜV Süd and Michelin’s Dr Joachim Neubauer, who have considerable knowledge of the current tire regulations in Europe and beyond. These are particularly critical as tire labeling and new type approval regulations are introduced. Some indication of the future in terms of tire regulations will be discussed and a brief outlook on the impact on tires of the EU’s chemical regulation, REACH, will also be given.

**Tire Mathematical Modeling Course**
This course covers the computer modeling of tires within a full vehicle system. It is aimed at engineers and researchers working in both industry and academia. The subject matter will be of primary interest to vehicle dynamics, for whom the tire is the primary force and moment generation element on the vehicle.

In addition to the main conference running for three days, a comprehensive program of courses will be held in Cologne during the same week. New this year is Cords and Steel Wire: their properties and performance in tires, taking the total number of courses available to seven!