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## Yokohama Rubber to Make Four Presentations at Tire Technology Expo 2019

Tokyo - The Yokohama Rubber Co., Ltd., will make four presentations at Tire Technology Expo 2019, which will take place from Tuesday, March 5, to Thursday, March 7, in Halls 19, 20, and 21 at Deutsche Messe, Hannover. Its presentations will address the issues of tire vibration, tree cellulose as an alternative to carbon black for rubber reinforcement, wet-friction behavior, and recycled rubber from scrap tires. Those presentations will include one by a representative of the Yokohama's group company Alliance Tire Group (ATG) and will thus highlight the integration of that manufacturer of tires for agricultural machinery and other off-highway tires into the Yokohama organization.

Tire Technology Expo, sponsored annually by the UK organizer UKIP Media & Events Ltd. and now in its 19th year, is Europe's most important technology exhibition and conference for tire manufacturing. The expo is open to participants from all nations, and the presentations cover a diversity of leading-edge advances in tire technology and research findings of possible significance for tires.

## Synopses of the Yokohama Presentations

## Analysis of rolling tire vibrations by a deconvolution method

Naoshi Miyashita

Miyashita Laboratory, Yokohama Rubber

Analyzing how tires transmit road-surface vibration to vehicles is crucial in creating tires that engender a comfortable ride. Miyashita will describe the findings of tire vibration analysis with a deconvolution method, which is widely applied in image analysis and signal processing.

## Mechanical properties of styrene-butadiene rubber composite reinforced with cellulose nanofibers

Masayuki Kawazoe

R&D Dept., Yokohama Rubber

Cellulose nanofibers derived from wood are promising as a sustainable reinforcement for tire rubber. Kawazoe will describe the advantages of cellulose nanofibers in that role, compared with traditional reinforcement with carbon black.

Observations of contact behavior between rolling-sliding rubber and wet road surfaces

Ryutaro Nakagawa

Amino Laboratory, Yokohama Rubber

Determining how the tire rubber makes contact with wet road surfaces is crucial to improving wet-surface performance. Nakagawa will describe research findings that have elucidated the alternation of stick and slip in extremely high-speed cycles in rubber under friction.

Sustainability and optimization of crumb rubber in tire applications

Partheban Manoharan

Alliance Tire Group

Recycling scrap tires is important in regard to safeguarding the environment and supporting social sustainability. Manoharan will describe an optimal method for reusing small amounts of granulized rubber from scrap tires in rubber compound for new tires.

Tire Technology Expo 2019 Website: www.tiretechnology-expo.com/en/