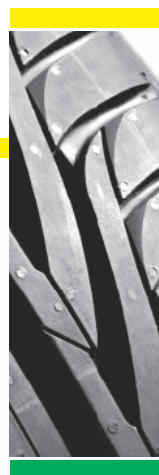


Updated
conference
program



■ Wednesday, September 16, 2015

Conference Manager: Dr. Christian Hartweg

- 8.30 **Registration**
Introduction
- 9.00 **Welcome and opening**
Prof. Christian Hopmann, Institute of Plastics Processing (IKV), Aachen, Germany
Prof. Lutz Eckstein, Institute for Automotive Engineering (ika), Aachen, Germany
- 9.30 **The tyre industry – more than 125 years of innovation and still not slowing down**
Stephan Rau, Wirtschaftsverband der deutschen Kautschukindustrie e.V., Frankfurt, Germany
- 10.00 **Coffee break**
Trends and requirements
- 10.30 **Tyre modelling from the perspective of a premium vehicle manufacturer**
Jan Prins, Jaguar Land Rover Ltd., Coventry, Great Britain
- 11.00 **SVW – quiet safe road traffic**
Dr. Tanya Tolpekina, Apollo Vredestein BV, Enschede, Netherlands
- 12.00 **Lunch break**
Interface between tire and car
- 13.30 **Use of objective tire characteristics to close the vehicle development loop**
Thorsten Reich, Adam Opel AG, Rüsselsheim, Germany
- 14.00 **FAREP – an alternative for tire characterization on real roads to enhance driving dynamics simulations**
Christian Carrillo, Institute for Automotive Engineering (ika), Aachen, Germany
- 14.30 **Temperature influence on tyre side force generation and estimation of the tyre temperature under real driving conditions using the TameTire model.**
Frédéric Spetler, Manufacture Française des Pneumatiques MICHELIN, Clermont-Ferrand, France
- 15.00 **Institute tour**
- 17.00 **Break:** Time for hotel check-in
- 19.30 **Evening reception:**
Restaurant LivingRoom, Büchel 22, Aachen



■ Thursday, September 17, 2015

Conference Manager: Dr. Gerard Nijman

- 8.45 **Opening for the second day**
Dr. Gerard Nijman, Apollo Tyres Global R&D BV, Enschede, Netherlands
Material technology
- 9.00 **Next generation carbon blacks for wear improvement of truck tires**
Dr. Florian Diehl, Orion Engineered Carbons GmbH, Cologne, Germany
- 9.30 **Determination of carbon black dispersion in dependency of the mixing process**
Annika Lipski, Institute of Plastics Processing (IKV), Aachen, Germany
- 10.00 **Chances and threats for natural rubber for use in low rolling resistance tires**
Prof. Dr. Jacques W. M. Noordermeer, University of Twente, Twente, Netherlands
- 10.30 **Coffee break**
Emerging technologies
- 11.00 **Mixing behaviour of pin-type extruders**
Florian Lemke, Institute of Plastics Processing (IKV), Aachen, Germany
- 11.30 **Dynamic testing solutions for continuous production process monitoring and control in mixing rooms in the tire industry**
Ralf Bäuerlein, Montech Werkstoffprüfmaschinen GmbH, Buchen, Germany
- 12.00 **Process control during reactive mixing with new mixtures for reducing rolling resistance**
Luciano Garro, Pirelli Deutschland GmbH, Höchst im Odenwald, Germany
- 12.30 **Lunch break**
Friction
- 14.00 **Rubber friction – A comparison of theory with experimental data**
Dr. Boris Lorenz, Forschungszentrum Jülich GmbH, Jülich, Aachen, Germany
- 14.30 **Micro contact analysis of rubber – road surface interaction**
Andras Kriston, Aalto University, Aalto, Finland
- 15.00 **Modelling of processes in the tire contact patch**
Dirk Henrichmüller, Institute for Automotive Engineering (ika), Aachen, Germany
- 15.30 **Final remarks**
Prof. Dr.-Ing. Lutz Eckstein, Institute for Automotive Engineering (ika), Aachen, Germany
Dr. Gerard Nijman, Apollo Tyres Global R&D B.V., Enschede, Netherlands
Dr. Christian Hartweg, Adam Opel AG, Rüsselsheim, Germany

3rd International Conference

Science meets Tires

September 16-17, 2015, Aachen

■ Conference Manager:

Dr. Gerard Nijman, Apollo Tyres Global R&D B.V.

"The pneumatic tire is an essential component of all cars, trucks and lorries, airplanes, motor bikes and bicycles, vital to the provision of tractive, breaking and steering forces. The complexity of the modern tire is such that polymer chemists, mathematicians, physicists and mechanical engineers are all involved in its design and manufacture. The introduction of the obligatory energy and performance labels on tires in Europe has increased the interest in understanding the dynamic mechanical properties of rubber compounds applied in a tire. Also the requirements which car manufacturers put on OEM tires really challenge the tire developer. Realizing top driving performance, both in wet and dry conditions, and ultra-low energy losses is only possible through a scientific approach. Moreover, the tire manufacturing process needs to be as cost efficient as possible, which also requires a deep understanding of rubber processing and tire manufacturing.

The seminar Science meets Tires is an outstanding opportunity to be briefed on all new developments related to tires and rubber. Furthermore, the venue of the seminar is a perfect place to expand your professional network."

Dr. Christian Hartweg, Adam Opel AG

"For many years, the tire was object of development in the different areas of transportation to fulfil performance requirements like force transmissibility, durability, rolling resistance, noise and many more. As legislative regulations are tightened to reduce all kinds of emissions, the tire needs to be described more detailed than ever to ensure that a vehicle, as a product of many contributors, does fulfill the legislative regulations as well as the performance requirements set by the customer in future markets. To enable an efficient product development, it is necessary to start a cooperative development of tire and vehicle as early as possible. For this purpose it is state of the art to use different kinds of virtual representations of the physical characteristics of the tire. This conference will provide the opportunity to discuss possibilities and solutions to improve the quality of exchanging expectations, improve the virtual description of the tire and to improve the physical understanding of the tire and its boundary conditions within the given target setting. Science meets Tires is the platform to learn about new ideas in the world of tire development, tire characteristics and tire description."

Cover photo: ©Stefan Redel-Fotolia

■ Initiators:

About ika: The Institute for Automotive Engineering (ika), headed by Prof. Lutz Eckstein, is Europe's leading vehicle technology institute. Its activities cover all areas of the vehicle. ika is divided into ten business areas: Chassis, Body, Drivetrain, Electrics/Electronics, Acoustics, Driver Assistance, Vehicle Concepts, Thermal Management, Strategy and Consulting as well as Driver Experience and Performance. Measurements of tire characteristics, their simulation-based reproduction and basic studies on the topic "tires" have always been a major field of research and development within ika's Chassis department.
www.ika.rwth-aachen.de

About IKV: IKV, the Institute of Plastics Processing at RWTH Aachen University, headed by Prof. Christian Hopmann, is europe-wide the biggest research and education institute engaged in the field of plastics processing enjoying outstanding reputation. More than 300 staff are employed in the four specialist departments of Injection Moulding, Extrusion and Rubber Technology, Part Design and Materials Technology, and Composites and PU Technology. IKV is run by an Association of Sponsors, which currently has a membership of over 250 plastics companies from all over the world.
www.ikv-aachen.com

■ Event information:

Organising institutes:

■ **Institute for Automotive Engineering (ika)**
RWTH Aachen University, Prof. Dr.-Ing. Lutz Eckstein
Postal address: Steinbachstr. 7, 52074 Aachen, Germany

■ **Institute of Plastics Processing (IKV)**
in Industry and the Skilled Crafts at RWTH Aachen University
Prof. Dr.-Ing. Christian Hopmann
Postal address: Pontstr. 49, 52062 Aachen, Germany

Organisation:

■ **ika:** Dipl.-Ing. Philip Niemeyer
Phone: +49 (0) 241 80-27010, Fax: +49 (0) 241 80 22147
Email: niemeyer@ika.rwth-aachen.de

■ **IKV:** Florian Lemke, M. Sc.
Phone: +49 (0) 241 80-28353, Fax: +49 (0) 241 80-22316
Email: florian.lemke@ikv.rwth-aachen.de

Event venue:

Institute for Automotive Engineering (ika), RWTH Aachen University
Steinbachstraße 7, 52074 Aachen, Germany

Attendance fee:

The attendance fee is EUR 895. The fee includes the conference proceedings, the conference dinner, lunch and drinks during the breaks. Bank and transfer charges to be paid by the participants.

Application:

Please use the application form, which you can detach from the last page. A separate application form should be used for each applicant. IKV and ika will be pleased to send you additional conference programs on request. You can also download the program online at www.science-meets-tires.de. After registration, you will receive confirmation of your application and an invoice for your attendance fee. The applications will be dealt with in the order of receipt.

Room reservation:

If you need help with room reservation, please contact the aachen tourist service e.V. (www.aachen-tourist.de/hotels), Postfach 102251, 52022 Aachen, Germany
Phone: +49 (0) 241 18029-50 or -51, fax: +49 (0) 241 18029-30, email: incoming@aachen-tourist.de

Conference papers:

The conference papers will be distributed at the beginning of the conference.

Data protection:

In accordance with the German Data Protection Act, we would like to point out, that we will keep your address in a database and process it with the help of automatic processes.

Cancellations:

Please send any cancellations in writing to the ika. If the cancellation is made by August 31, 2015, we will refund the full paid-up sum less a processing charge of EUR 70. In the event of a cancellation after this date, the full attendance fee must be paid, and we will send you the conference papers. IKV and ika reserve the right to cancel the event. If this happens, the attendance fees will be refunded in full. The institutes will not be responsible for other obligations over and beyond this.

Registration

Science meets Tires – Perspectives for Tire Technology

September 16 - 17, 2015, Aachen

Dipl.-Ing. Philip Niemeyer
Fax: +49 (0) 241 80-22147

Title

Surname/First name

Telephone

Email

Company/Organisation

Department

Job position

Address

Postal code/City/Country

Billing address

Department

Address

Postal code/City/Country

These details are also included in the list of participants, which is distributed to all participants. For further participants, please use a copy of the registration card or download the flyer from www.science-meets-tires.de

Please frank this
card. Thank you.

Deutsche Post

Antwort

Institute for Automotive Engineering (ika)
RWTH Aachen
Dipl.-Ing. Philip Niemeyer

Steinbachstraße 7
52074 Aachen
Germany

Date

Signature