



# CAMX 2021 Tracks and Categories

## Additive Manufacturing

- **Advanced Materials for Thermoplastics**
- **Advanced Materials for Thermosets**
- **Concepts and Design Ideas for Advanced Composites**
- **Current Technology in Manufacturing and Materials**
- **National Lab and University Developments in Additive Manufacturing**
- **Tooling**
- **UV Cure Applications**

## Advances in Materials

- **Adhesives**
- **Advanced Materials and Selection**
- **Carbon Fiber**
- **Coatings/Sealants/Films**
- **Fibers, Textiles, and Reinforcement Forms**
- **Flammability, Smoke, Toxicity (FST)**
- **Gel Coat**
- **Glass Fiber**
- **High Temperature Resins & Adhesives**
- **Multifunctional Materials & Structures**
- **Nanomaterials & Nanotechnology**
- **Resins & Matrices**
- **Sandwich Structures & Core Materials**
- **Smart Materials, Self-Healing, and Multifunctional Materials**
- **Thermoplastics Resins & Composites**
- **Thermoset Resins & Composites**

## Bonding and Joining

- **Adhesives**
- **Composites to Composites**
- **Joining Simulation**
- **Mechanical Fasteners**
- **Multi-Material**



## Business, Regulatory, and Workforce Development

- **Chemical Hazard & Safety**
- **Codes and Standards**
- **Collaborative Research Centers**
- **Contract Language**
- **Grants**
- **Inspiring Science, Technology, Engineering, and Mathematics (STEM)**
- **Intellectual Property**
- **Internal Training Development**
- **Marketing Strategies**
- **Mitigating Regulatory Risk while Building a Productive and Safe Operating Culture**
- **Partnerships Between Academia and Industry**
- **Reports from Industry – Academia and Government Collaboration**
- **Reports from Industry – Market and Technology Gaps**
- **Research Tax Credits**
- **Successful Industry/Academic Case Studies**
- **Tax Law**
- **Training, Life-Long Learning, and Next Generation Work Force**
- **Working with Government Representatives**

## Design, Analysis, and Simulation

- **Advanced Design, Analysis, and Verification**
- **Advanced Design Methods**
- **Computational Materials Science and Engineering (CMSE)**
- **Damage, Fatigue, and Fracture**
- **Durability, Agility, and Long Term Performance**
- **Process Modeling & Simulation**
- **Repair**
- **Use of Composites with Metal, Ceramics, etc.**

## Green & Sustainability

- **Alternative Energy**
- **Designing for Sustainability**
- **Life Cycle Assessments**
- **Recycling of Composites**
- **Renewable & Bio-Composites Materials**



## Manufacturing & Processing Technologies

- **Advances in Automation & Affordable Manufacturing**
- **Advances in Prepreg Technology**
- **Automation & Robotics Technology**
- **Bonding Primary and Secondary Structures**
- **Composite Manufacturing & Processing**
- **Forming Technologies**
- **Large Production Volume Manufacturing Methods**
- **Out-of-Autoclave (OOA)**
- **Process Control**
- **Rapid Cure & Manufacturing Processing Technologies**
- **Resin Infusion/Liquid Molding/VARTM Composites Processing**
- **Tooling**
- **UV Cure & EB Cure**

## Market Applications

- **Aerospace**
- **Architecture**
- **Automotive**
- **Bath**
- **Consumer Products**
- **Corrosion**
- **Energy**
- **Heavy Vehicle**
- **Infrastructure/Construction**
- **Marine**
- **Mass Transit**
- **Medical**
- **Military & Defense**
- **Pipe & Tank**
- **Recreational Vehicle**
- **Renewable Energy**
- **Sports and Recreation**
- **Transportation**



## Non-Destructive Evaluation & Testing

- **Material Certifications**
- **Materials and Structural Test Methods**
- **Non-Destructive Inspection & Testing**
- **Sensors & Sensor Technologies**
- **Structural Health Monitoring**