University Industry
Demonstration Partnership

Session 2.

Aligning Multiparty Goals and Mission:

Ashland's Involvement in IACMI

Joe Fox
Director, Emerging & External Technologies
Ashland Performance Materials

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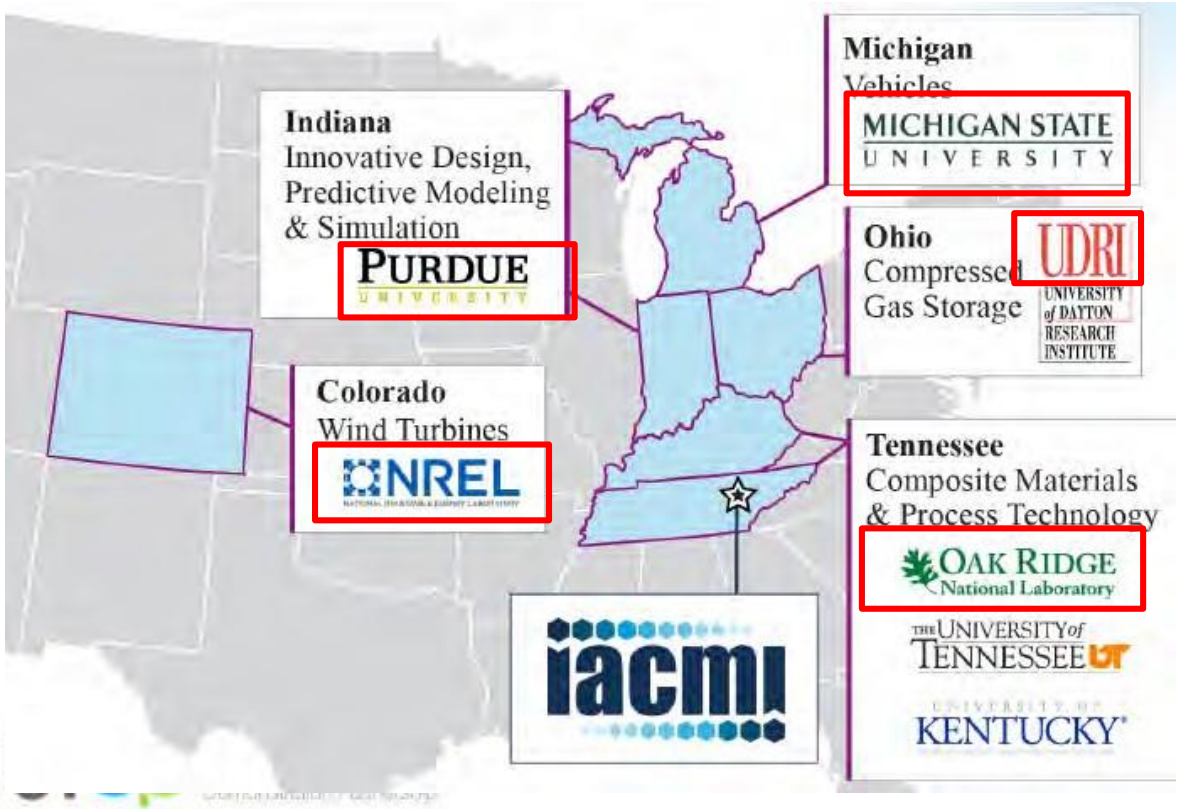
APM's Membership in Consortia

Consortium	Acronym	Location	Overlap with APM
Advanced Structures & Composites Center	ASCC	Maine	Composites
Industrial Partnership for Research in Interfacial Matl's & Engineering	IPRIME	Minnesota	Polymers
Institute for Advanced Composites Manufacturing Innovation	IACMI	Michigan State, UDRI, Purdue, ORNL, NREL	Advanced Composites
Center for Bio renewable Chemicals	CBiRC	Iowa State, Rice, UC-Irvine, Wisconsin, Virginia	Bio-based chemicals
Ohio Bio products Innovation Center	OBIC	Ohio State	Bio-based chemicals
Center for Sustainable Polymers	CSP	Minnesota, Cornell, UC-Berkeley	Green Chemistry

Ashland's Involvement in IACMI

- IACMI is a $70MM DOE-funded manufacturing institute that was awarded, Jan '15 www.iacmi.org
  - One of five National Network for Manufacturing Innovation (NNMI) institutes
  - 5 centers: 2 Federal labs = Oak Ridge Nat'l Lab, National Renewable Energy Lab (NREL),
  - 3 Universities = Purdue, Michigan State, and the University of Dayton Research



IACMI provides access to technology and expertise at multiple centers

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Overlap of Ashland's Interests with IACMI

Institute for Advanced Composites Manufacturing Innovation

MISSION

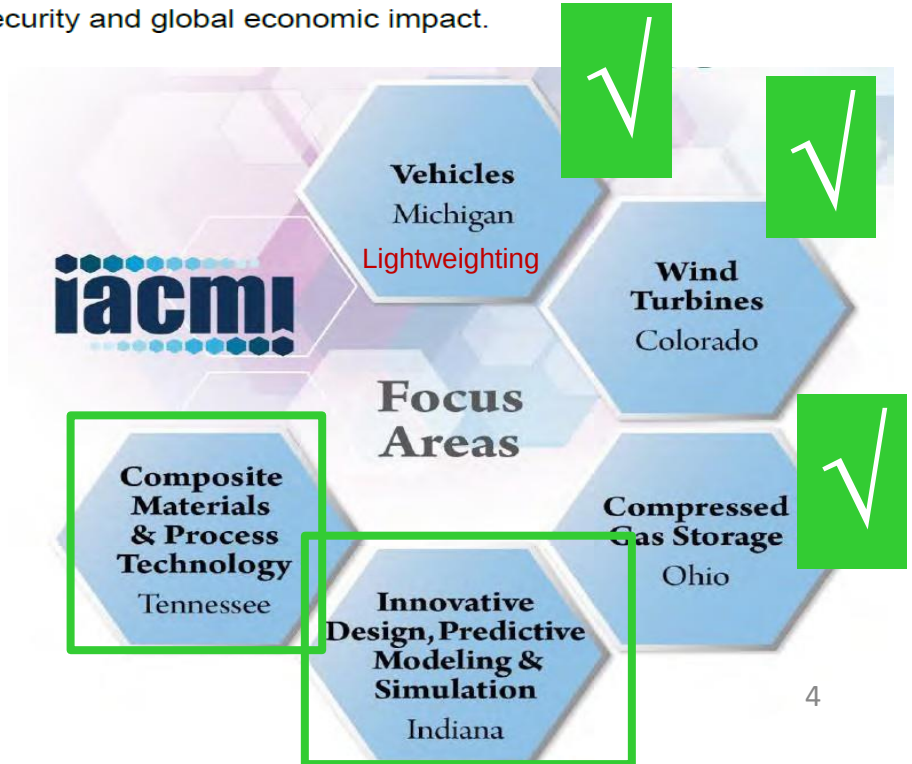
The Institute for Advanced Composites Manufactu
and **drives adoption of commercial composite**
private and public value chain partners to advance
manufacturing competitiveness.

Very good overlap with APM's needs for Advanced Composites technology (Carbon fiber composites)

IACMI unites and advances strategic regional capabilities, expertise and infrastructure in research, development and demonstration of critical technologies to accelerate adoption of high impact, commercially-relevant, scalable discoveries and prepare a skilled workforce to support advanced composites manufacturing job growth, US energy security and global economic impact.

CENTERS OF EXCELLENCE

MICHIGAN	OHIO	COLORADO with NREL	INDIANA	TENNESSEE With ORNL
Automotive Manufacturing	Compressed Gas Storage	Wind Energy Manufacturing	Manufacturing Simulation	Materials Development
Joining	Automotive Manufacturing	Wind Energy Simulation	Recycling/ Product Life Cycle Management	Advanced Characterization
	Wind Energy Manufacturing	Wind Energy Testing	Recycling	Non-Destructive Evaluation



Networking / Partnership Opportunities

OEMs

Fiber Suppliers

IACMI provides access to multiple potential partners throughout the composites value chain.

There are currently 149 members listed on the website.

Composites Supply Chain

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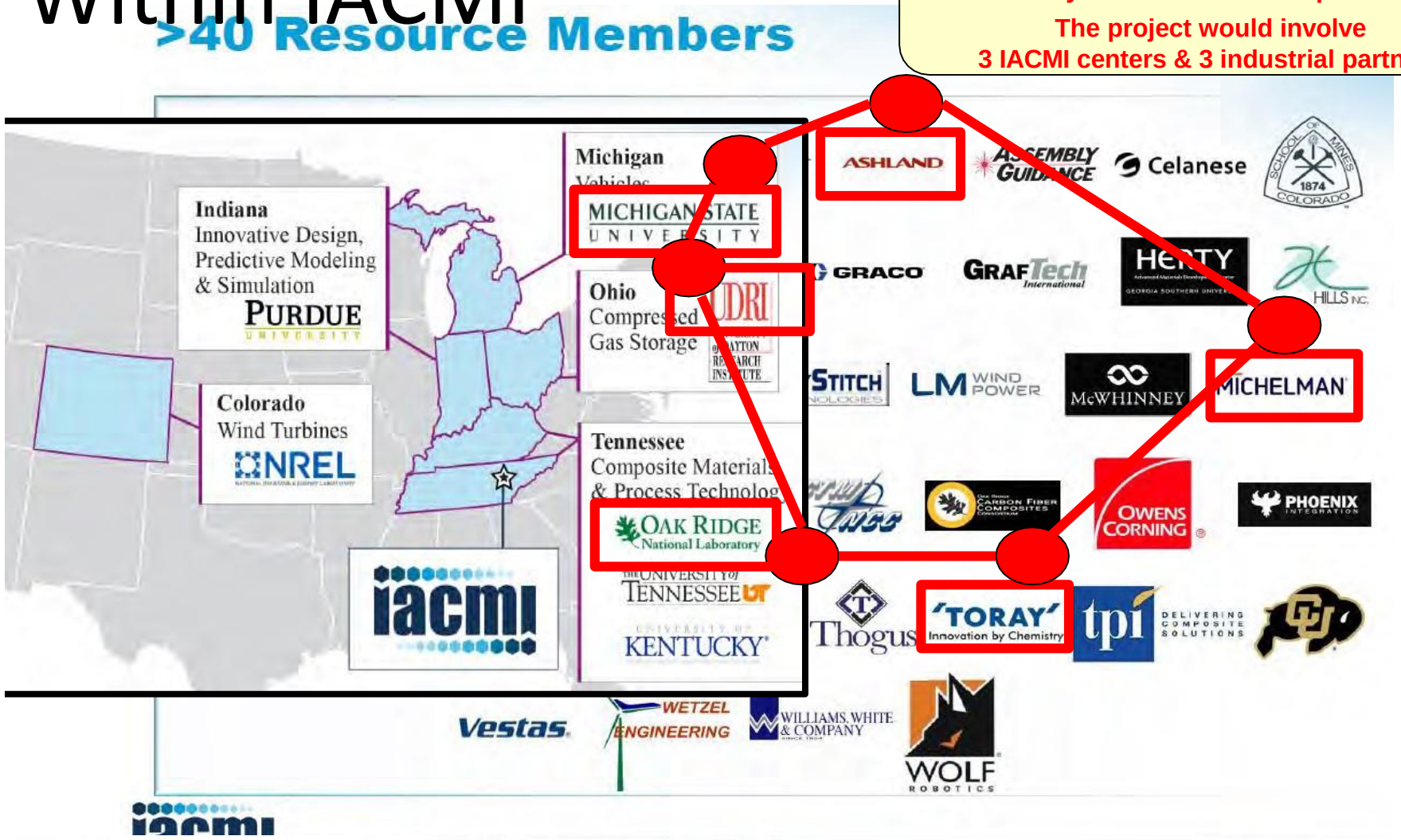
Connecting the Dots Within IACMI

We are getting ready to submit a project to develop resin & sizing technology for vinyl ester / C fiber composites.

The project would involve 3 IACMI centers & 3 industrial partners



How Did We Get Involved and Align Our Goals?

- We became aware of IACMI through our membership in the Carbon Fiber Consortium at Oak Ridge and the American Composite Manufacturers Association (ACMA)
- We attended the IACMI kick-off meeting in June ‘15 and formed a Core Team to coordinate our involvement
- We visited 4 of the 5 centers and shared our needs and capabilities
  - “We want to be a participant, not a spectator”
- The centers connected us to other industrial consortia members with similar interests
- UDRI has assisted with project planning and formatting of the project proposal
- UDRI will handle much of the project management going forward

In Summary….

- Ashland has become a member of the IACMI consortium
  - Similar motivation to joining ERCs and I/UCRCs
  - Industry + Universities + Federal Labs

- Benefits of membership:
  - Access to technology at multiple federal laboratories and universities
  - Networking / partnering opportunities throughout the composites value chain
  - Exposure within the Advanced Composites community
  - Leveraged funding

- Biggest differences from ERCs and I/UCRCs:
  - Greater involvement in project definition and project management
  - Cost share (cash + in-kind) contributions to support project work

Lessons We Are Still Learning …

- It takes a lot of time to get to the starting line with the first project.
  - "Plan the work. Work the plan."
  - Lots of paperwork – NDA, MTA, MSA
- It is a challenge to be someone submitting the first projects.
  - Would a "fast follower" approach be better?
- Advice: Keep the red tape to a minimum. Make the process as simple as possible.

Contact Information
Joe Fox
614-790-3686
jfox@ashland.com

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UIDP University Industry Demonstration Partnership