

INSTITUTE FOR ADVANCED COMPOSITES MANUFACTURING INNOVATION

2017 Year in Review: Ohio

COMPOSITES HAVE GROWING USE IN:

- Compressed gas storage
- Aerospace. IACMI aerospace companies include:







Vehicles







Orbital ATK

Orbital ATK announced addition of 57 new jobs in Ohio with \$3.5M in new payroll by 2019.





DuPont led an IACMI project to unveil a compressed natural gas vessel prototype, with research conducted at the University of Dayton Research Institute (UDRI). The



project is IACMI's first compressed gas storage project, and provides unique advantages to the storage of compressed natural gas through the use of thermoplastic composite technologies to achieve better durability, weight reduction and recyclability.





IACMI hosted its semi-annual Members Meeting in Dayton, Ohio, bringing more than 300 attendees from more than 100 companies across 30+ states to Dayton, OH.

During the meeting, IACMI members toured UDRI's newly renovated composites laboratory, and heard from speakers, including Senator Bill Beagle, who highlighted Ohio's thought leadership and innovations in the composites field.



Because of Dayton residents' long history of leading innovations, "it's exciting to see IACMI and its 150 member companies convening at the UDRI-led technology hub. I wish you all the success in honoring the Ohioan spirit of innovation, invention, and creativity." – SEN. BILL BEAGLE

IACMI Summer 2017 Members Meeting

Sen. Bill Beagle and Glenn Richardson from Jobs Ohio at IACMI's Summer 2017 Members Meeting in Dayton, OH.





of DAYTON

RESEARCH

INSTITUTE

2017 Year in Review: Ohio

OHIO IACMI PROJECTS

ASHLAND PERFORMANCE MATERIALS

Project: Optimized resins and sizings for vinyl ester/carbon fiber composites

IMPACT: Explore the optimization of resin fiber sizing and carbon fiber combinations in the pursuit of better storage, cycle time, and lower cost **PROJECT PARTNERS:** Ashland | Michelman | Zoltek | University of Dayton

Research Institute (UDRI) | Jobs Ohio | Michigan State University









CINCINNATI INC.

PROJECT: Big Area Additive Manufacturing (BAAM) materials development and reinforcement with advanced composites **IMPACT:** Integrated design and materials selection, together with novel, low-cost reinforcing techniques to optimize components for vehicle application

PROJECT PARTNERS: Cincinnati Inc. | Local Motors | Oak Ridge National Laboratory (ORNL) | University of Tennessee, Knoxville (UTK)

CINCINNATI

WORKFORCE DEVELOPMENT IN OHIO

20+ UDRI students participating in IACMI research projects

1 fully-funded intern based at UDRI

17 intern presentations during Members Meeting

15 scientific poster presentations during Members Meeting

UDRI student won 2017 CAMX Technical Paper Award for research conductred on Effects of Z-stitching in Heavy Tow Carbon Laminates via Tailored Fiber Placement



MEDIA COVERAGE AND SUPPORT



OHIO: A HISTORY OF INVENTION, A PROUD LEGACY OF INNOVATION October 30, 2017 | tradeandindustrydev.com

"Manufacturers can take advantage of the four Manufacturing USA institutes – America Makes, LIFT, **IACMI** and NextFlex – for additive manufacturing, advanced composites, lightweight materials and flexible electronics. **In an industry that is rapidly changing, accessible resources are essential to stay current with trends. Equally important is having access to a network that is discovering and seizing opportunities to maintain a competitive advantage."

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Three Technologies You Need to Start Paying Attention to Right Now

July 8, 2017 | www.inc.com | Author: Greg Satell

"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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