

# IACMI Renewal: Innovation, Technology, Member Value

**Dale Brosius**  
Chief Commercialization Officer  
June 21, 2023

Convene. Connect. Catalyze.

Convene

Connect

Catalyze

# Connecting the Composites Industry

Professional Societies

SPF SOCIETY OF PLASTICS ENGINEERS  
sampe North America

International Consortia

CU COMPOSITES UNITED  
NATIONAL COMPOSITES CENTRE  
Innovate UK

Communications Partners

CW CompositesWorld  
JEC GROUP

Trade Associations

American Chemistry Council  
ACMA AMERICAN COMPOSITES MANUFACTURERS ASSOCIATION

Federal and state partners

U.S. DEPARTMENT OF ENERGY  
Department of Economic & Community Development  
MICHIGAN ECONOMIC DEVELOPMENT CORPORATION  
COLORADO  
Indiana  
JobsOhio

Workforce Partners and Community Colleges

ACE AMERICA'S CUTTING EDGE  
ClosedMold Alliance  
ABARIS  
SkillCrafters BY IAC3E

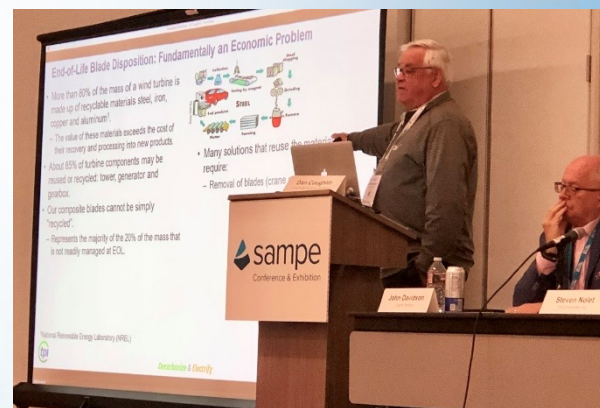
THE UNIVERSITY OF TENNESSEE KNOXVILLE  
OAK RIDGE National Laboratory  
VANDERBILT UNIVERSITY  
PURDUE UNIVERSITY  
iacmi THE COMPOSITES INSTITUTE  
MICHIGAN STATE UNIVERSITY  
University of Dayton Research Institute  
NREL NATIONAL RENEWABLE ENERGY LABORATORY  
uammi



# SAMPE 2023 Seattle, WA

April 17-20, 2023

  
Conference & Exhibition







Summit 23 Paris

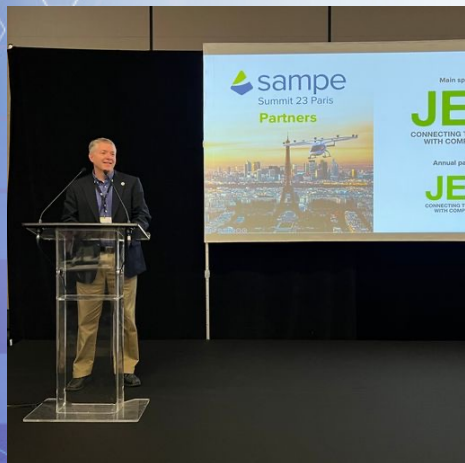
"Visions on Future Composites"



# JEC WORLD 2023

The Leading International  
Composites Show

April 25-27, 2023 | PARIS-NORD  
VILLEPINTE

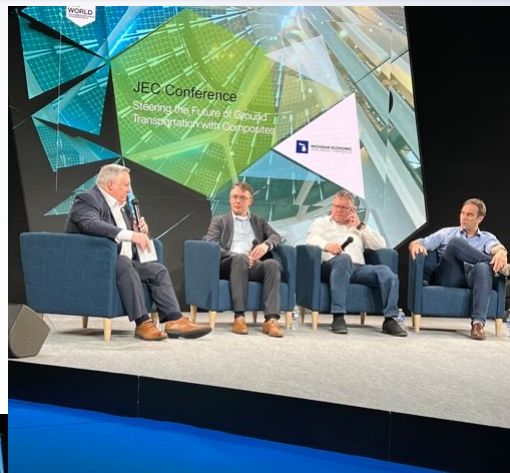




# JEC WORLD

## 2023 The Leading International Composites Show

April 25-27, 2023 | PARIS-NORD VILLEPINTE





# Upcoming Events



**spe** AUTOMOTIVE COMPOSITES  
CONFERENCE & EXHIBITION  
Novi, MI • September 6-8, 2023  
*Presented by SPE Automotive and Composites Divisions*

WORLD'S LEADING AUTOMOTIVE COMPOSITES FORUM

**COMPOSITES THE KEY TO EV**  
AUTO & AIR MOBILITY

The image features a dark blue background with a glowing globe. In the foreground, there is a white truck on the left and a dark blue SUV on the right. A drone is flying in the air above the vehicles. The overall theme is automotive and air mobility.



**CAMX**  
THE COMPOSITES AND ADVANCED MATERIALS EXPO

Conference - October 30 - November 2, 2023  
Exhibition - October 31 - November 2, 2023  
GEORGIA WORLD CONGRESS CENTER  
Atlanta, Georgia, USA

EXHIBITOR AND  
SPONSOR PROSPECTUS  
**RESERVE TODAY**  
[www.theCAMX.org](http://www.theCAMX.org)

COMBINED STRENGTH. UNSURPASSED INNOVATION.

Powered by **ACMA** **sampe** Official Media Partners **GARDNER** **CW**

The image features a green and orange diagonal split. The left side is green with white icons of a wind turbine, a bicycle, a hand holding a tool, and a microscope. The right side is orange with a cityscape at sunset, including a Ferris wheel and several skyscrapers.



**CF/23**

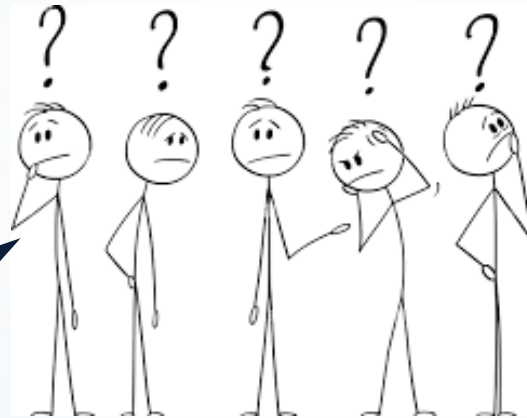
**CARBON  
FIBER**

**November 28-30**  
**Salt Lake City**

The image features a blue and orange logo for CF/23. Below the logo, the words 'CARBON FIBER' are written in large, bold, blue letters. At the bottom, the dates 'November 28-30' and the location 'Salt Lake City' are written in bold black text.

*We're a small company with a great product/process. How do I get an introduction to the right people?*

*We have a new product and need to generate properties for a data sheet. Who has the testing capabilities that we can trust?*



*I would like to hire college graduates with some understanding of composites. Where can I find them?*

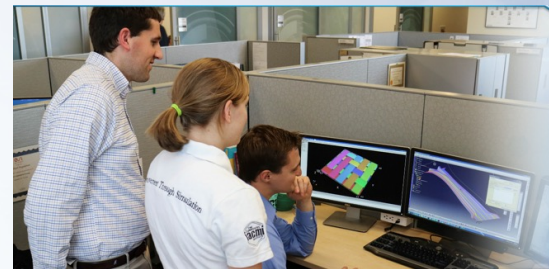
*Where can we make the prototypes our customer needs for validation?*



***“Anyone looking for a solution should know that IACMI is the place to go”***

***- IACMI Premium Member***

# Manufacturing Assets at Relevant Scale



PURDUE  
UNIVERSITY.



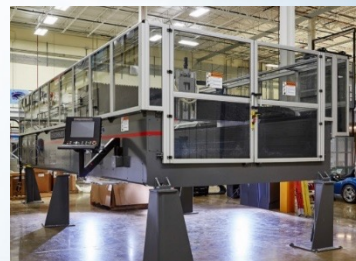
MICHIGAN STATE  
UNIVERSITY



University of Dayton  
Research Institute



NATIONAL RENEWABLE ENERGY LABORATORY

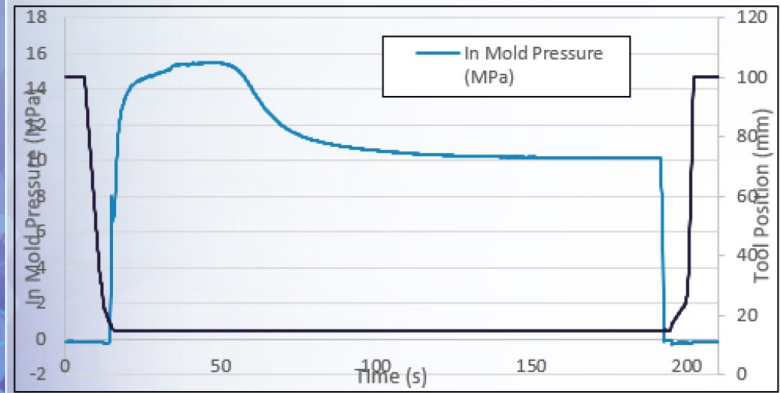


OAK RIDGE  
National Laboratory

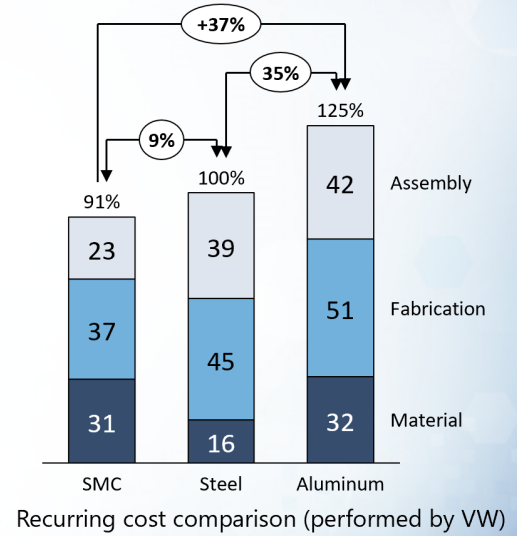
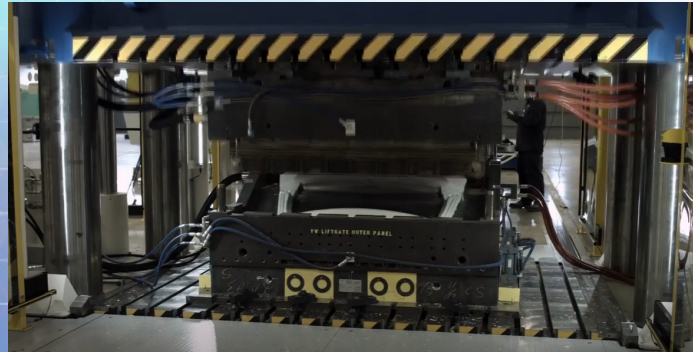
T  
THE UNIVERSITY OF  
TENNESSEE  
KNOXVILLE



# Ford Liftgate Carbon Fiber Inner Panel



# VW SMC Liftgate





# 13 Meter Blade Fabrication



Infusion and Cure



Demolding



Bonding



Blade Prep for Testing



# 13 Meter Blade Testing

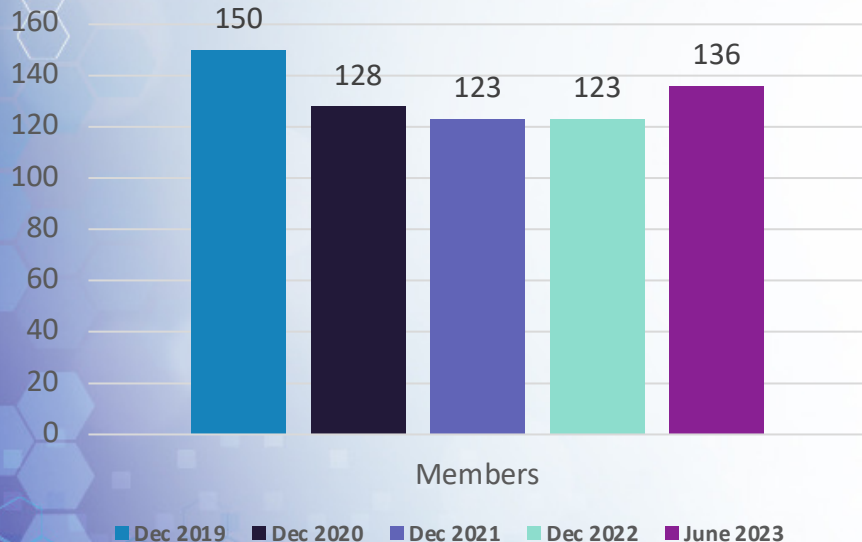


Fatigue Testing



# IACMI Consortium Membership Growing Again

IACMI Consortium Membership



- **21 NEW members in 2023**
  - 13 industrial across all size categories
  - 7 workforce ACE/MEEP members
  - 1 academic member (non workforce)
- **Targeting 154 by end of year**
- **Membership fees fund members meetings and other activities, including project funding from Resource Pool**

# IACMI Technical Working Groups



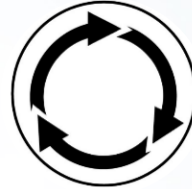
**High Rate  
Aerostructures  
Fabrication**



**Future Mobility  
& Vehicles  
Technology**



**Wind Energy**



**Recycling  
Circular  
Economy**



**Infrastructure  
& Construction**



# Highlighting Small and Medium Members

## AGENDA

4:50pm – 5:20pm

### Small and Medium Enterprise Panel

- John Dispennette, OMNIA Products
- Alec Redmann, Netzsch Instruments North America
- Tom Drye, Orion Compounding
- Scott Lewit, Structural Composites
- David Morgan, Carbon Rivers

Marriott Knoxville  
Fulton/Armstrong

- ◆ A big hit at every members meeting, ongoing since July 2016
- ◆ 68 small companies featured to date

# Innovation Insights Webinars

## Innovation Insights

Innovation Insights is a monthly webinar featuring the latest innovations and products from IACMI members and R&D partners. Each month, we plan to highlight one SME member, one large company member, and one research partner. IACMI members are eligible to present and should contact Dale Brosius, webinar host and IACMI Chief Commercialization Officer, to be considered for the webinar.

*A Webinar Series highlighting new products, services and innovations from IACMI industry members and core R&D partners*

May 22, 2023  
Innovation Insights

05/22/2023

[LEARN MORE →](#)

March 20, 2023  
Innovation Insights

03/20/2023

[LEARN MORE →](#)

February 27, 2023  
Innovation Insights

03/06/2023

[LEARN MORE →](#)

January 30, 2023  
Innovation Insights

01/30/2023

October 2022  
Innovation Insights

10/31/2022

September 2022  
Innovation Insights

09/19/2022

- Every episode recorded and can be found on IACMI website and IACMI YouTube channel

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# INNOVATION INSIGHTS

Monday, May 22 - 12:00pm ET

*A Webinar Series highlighting new products, services and innovations from IACMI industry members and core R&D partners*

Hosted by Dale Brosius, IACMI CCO

**Amolek Badwani**  
CEO/Co-founder  
Orbital Composites

**Daniel Alliman**  
Director, Composites Business  
Development & Principal  
Investigator-TARMACS  
Globe Machine  
Manufacturing Company

**Mark Morrison**  
Communications Director  
IACMI

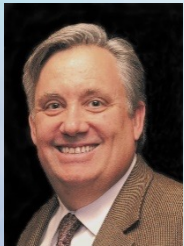
THE COMPOSITES  
**iacmi**  
INSTITUTE

- Presenters must be IACMI members
- Attendance is open to everyone
- Interested in presenting? Next events are July 17, August 21 and September 18

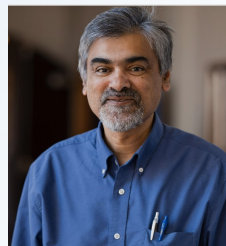


# IACMI Consortium Council

## EX OFFICIO MEMBERS



**DALE BROSIUS**  
EXECUTIVE DIRECTOR



**UDAY VAIDYA**  
CTO

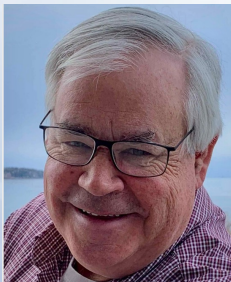


**MAHA KRISHNAMURTHY**  
UT RESEARCH FOUNDATION



**TOM DRYE**  
CCS LIAISON

## PREMIUM MEMBERS



**STEVE NOLET**  
TPI COMPOSITES



**RANI RICHARDSON**  
DASSAULT SYSTEMES



**GINA OLIVER**  
AMERICAN CHEMISTRY COUNCIL

# IACMI Consortium Council

## ELECTED AND APPOINTED MEMBERS



**HALEY MARIE KEITH – MITO MATERIALS**  
**SMALL ENTITY REPRESENTATIVE**



**HICHAM GHOSSEIN – ENDEAVOR COMPOSITES**  
**SMALL ENTITY REPRESENTATIVE**



**CRAIG BLUE - ORNL**  
**STATE/NATIONAL LAB/ACADEMIA**



**JOHN PRUETT - HEXCEL**  
**LARGE ENTITY REPRESENTATIVE**



**JOE FOX – FX CONSULTING**  
**EXECUTIVE DIRECTOR APPOINTEE**



**GLENN RICHARDSON – JOBS OHIO**  
**EXECUTIVE DIRECTOR APPOINTEE**

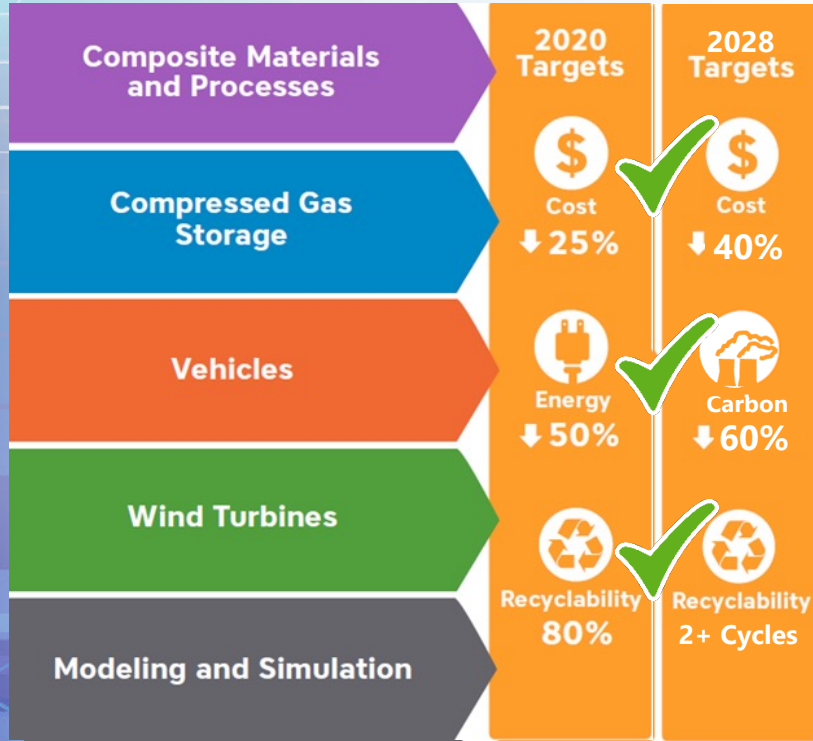




# DOE Renewal

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# IACMI Technical Goals under DOE Funding



IACMI Priorities 2023-2028	
Clean Energy Markets	Wind Energy, EVs, Hydrogen Storage
Cross-cutting Technologies	Circular Economy, Digitalization, Materials & Processes
Workforce of the Future	Education and Workforce Development, DEIA
Industry health	Small & Medium Enterprises; Robust, Resilient Supply Chains; Regional Partnerships/Clusters



# DOE Renewal Scope

- ◆ Major “in-scope” technical topics:
  - Offshore wind and longer onshore wind turbines
  - Hydrogen generation and storage
  - Vehicle electrification, both ground and airborne, supported by lightweighting
  - Circular and renewable economy, including recycling, bio-based materials and reversible resins
  - Digital process twins via simulation, incorporating real time life cycle analysis (LCA) into the design process
- ◆ In addition to technical scope, we will be addressing workforce and DEIA elements and Community Benefits.
- ◆ Baseline funding \$30M over five years plus \$30M in cost share.

# DOE Renewal – What Comes Next?

- ◆ Currently in negotiations with DOE to get under contract
  - Targeting July for Cooperative Agreement
  - Working on streamlined process for project approval and commencement of project work
- ◆ Working with core partners to refine scope, and identify high priority, high impact projects, including input from IACMI Working Groups.
- ◆ Projects will require industry cost share, some of which may be cash depending on need for tooling or other assets. Building a team with multiple partners allows for greatest leverage on project contributions.
- ◆ Stay tuned for a member webinar in early August to more fully describe how to participate.



# Thank You for Being IACMI Members!

