

FOR IMMEDIATE RELEASE: 14 JUNE 2023 Media Contact: Teri Chouinard, SPE Auto. Div. Comm. Chair, 248.701.8003, <u>intuitgroup@gmail.com</u> THIRD KEYNOTE ANNOUNCED FOR SPE[®] ACCE 2023 EVENT: "AN OVERVIEW OF TRANSPORTATION TRENDS AND RELATED OPPORTUNITIES" Gregory E. Peterson, Chief Engineer at Airspace Experience Technologies (ASX)

TROY (DETROIT), MICH. - The executive planning committee for the <u>SPE[®] Automotive Composites</u> <u>Conference & Expo</u> (ACCE) is announcing the third keynote speaker for their ACCE 2023 event Sept. 6 – 8, 2023 at the Suburban Collection Showplace in Novi, Michigan (Detroit suburb). Gregory E. Peterson, Chief Engineer at Airspace Experience Technologies (ASX) will present "An Overview of Transportation Trends and Related Opportunities." The presentation will begin with an historic perspective of the transportation industry and its impact on the supply chain network. It will include examples of timelines for new technologies to emerge and replace mature products. Using this data, parallels to today's evolving markets will be presented. It will review three paradigm shifts in technology that are impacting today's transportation markets including: 1. The transition to substantially more efficient vehicles; 2. The shift from human vehicle control to electronic vehicle control; and 3. The shift from 2D to 3D transportation. The presentation will cover opportunities for plastic/composite suppliers in emerging market sectors, including eVTOLS, as well as providing simple holistic math models showing that highperformance plastics and composites that cost more than base materials can potentially reduce new vehicle costs.

"The use of polymer composites technologies will increase as ground and air mobility transportation progresses into the future," said Peterson. "Composites have historically offered greater design flexibility, structural strength and lower mass in comparison to other materials but at a higher cost which typically limits applications to shorter run production and high end vehicles," continued Peterson. "Increasing efficiency in electric mobility applications by reducing vehicle weight allows increased range without increasing battery energy. Since the battery is one of the heaviest and highest cost elements (on a \$/lb. basis) on an EV, using composites is a means to cost effectively increase EV range. This total vehicle, holistic approach can result in expanding opportunities for suppliers." **Other keynotes** planned for the ACCE 2023 event include: "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://speautomotive.com/.



Gregory E. Peterson, Chief Engineer at Airspace Experience Technologies (ASX) will present: "AN OVERVIEW OF TRANSPORTATION TRENDS AND RELATED OPPORTUNITIES" at the SPE ACCE 2023, September 6 – 8, 2023

Bio: Gregory Peterson has worked at Pontiac Product Engineering, Chevrolet-Pontiac-Canada Advanced Vehicle Engineering, DaimlerChrysler Street and Racing Technology and Lotus as well as at numerous Tier 1 companies. His background includes lightweight structure design, aero-thermal systems, powertrain (ICE and Electric), joining technologies, solid state control systems, power generation, chassis design and development and lightweight materials. He was part of GE Plastic's advanced engineering team at Autopolymer Design. He has over forty years of transportation experience including automotive, aerospace and heavy truck. He holds 15 patents in multiple fields. He is the Chief Engineer for ASX, an eVTOL (electric Vertical Takeoff and Landing aircraft) OEM with headquarters at Detroit City Airport (link: https://www.iflyasx.com/about-us). ASX completed the build of its full size, 900+ HP, prototype last summer and started initial development. The near 40' wingspan Sigma Six plane was publicly unveiled at the 2022 Detroit NAIAS showcasing its quick connect cargo and passenger modules (with pre-charged, integral battery packs) delivered by an electric shuttle.

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

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