

# Ohio

## Moving materials and processes to commercial readiness

With a diversity of composites technology and a large number of small and medium enterprises (SMEs) involved in the composites industry, Ohio is a central location for IACMI—The Composites Institute to support SMEs advancing toward commercialization of their innovations. It features significant activity in aerospace composites and is also home to our Compressed Gas Storage Area.



## Facility Hosts and Partners

The Composites Laboratory at the University of Dayton Research Institute (UDRI) supports R&D of advanced composites manufacturing, modeling and characterization. The facility features full-scale manufacturing work cells and SMB incubation.

Key IACMI members involved in Ohio projects include Advanced Composites, Additive Engineering Solutions, Airbus, Cincinnati, Eaton, Globe, Hapco, Harmony Systems and Service, Ineos Composites, Johns Manville, Litzler Automation, MBI, Michelman, Milacron, N12, Northrop Grumman, Owens Corning, Saint-Gobain, and A. Schulman.



## Research Features

### Key Equipment and Technology:

- Finite element analysis, 3D stress analysis, and virtual textile morphology software
- Tailored fiber placement machine
- Additive manufacturing, autoclave, press, VARTM, and injection molding equipment
- Coating and bonding technologies including adhesive bonding, nanocomposite coating, EMI shielding, and environmental conditioning
- Agile tooling equipment
- Characterization and testing equipment

### Recent projects:

- Injection molding of textile carbon fiber and polyamide 66
- High production capacity of nanotechnology interlaminar reinforcement product
- Rapid curing prepreg and sheet molding compound
- Composites recycling non-incineration technology
- Tailored fiber placement for complex preforms

## Key Staff Member

Brian Rice

Composites Technology Development Lead, UDRI Structural Materials Div.