

INSTITUTE FOR ADVANCED COMPOSITES MANUFACTURING INNOVATION

2017 Year in Review: Michigan

UPDATED 12/1/17



MI MEMBERS



IACMI opened a shared \$50M manufacturing innovation facility as a national hub for research development and workforce training. The Scale-Up Research Facility, located in Detroit, MI, is home to the IACMI Vehicles Technology Area.

The Scale-Up Research Facility (SURF) in the Corktown neighborhood of Detroit houses a 4,000-ton Schuler hydraulic press. IACMI members have access to this state-of-the-art composite manufacturing equipment where technology can be demonstrated on full-scale prototypes.





GEMINI

WORKFORCE DEVELOPMENT IN MICHIGAN

Hundreds of Training Participants in Michigan-Based Events

6 internship appointments205 attendees at Road 2 Composites hands-on workshop with Composites One160 students at Manufacturing Day in Detroit



NATIONAL MEDIA COVERAGE



Three Technologies You Need to Start Paying Attention to Right Now

July 8, 2017 | www.inc.com

"The next big thing always starts out looking like nothing at all...

#3: Materials Science: including new composite materials responsible for reducing the weight of Boeing's Dreamliner by 40,000 pounds and fuel use by 20 percent."

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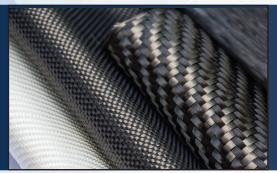
MICHIGAN IACMI PROJECTS

VOLKSWAGEN (W)



~\$3M Project: Developing a sheet molding compound composite for use on exterior body panels

IMPACT: 25% reduction in cost and weight on a production model expected to be greater than 100k units annually. PROJECT PARTNERS: Volkswagen | Michigan State University | Oak Ridge National Laboratory | University of Tennessee, Knoxville | Purdue University



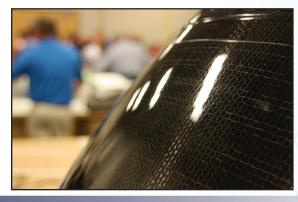
IACMI-THE COMPOSITES INSTITUTE ANNOUNCES PROJECT TO OPTIMIZE RESINS AND SIZINGS FOR VINYL ESTER / CARBON FIBER COMPOSITES

The project will identify styrene-free prepreg formulations with longer room temperature shelf life, shorter cycle times, and reduced cost. Advancements in these areas will increase productivity, decrease scrap and material costs, and enable adoption into the automotive industry. **PROJECT PARTNERS:** Ashland Performance Materials | Michelman | Zoltek Michigan State University | University of Dayton Research Institute

PROJECT TO ENABLE THERMOPLASTIC COMPOSITE PARTS MANUFACTURING FOR HIGH VOLUME, LOW COST, REDUCED **WEIGHT AUTOMOTIVE COMPONENTS WITH INCREASED DESIGN FLEXIBILITY**

First project selected with a dual focus on decreasing the cost of manufacturing and increasing design flexibility for automotive composites. Advancements in both areas can open up new opportunities and become an enabler for large scale deployment of composite parts.

PROJECT PARTNERS: DuPont | Fibrtec | Michigan State University | Purdue University | Oak Ridge National Laboratory



WORKFORCE DEVELOPMENT INITIATIVES



LEADERS IN AUTOMOTIVE INDUSTRY GATHER AT ROAD 2 COMPOSITES WORKSHOP

200 attendees, nationally-recognized experts from GM, Tesla, and more

RESULTS: Exposure to MI capabilities; project submissions; increased IACMI membership

TRANSATLANTIC CLUSTER INITIATIVE ON LIGHTWEIGHTING

Scale-Up Research Facility Director, Ray Boeman, offered thought-leadership on lightweighting during an international conference with the German American Chambers of Commerce Transatlantic Cluster Roadshow during a half day event hosted in Troy, MI.

IACMI INTERNSHIP PROGRAM

21 interns accepted from hundreds of applicants, nationally, 2017 placements include Michigan State University and the Scale-Up Research Facility.



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