



FOR IMMEDIATE RELEASE: 14 AUGUST 2023 Media Contact: Teri Chouinard, 248.701.8003, intuitgroup@gmail.com

FOURTH KEYNOTE ANNOUNCED FOR SPE® ACCE 2023 EVENT:

“JOURNEY TO THE WORLD’S FIRST ULTRA-LIGHTWEIGHT CARBON FIBER REINFORCED THERMOPLASTIC COMPOSITE 100% RECYCLABLE DOOR ASSEMBLY”

Dr. Ryan Hahnen, Principal Engineer and Lead of Strategic Research Operations at Honda Development & Manufacturing of America, LLC

Dr. Srikanth Pilla, Director of the Center for Composite Materials at the University of Delaware (UD-CCM) and Founding Director of ‘AIM for Composites’ a DOE Energy Frontier Research Center

TROY (DETROIT), MICH. - The executive planning committee for the [SPE® Automotive Composites Conference & Expo](#) (ACCE) is announcing the fourth keynote presentation for their ACCE 2023 event Sept. 6 – 8, 2023 at the Suburban Collection Showplace in Novi, Michigan (Detroit suburb). Dr. Ryan Hahnen, Principal Engineer and Lead of Strategic Research Operations at Honda Development & Manufacturing of America, LLC (HDMA) and Dr. Srikanth Pilla, Director of the Center for Composite Materials at the University of Delaware (UD-CCM), together will present “Journey to An Ultra-Lightweight Carbon Fiber Reinforced Thermoplastic (CFRTP) Composite 100% Recyclable Door Assembly.” In a project funded by the U.S. Department of Energy (DOE) with collaborative teams from Clemson University and University of Delaware and project partners from HDMA, Envalior (formerly Lanxess/Material Partner) and Proper Group International (Tooling Partner) a cost-effective 45% lighter (compared to steel) door assembly was developed for improved fuel efficiency, reduced vehicle emissions and optimum sustainability. The keynote will highlight the innovative design, advanced materials, simplified manufacturing and assembly, thermoformability with existing infrastructure, improved safety aided by advanced Finite Element Analysis (FEA) and eco-friendly manufacturing.

“The use of CFRTP composites in this application is a breakthrough in materials science providing superior strength and stiffness, kilogram-for-kilogram, as compared to steel,” said Dr. Hahnen from Honda. “Through strategic part consolidation, the CFRTP door design reduces the number of structural components required for assembly by 52% making it easier and more cost-effective to produce,” said Dr. Pilla, who led the project, from ‘AIM for Composites’, Clemson University and The Center for Composites Materials at the University of Delaware. “This innovative CFRTP door application is a prototype developed for the Honda Acura MDX 2016 model,” added Dr. Pilla. “The successful application of CFRTP in the door’s design sets a precedent for further use in the industry.”

Other keynotes planned for the ACCE 2023 event include: “An Overview of Transportation Trends and Related Opportunities” by Gregory E. Peterson – Chief Engineer at Airspace Experience Technologies (ASX), “A Role for Composites In GM’s Vision for Simulation-Driven & Sustainable Material Impact” by Jason Coryell, P.E., FASM – Engineering Group Manager of Advanced Materials Technology at General Motors Company and “What Does Disruptive Electrification of Transport Mean For Industrialization of Composites?” by Joe Summers, Commercial Director Airborne & Managing Director Airborne UK.

The ACCE technical program will include 80 – 100 presentations on current and future industry advances in the following categories: Composites in Electric Vehicles; Advances in Thermoplastic Composites; Advances in Thermoset Composites; Modeling of Composites; Additive Manufacturing & 3D Printing; Enabling Technologies; Sustainable Composites; Bonding, Joining & Finishing; Carbon Composites; and Business Trends/Tech Solutions.

Held annually in suburban Detroit, the ACCE draws over 800 speakers, exhibitors, sponsors and attendees and provides an environment dedicated solely to discussion, education and networking about advances in transportation composites. Its global appeal is evident in the diversity of exhibitors, speakers, and attendees who come to the conference from Europe, the Middle East, Africa, Asia/Pacific and South America as well as North America. About 20% of attendees work for automotive and light truck, agriculture, truck & bus or aviation OEMs and another 25% represent tier suppliers. Attendees also work for composite materials processing equipment, additives, or reinforcement suppliers; trade associations, consultancies, university and government labs; media; and investment banks. ACCE has been jointly produced by the SPE Automotive and Composites Divisions since 2001.

For more info go to: <https://speautomotive.com/acce-conference/>.

The mission of SPE is to promote scientific and engineering knowledge relating to plastics worldwide and to educate industry, academia, and the public about these advances. SPE’s Automotive Division is active in educating, promoting, recognizing, and communicating technical accomplishments in all phases of plastics and plastic-based composite developments in the global transportation industry. SPE’s Composites Division does the same with a focus on plastic-based composites in multiple industries. Topic areas include applications, materials, processing, equipment, tooling, design, and development. For more info go to: <https://speautomotive.com/> and <https://composites.4spe.org/>. For more information on the *Society of Plastics Engineers*, see www.4spe.org.



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Dr. Srikanth Pilla, Director of the Center for Composite Materials at the University of Delaware (UD-CCM) and Founding Director of ‘AIM for Composites’ a DOE Energy Frontier Research Center will present:

“JOURNEY TO THE WORLD’S FIRST ULTRA-LIGHTWEIGHT CARBON FIBER REINFORCED THERMOPLASTIC COMPOSITE 100% RECYCLABLE DOOR ASSEMBLY” at SPE ACCE September 6 – 8, 2023

Bio: Dr. Ryan Hahnen is a Principal Engineer and Unit Lead of Strategic Research Operations at Honda Development & Manufacturing of America, LLC. His current areas of expertise include additive manufacturing, composite structures, and multi-material joining. Ryan is also responsible collaborating with universities, companies, and government institutions on joint research programs to further develop new technologies to meet the needs of the automotive industry. Ryan completed his graduate studies in Mechanical Engineering at The Ohio State University researching metal-matrix composites made via additive manufacturing. Ryan has co-authored over 20 technical publications and has eighteen patents granted and several more pending in the area of advanced manufacturing.

Bio: Dr. Srikanth Pilla is the Director of the Center for Composite Materials at the University of Delaware (UD-CCM). He is also the Founding Director of ‘AIM for Composites’, a Department of Energy funded Energy Frontier Research Center. Pilla earned his doctorate in Mechanical Engineering from the University of Wisconsin-Milwaukee with a postdoctoral training from Stanford University. Prior to joining UD-CCM, Pilla held the ExxonMobil Employees Chair in Engineering and was the founding director of the Clemson Composites Center, at Clemson University. Pilla also worked as an Assistant Scientist at the University of Wisconsin-Madison. Pilla’s research interests are in the fundamentals and applications of sustainable and lightweight functional materials and manufacturing. Pilla has co-authored over 150 peer-reviewed archival publications. His research is supported by NSF, DOE, USDA, DOD, and NASA, besides several foundations and industries including automotive OEMs, and their suppliers. Pilla currently serves as the Editor-in-Chief of SAE International Journal of Sustainable Transportation, Energy, Environment and Policy. Pilla’s efforts in research and engineering education have garnered him numerous awards, including the 2022 DOE-VTO Team Award, 2021 US EPA Presidential Green Chemistry Challenge Award, 2021 Innovision’s Sustainability Award, 2019 Composites Educator of the Year Award, 2018 SC Governor’s Young Scientist Award, 2017 Stefan Pischinger Young Industry Leadership Award, 2017 SAE Ralph R. Teetor Educational Award, and 2016 Robert J. Hocken Outstanding Young Manufacturing Engineer award from SME. He has supervised over 50 graduate students and postdocs, and many undergraduate students. Four of his former team members now hold faculty positions at the University of Texas-EI Paso, Cleveland State University, Clemson University and Amasya University.

For more information and the SPE ACCE see <https://speautomotive.com/acce-conference/>

For more information on the **Society of Plastics Engineers**, see <https://4spe.org/>