# IACMI Connects Composites Leaders in Dynamic Virtual Fall 2020 Members Meeting

IACMI–The Composites Institute hosted its Fall 2020 Members Meeting virtually October 7-8, 2020. The more than 360 IACMI members and state partners who registered and participated in the event from all across the U.S. in 36 states, as well as 10 countries, were provided a robust line up of speakers. Presentations focused on topics related to growth markets for composites post-COVID, transitioning to a circular economy, standardizing automotive grade carbon fiber and the business outlook in the composites sector. Technology and research project updates featured Airbus-IACMI on future aviation, TPI Composites on wind blade thermal welding and Michigan State University on co-molded exterior closure panel.

This was the first time for IACMI to conduct a “virtual” Members Meeting for its 150+ member and partner organizations due to the challenges of the COVID-19 pandemic. However, thanks to a dynamic online meeting platform, participants were able to network throughout the event.



*A screen shot shows Alex Fitzsimmons talking to IACMI CEO John Hopkins and member partners as part of the Fall 2020 Virtual Members Meeting.*

**Fitzsimmons Kicks Off Opening Session**

The meeting kicked off with opening remarks from Alex Fitzsimmons, Deputy Assistant Secretary for Energy Efficiency at the U.S. Department of Energy. Fitzsimmons told IACMI members the institute is going to play a critical role in the future of U.S. manufacturing and in manufacturing competitiveness in the next five to 10 years. “I strongly believe that the future of IACMI is as bright as its past and I applaud IACMI and all the partners who have contributed to its success,” Fitzsimmons said. IACMI was launched in 2015 by the U.S. Department of Energy’s Advanced Manufacturing Office. Read full story [here](https://iacmi.org/2020/10/08/fitzsimmons-lauds-iacmi-for-setting-strong-foundation-looks-to-bright-future/).

Following Fitzsimmons, IACMI CEO John Hopkins provided a recap of the institute’s first five years focusing on wins and achievements, specifically how IACMI has provided and continues to provide production-relevant environments to support collaborative innovation and workforce development.

The Members Meeting continued with a featured presentation “Transitioning toward a circular economy for automotive plastics and polymer composites” by Jose Chirino, Chair of the American Chemistry Council Automotive Team and Technical Director for the High-Performance Materials Business Unit at Lanxess Corporation.



**Chirino Outlines Roadmap for Circular Economy**

**in Automotive Plastics and Polymer Composites**

Achieving a circular economy in automotive plastics and polymer composites represents a projected value of $4.5 trillion by the year 2030, according to a report from Chirino. He explained that a true circular economy is one, “in which, by design, no molecule is wasted – while continuing to meet performance requirements and bring value throughout the supply chain.” Read full story [here](https://iacmi.org/2020/10/13/chirino-outlines-roadmap-for-circular-economy-in-automotive-plastics-and-polymer-composites/) and view Chirino’s presentation on our [recap page](https://iacmi.org/wp-content/uploads/2020/10/Jose-Chirino_FINAL.pdf)

**Project Managers Update Members on R&D Initiatives**

IACMI Program Director Erin Brophy led a group who presented status reports on three distinct IACMI related projects that collectively aim to advance the use of composites in aerospace, wind turbine and automotive manufacturing.

Airbus’s Lei-Ann Chang and Jeff Nangle outlined IACMI’s major role in identifying and developing new weight-, cost-, energy- and time-saving technologies the aerospace giant will incorporate into the design and production of the first-ever hydrogen-powered, zero-emissions commercial aircraft it aims to introduce in 2035. One example: a hybrid additive manufacturing tool IACMI scientists developed that can produce large parts and match Invar’s thermal performance. Cost of the AM tool: $24,200. A comparable Invar tool? $48,800.

Also, at the session:

Steve Nolet of TPI Composites and Derek Berry, IACMI Wind Energy Technology Director at the National Renewable Energy Lab, gave an overview of IACMI’s thermoplastic thermal welding project, in which partners are investigating the use of thermal welding to replace paste adhesives in wind blade assembly.

Shane Skop of IACMI-Michigan State University’s Scale-up Research Facility, reporting on a co-molded exterior one-piece composite automotive closure panel, said collaborators currently are testing ribbed plaques to characterize their properties.

Members were then told during featured speaker Julia Attwood’s presentation that significant growth in wind energy and electric vehicles bodes well for the composites industry. Attwood is head of advanced materials for Bloomberg New Energy Finance. BloombergNEF is the global research arm of Bloomberg.



**Attwood Outlines Opportunities for**

**Composite Industry Beyond COVID-19**

Attwood said it has been a difficult period for the aerospace industry and electric vehicle manufacturing during the COVID-19 pandemic. But, she said, if there is a bright spot for composites in the current COVID period, it is in the wind industry. Although orders were significantly down in the second and third quarters, Attwood said the wind industry is “what passes for a resilient industry these days. I should really stress that this is not as bad as we expected it to be. In fact, we have to keep continuing to revise our forecast upwards because wind power developers – they just keep building things.” Read full story [here](https://iacmi.org/2020/10/13/attwood-outlines-opportunities-for-composite-industry-beyond-covid-19/) and view Attwood’s presentation on our [recap page](https://iacmi.org/wp-content/uploads/2020/10/Julia-Attwood_FINAL_shareable.pdf)

**IACMI Launches New Workforce Initiative**

IACMI Workforce Director Joannie Harmon shared news with members that the institute is expanding its workforce strategy with the launch of a new workforce development initiative, “Elevate by IACMI.”

Harmon said, through IACMI’s successful workforce development track record in its first five years, it has built a reputation as a leader in training experiences in the advanced composites industry. “As IACMI looks toward our future in the advanced manufacturing space, our workforce development initiatives have grown in scope and diversity, leading the us Elevate by IACMI.

“Elevate by IACMI will serve as an initiative to bring together the diverse stakeholders and partners in the advanced manufacturing workforce development field and will implement programs and grow workforce development training opportunities in alignment with IACMI’s mission and vision,” Harmon said.



**Mixed Economic Picture**

**for Composites Industry**

In a presentation from Gardner Intelligence Chief Economist and Director of Analytics Michael Guckes, members heard that “there are signs of growth, but it will likely be 2022 before the composites industry as a whole rebounds from the economic devastation COVID-19 left in its wake.” Guckes stressed that fabricators cannot think of the 2020 pandemic-induced recession in the same light as past recessions. He said, among the market’s winners have been RVs, Bicycles and Consumer Electronics, in contrast restaurants and passenger airlines have been severely affected. The best performing fabricators in 2021, he said, will be those who can effectively re-align their offerings and marketing towards those markets that have been able to accel through the economic disruption. Quoting the “Don’t put all your eggs in one basket” adage, Guckes encouraged his audience to seriously consider diversifying their product lines to protect their companies’ survival, should 2020 repeat itself in the future. View Guckes’ presentation on our recap page [here](https://iacmi.org/wp-content/uploads/2020/10/Michael-Guckes_Final.pdf)

**Panel explores challenges to market penetration**

IACMI Chief Commercialization Officer Dale Brosius and Chief Technology Officer Uday Vaidya led a panel to provide insight on moving new technologies out of the lab and into the marketplace. “Some people don’t speak plastic,” and Tom Drye of Techmer PM considers that one of the major challenges the advanced composites industry faces in penetrating the marketplace with new technologies. Rounding out the panel were Andrew Maxey of Vartega, Mohamed Bouguettaya with BASF and TPI Composites veteran Steve Nolet, who identified what he called “the real challenge” — the substantial investment manufacturers would have to make to change from steel, concrete and other traditional materials to composites.



**IACMI Project to Standardize Automotive-Grade**

**Carbon Fiber Composites on Track**

Featured speaker Tom Hollowell explained that an in-progress IACMI project to develop performance standards for automotive-grade carbon fiber composites is on track to produce an extensive database that members and component manufacturers can access when selecting materials. Hollowell serves as chair of the Automotive Performance Standards Working Group. In a presentation to meeting participants on the project’s completed first stage and current Stage 2, Hollowell, internationally recognized vehicle crash safety expert and chair of IACMI’s Automotive Performance Standards Working Group, said the working group has assigned teams to focus on different Stage 2 tasks, including determining the key material characteristic parameters for energy absorption, stiffness and strength testing; developing standard testing methods; developing and formatting the database; and identifying OEM material card needs. Up next, testing will begin to evaluate the ease and accuracy of the selected test procedures. Hollowell wrapped up his presentation with a few best-practice recommendations related to the six working group organizational sessions scheduled for day two of the conference. View Hollowell’s presentation on our recap page [here](https://iacmi.org/wp-content/uploads/2020/10/Tom-Hollowell_FINAL.pdf)

**IACMI Vision 2025**

In the final presentation of the afternoon on Day One, IACMI CCO Dale Brosius discussed with Members Meeting attendees an integrated strategy for IACMI’s next five years in his “IACMI Vision 2025” presentation. Brosius emphasized IACMI will continue to serve as a convening entity to serve U.S. R&D needs in composites, connect the composites ecosystem, and catalyze U.S. global economic competitiveness.

He also highlighted his goals for IACMI including growing IACMI to 250+ members over the next three to five years, offering more technology demonstrations, and hosting new, focused events and activities to serve the industry, among others. View Brosius’s presentation [here](https://iacmi.org/wp-content/uploads/2020/10/IACMI-Vision-2025-Brosius.pdf)

**More Members Meeting Materials…**

Be sure to check out our [Recap Page](https://iacmi.org/10791-2/%29) for presentations, quick links, videos and attendee list.

**SAVE THE DATE: Winter 2021 Members Meeting February 16-18, 2021**

Mark your calendars for February 16-18, 2021, the dates for IACMI’s next virtual Members Meeting, which will be a virtual event. Stay tuned for more details.