



# 2017 Year in Review: Tennessee

UPDATED 12/7/17



**TN IACMI MEMBERS**



**May 2017**  
MVP broke ground on 80,000 sq.-ft. manufacturing facility in Knoxville, TN. The \$12M facility will add 70 jobs, and marks MVP's 50<sup>th</sup> anniversary in East Tennessee.



**October 2017**  
IACMI opened a shared \$50M manufacturing innovation facility as a research, development, and workforce national hub. Tennessee-based members, including Volkswagen and others, are utilizing the facility as a resource for faster innovation during the product development cycle.



**January 2017**  
IACMI unveiled an innovative nine-meter wind turbine blade prototype. The blade was produced via pultrusion with the first textile PAN fiber made at ORNL's Carbon Fiber Technology Facility. This prototype has been nominated for the Combined Strength Award at CAMX, the nation's leading composites conference with more than 250 education sessions and more than 8,000 attendees.



## WORKFORCE DEVELOPMENT IN TENNESSEE

### 7,000+ Training Participants in Tennessee-Based Events

- 9 internship appointments
- 17 senior executives at the National Defense University
- 155 attendees at Vanderbilt Composites One hands-on event
- 475 students at Manufacturing Day in Knoxville
- 4,000 attendees at Vanderbilt's Mini Maker Faire
- 2,700 participants in First Robotics competition
- 115 participants in Tooling U-SME



## NATIONAL MEDIA COVERAGE



### Three Technologies You Need to Start Paying Attention to Right Now

July 8, 2017 | [www.inc.com](http://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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## TENNESSEE IACMI PROJECTS

### VOLKSWAGEN

**~\$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 | Oak Ridge National Laboratory (ORNL) | University of Tennessee, Knoxville (UTK) | Michigan State University | Purdue University



### LOCAL MOTORS

IACMI's integration of large-scale additive manufacturing and composite materials for vehicle applications seeks to challenge existing designs and defines new components to meet longevity and crash performance requirements.

**PROJECT PARTNERS:** Local Motors | UTK | BASF | ORNL | Techmer PM

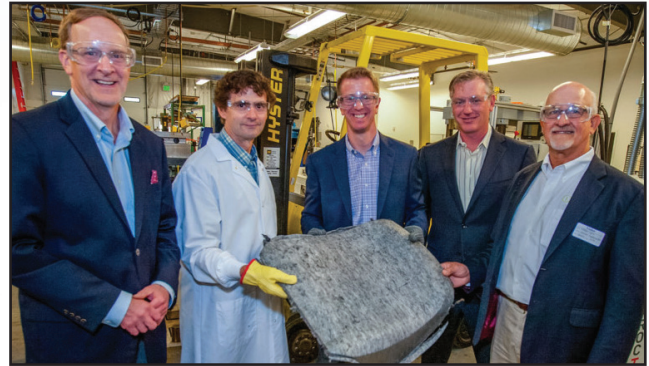
### COMPOSITE RECYCLING TECHNOLOGY CENTER (CRTC)



**~\$1.5M Project:** Automated preform manufacturing equipment for recycling scrap pre-preg

**IMPACT:** Initiates capability to have 100% recyclability within automotive production. State of Tennessee received national recognition as a leader in manufacturing innovation and job creation as project enables immediate benefits of utilizing scrap carbon fiber.

**PROJECT PARTNERS:** CRTC | UTK | ORNL



The IACMI project, led by CRTC with expertise from UTK, demonstrates the ability to produce automotive interiors, such as the auto seatback in the photo above, with fast-cycle molding of recycled carbon fiber/thermoplastic materials.

## WORKFORCE DEVELOPMENT INITIATIVES



### HANDS-ON WORKSHOP AT VANDERBILT UNIVERSITY

150 attendees, nationally-recognized experts  
**RESULTS:** Exposure to TN capabilities; project submissions; increased IACMI membership



### TOOLING U-SME PARTNERSHIP:

IACMI-sponsored advanced composites online training for **all** IACMI members.

#### PILOT PROJECT:

Wright Industries: 5 courses over the 12-week hybrid certificate program for approximately 50 employees during Phase One in 2017

### PRESTIGIOUS INTERNSHIP PROGRAM

21 interns accepted from hundreds of applicants, nationally. Nine interns appointed to work on projects in TN. 2017 placements include Local Motors, RMX Technologies, University of Tennessee, Knoxville, ORNL, Vanderbilt University, IACMI HQ.

