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SECOND KEYNOTE ANNOUNCED FOR SPE® ACCE 2020 VIRTUAL EVENT –

“GREENER MATERIALS FOR A GREENER WORLD”

Dr. Deborah Mielewski, Senior Technical Leader of Sustainable and Advanced Materials at Ford Motor Co.

TROY (DETROIT), MICH. - The executive planning committee for the [SPE® Automotive Composites Conference & Expo](#) (ACCE) is announcing their second keynote speaker for their ACCE 2020 Virtual

Event, September 9 – 11, 2020. Dr. Deborah Meilewski, Senior Technical Leader of Sustainable and

Advanced Materials at Ford Motor Co. will present **“GREENER MATERIALS FOR A GREENER WORLD.”**

The presentation will highlight the broad portfolio of greener materials available now and in the future that can reduce the carbon footprint of the automotive industry and other industries worldwide.

Dr. Mielewski initiated the biomaterials program at Ford in 2001, and her team was the first to demonstrate soy-based foam that met all the requirements for automotive seating. Ford launched soy-based foam on the 2008 Mustang, and soy seat cushions, backs and headrests have found their way into every Ford North American built vehicle. “Bio-based foams currently reduce Ford’s greenhouse gas emissions by over 25 million pounds and reduce petroleum dependence by over 5 million pounds annually,” said Mielewski. “Ford now has over 10 renewable materials in production vehicles including natural fiber reinforced composites such as wheat straw, rice hulls and cellulose fiber from trees with many of them exceeding the performance of traditional plastic composite materials,” continued Mielewski. “Over the past five years, we have kicked off several new material investigations with cellulose nanofibers, materials from carbon dioxide, and we are applying our knowledge in green materials to the exploding area of 3D printing.”

Since the first laboratory success in soy foam over a decade ago, the Ford biomaterials research team have been working to expand the use of sustainable plastic materials in vehicles. They continue to search for innovative and creative biotechnologies that can reduce dependence on petroleum, create new markets for agricultural products and additional revenue streams for farmers, as well as reduce vehicle weight, which results in improved fuel efficiency and lower vehicle emissions. Late last year, Ford with partner McDonald's, was the first to launch coffee chaff reinforced plastic on the headlamp housings of the Lincoln Continental.

In addition to daily keynote presentations, the three-day virtual ACCE will feature 40 technical presentations, 2 panel discussions, and 22 sponsors presenting advances in materials, processes, and equipment for both thermoset and thermoplastic composites in a wide variety of transportation applications. Daily virtual networking opportunities will enhance the value of the event that expects to draw over 400 attendees worldwide. The Automotive and Composites Divisions of the Society of Plastics Engineers (SPE®) jointly produce the ACCE to educate the industry about the benefits of composites in automotive, light and heavy-duty truck, off-highway vehicles, and other ground transportation applications.

The technical presentations (20 - 30 min. ea.) are organized in the following categories: Advances in Thermoplastic Composites, Advances in Thermoset Composites, Virtual Prototyping, Testing & Modeling, Reinforcement Technologies, Additive Manufacturing & 3D Printing, Nanocomposites, Enabling Technologies, Sustainable Composites, Bonding, Joining & Finishing, Opportunities & Challenges with Carbon Composites, and Business Trends & Technology Solutions.

“Composites – Driving Innovative Transportation with Electrification, Mobility, Autonomy,” is the theme for this year's event reflecting the industry advancing with new technologies and polymer composites solutions. The 2020 ACCE is co-chaired by Dr. Alper Kiziltas, technical expert, Ford Motor Company and SPE Automotive Div. Chair and Dr. Xiaosong Huang, lab group manager of Polymer Composites Systems in GM Global Research & Development, General Motors Company. The technical program is co-chaired by Dr. David Jack, associate professor, Mechanical Engineering at Baylor University, Dr. Leonardo Simon, professor, Chemical Engineering at Waterloo University, and Dr. Oleksandr G. Kravchenko, assistant professor, Composites Modeling and Manufacturing Group, Department of Mechanical and Aerospace Engineering at Old Dominion University.



TROY (DETROIT), MICH. –

Dr. Deborah Mielewski is the Senior Technical Leader of Sustainable and Advanced Materials at Ford Motor Company. She received her B.S.E. ('86), M.S.E. ('93) and PhD ('98) degrees in Chemical Engineering, all from the University of Michigan in Ann Arbor, and has been with Ford Motor Company for 33 years. Dr. Mielewski has worked at Ford Research in automotive paint durability, polymer processing and materials development.

Dr. Mielewski is passionate about the work she does to reduce Ford's environmental footprint and believes that these new materials are going to dominate the market in the future. Her philosophy is to "do the right thing" in incremental, but ever advancing steps. She has appeared in a Ford national commercial, the NOVA "Making Things" series, and has been interviewed by countless media outlets, including Wall Street Journal, Cheddar, Time Inc. and CNN. She has over 60 referred journal publications and 20 U. S. patents. Her work has been acknowledged with awards such as the Henry Ford Technology Award, the R&D100 Award, the Free Press Automotive Leadership Award, the Environmental Management Association Award, 5 SPE Environmental Innovation Awards and the American Chemical Society's Industrial Innovation Award. She has spoken at prestigious outlets such as TED and the Smithsonian "Age of Plastics Symposium".

For more information and the SPE ACCE see www.speautomotive.com/acce . For more information on the **Society of Plastics Engineers**, see www.4spe.org