CAMX
THE COMPOSITES AND ADVANCED MATERIALS EXPO

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Please note that the schedule below, compiled on 10/26/2023, only includes technical papers and educational sessions. For an up to date listing of all the educational offerings, please download the CAMX App

Additive Manufacturing Track

Session Type	Title	Date	Time	Location
Technical Paper	**3D Printed Wind Blade Tooling on a Near Net Shape Support Structure with Built-In Heating System** *John Arimond , University of Maine, Advanced Structures and Composites Center*	Tuesday, October 31	2:00 PM - 2:25 PM	C107
Technical Paper	**Investigation of Fiber Content, Fiber Direction, and Surface Characteristics of the Different Surface Angles of Additively Manufactured Composite Relative to the Printing Direction** *Sung Jun Choi , Purdue University*	Tuesday, October 31	2:30 PM - 2:55 PM	C107
Technical Paper	**Leveraging Simulation and Soluble Support to 3D Print Semicrystalline Thermoplastic Polymers in Cold Chamber Using Filament Fusion** *Claire Steggall-Murphy , Hexagon*	Tuesday, October 31	3:00 PM - 3:25 PM	C107
Technical Paper	**Characterization of the Performance of 3D Printed Honeycomb Cores for Resin Infused Sandwich Panels** *Clement Brousse , Colorado State University*	Tuesday, October 31	3:30 PM - 3:55 PM	C107
Technical Paper	**Continuous Fiber 3D Printing for Compression Overmolding** *Tyler Smith , Oak Ridge National Laboratory*	Tuesday, October 31	4:00 PM - 4:25 PM	C107
Technical Paper	**Experimental Evaluation on the Longitudinal Compressive Strength of Carbon Nanofibers Z-threaded CFRP Laminate Manufactured by the Magnetic Compaction Force Assisted Additive Manufacturing Method** *Kuang-Ting Hsiao PhD, University of South Alabama*	Tuesday, October 31	4:30 PM - 4:55 PM	C107
Technical Paper	**Design Of Lightweight, High Stiffness, And Low Strength Parts Using Metallic Skins For Large Format Additive Manufacturing Processes** *Emily Piatt , Dept. of Mechanical Engineering, University of Cincinnati*	Wednesday, November 1	9:00 AM - 9:25 AM	C107
Technical Paper	**Enhancing Structural Performance of Upcycled Fiber-reinforced Thermoplastic Composites through Additively Manufactured Continuous Fiber Reinforced Preforms** *Garam Kim , Purdue University*	Wednesday, November 1	9:30 AM - 9:55 AM	C107
Technical Paper	**Optimization through Fiber Steering for Continuous Fiber Composite Applications** *Nathan Stranberg , Continuous Composites*	Wednesday, November 1	10:00 AM - 10:25 AM	C107
Technical Paper	**Additively Reinforced Thermoforming (Art)** *Ahmed Hassen , Oak Ridge National Laboratory*	Wednesday, November 1	10:30 AM - 10:55 AM	C107

Education Session	**Additive Fusion Technology: A Novel Hybrid Manufacturing Approach Allowing Material Circularity for Structural Parts** *Yannick Willemin , 9T Labs AG*	Wednesday, November 1	11:00 AM - 11:55 AM	C107
Technical Paper	**Investigation of Rheological Behavior and Dispersion Stability of Epoxy Resin with the Addition of Graphene-based Hybrid Additives** *Lynsey Baxter , MITO*	Wednesday, November 1	1:30 PM - 1:55 PM	C107
Technical Paper	**Investigation of In-plane and Out-of-plane Deformation Mechanisms in Composites Additive Manufacturing** *Eduardo Barocio PhD, Composites Manufacturing and Simulation Center - Purdue University*	Wednesday, November 1	2:00 PM - 2:25 PM	C107
Technical Paper	**In-Situ Monitoring for Local Feature Segmentation and Material-Driven Control** *Anthony Psulkowski , High Performance Materials Institute*	Wednesday, November 1	2:30 PM - 2:55 PM	C107
Technical Paper	**Multi-Axis Pellet-Based Extrusion for Large Format Additive Manufacturing** *Aywan Das , McNAIR Center for Aerospace Innovation and Research*	Wednesday, November 1	3:00 PM - 3:25 PM	C107
Technical Paper	**Streamlining Composite Manufacturing Using Additively Manufactured Mandrels** *Ido De La Vega , Massivit*	Wednesday, November 1	3:30 PM - 3:55 PM	C107
Technical Paper	**Automated Manufacturing of Grid Stiffened Panels with Radically Reduced Tooling** *Harry Ratkai , Colorado State University*	Wednesday, November 1	4:00 PM - 4:25 PM	C107
Technical Paper	**Additive Manufacturing of Two-part Reactive Resin Systems** *Chad Ulven , North Dakota State University*	Wednesday, November 1	4:30 PM - 4:55 PM	C107

Advances in Materials Track

Session Type	Title	Date	Time	Location
Technical Paper	**Analytical Modeling of a 3-phase Nanocomposite Cylindrical Unit Cell with Orthotropic Constituents** *Ramanan Sritharan , California Polytechnic State University, Saint Luis Obispo*	Tuesday, October 31	1:30 PM - 1:55 PM	C105
Technical Paper	**Hybrid Multifunctional Carbon Fiber/Carbon Nanotube Peek Composite Thermomechanical Mechanisms and Performance** *Mitesh Patadia , High-Performance Materials Institute*	Tuesday, October 31	2:30 PM - 2:55 PM	C105
Technical Paper	**Comparing Long Term Multi-Temperature Flexural Creep with DMA TTSP Techniques for Neat PP and PP-GF30 Long Fiber Thermoplastic** *Max Kauphusman , Winona State University*	Tuesday, October 31	3:00 PM - 3:25 PM	C105
Technical Paper	**Influence of Carbon Fibers and Nanomaterials on the Crystallization Behavior and Morphology of High Temperature Thermoplastic Composites** *Nick Enos , University of Southern Mississippi*	Tuesday, October 31	3:30 PM - 3:55 PM	C105
Technical Paper	**Investigating the Effectiveness of Nanomodified Superhydrophobic Coatings on Fiber-Reinforced Laminated Composites** *Halil Kaybal PhD, Amasya University*	Tuesday, October 31	4:00 PM - 4:25 PM	C105

Technical Paper	**Increasing the Electrical Properties of Fiber Composites for EMI Shielding Purposes with PEDOT:PSS Drop Coating Method** *Hayrettin Duzcukoglu PhD, Selcuk University*	Tuesday, October 31	4:30 PM - 4:55 PM	C105
Education Session	**Non-filled and Non-halogenated Polyester Resin for FST Applications** *Daniel Rodriguez , AOC Resins*	Tuesday, October 31	1:00 PM - 1:55 PM	C106
Technical Paper	**Ablation Performance of Carbon Fiber Reinforced Ceramic Matrix Composites** *Jihua Gou PhD, University of Central Florida*	Tuesday, October 31	2:00 PM - 2:25 PM	C106
Technical Paper	**Frictional Properties at Tool-ply Interface of Continuous vs Stretch Broken Carbon Fiber (SBCF) Prepreg** *Tasnia Javin Nur , Montana State University*	Tuesday, October 31	2:30 PM - 2:55 PM	C106
Technical Paper	**Investigation of the Combined Effect of Purification and Functionalization on the Interfacial Properties of Carbon Nanotube Yarns Using a Post-Fractionated Strip-block Design of Experiments Approach** *Matthew Wadsworth , Florida State University*	Tuesday, October 31	3:00 PM - 3:25 PM	C106
Technical Paper	**Development of Conductive Lightweight Nanofiber Reinforced Composite for Aircraft Lightning Strike Protection** *Mohammad Uddin , North Carolina A&T State University*	Tuesday, October 31	3:30 PM - 3:55 PM	C106
Technical Paper	**Constitutional Isomerism of Aryl Ether Ketone Diamine – Epoxy Networks** *Andrew Hollcraft , University of Southern Mississippi*	Tuesday, October 31	4:00 PM - 4:25 PM	C106
Technical Paper	**Phenylethynyl-Terminated Amic Acid Oligomer Prepreg for High Temperature Composites** *Masahiko Miyauchi , Material Solutions New Research Engine, Kaneka Corporation*	Tuesday, October 31	4:30 PM - 4:55 PM	C106
Education Session	**Sustainable Thermoplastic Sandwich Structures** *Peter LeBoulluec , Diab*	Wednesday, November 1	9:00 AM - 9:55 AM	C105
Technical Paper	**Extending Impact Fatigue Life of Thermoplastic Fibre-Reinforced Composites via Multi-Impact Resistant Nature-inspired Helicoid Fibre Architectures** *Lorenzo Mencattelli PhD, Helicoid Industries Inc.*	Wednesday, November 1	10:00 AM - 10:25 AM	C105
Technical Paper	**Next Generation rPET Structural Foam Core with Significantly Lower Resin Uptake** *Stefan Reuterlöv , Armacell*	Wednesday, November 1	10:30 AM - 10:55 AM	C105
Education Session	**How Today's Next-generation High-rate Composite Manufacturing Programs are Paving the way to a Sustainable Future** *DeWayne Howell , Toray Advanced Composites*	Wednesday, November 1	11:00 AM - 11:55 AM	C105
Education Session	**Controlling Viscosity of Filled Composite Systems** *Erik Antonio , Omya*	Wednesday, November 1	1:30 PM - 2:25 PM	C105
Technical Paper	**Novel Degradable Polymer Composite Materials to Enable Acid Fracturing at High Temperature High Pressure Conditions** *LEI ZHAO , CNPC USA*	Wednesday, November 1	2:30 PM - 2:55 PM	C105
Technical Paper	**Reactive Polyetherimide Oligomers: (Part I) Performance Robustness of Epoxy Modified Systems** *Dadasaheb Patil PhD, SABIC*	Wednesday, November 1	3:00 PM - 3:25 PM	C105

Technical Paper	**Influence of Isomerism on Thermal and Mechanical Properties of Aromatic Diamine Based Polybenzoxazines** *Charles Davis , University of Southern Mississippi*	Wednesday, November 1	3:30 PM - 3:55 PM	C105
Technical Paper	**Reactive Polyetherimide Oligomers: (Part II) Toughening in Carbon Fiber Reinforced Epoxy Composites** *Devendra Bajaj , SABIC (Saudi Arabia)*	Wednesday, November 1	4:00 PM - 4:25 PM	C105
Technical Paper	**Highly Conductive Dispersions of Carbon Nanotubes for Polymer Composite Applications** *Santosh Yadav , Vibrantz Technologies*	Wednesday, November 1	4:30 PM - 4:55 PM	C105
Bonding & Joining Track				
Session Type	**Title**	**Date**	**Time**	**Location**
Technical Paper	**Joining of Continuous Fiber Reinforced Thermoplastic Composites at Large Scale and To Metal and Glass** *Jeff Ellis , EWI*	Tuesday, October 31	1:00 PM - 1:25 PM	C108
Technical Paper	**Glass Fiber Sheet Molding Compound/ Metal Hybrid Laminates** *Pritesh Yeole , University of Tennessee*	Tuesday, October 31	1:30 PM - 1:55 PM	C108
Technical Paper	**Induction Welding Development for Sustainable Thermoplastic Fuselage** *Damien Sireude , Airbus Atlantic*	Tuesday, October 31	2:00 PM - 2:25 PM	C108
Technical Paper	**Thermal and Mechanical Performance of Ultraviolet-Curable Thermosets for Wind Turbine Blades Repair** *Jeremi Bussieres , CDCQ*	Tuesday, October 31	2:30 PM - 2:55 PM	C108
Technical Paper	**Preliminary Experimental Study of Using Nano-enhanced Epoxy Adhesive to Bond Carbon Nanofibers Z-threaded CFRP Laminates** *Kuang-Ting Hsiao PhD, University of South Alabama*	Tuesday, October 31	3:00 PM - 3:25 PM	C108
Technical Paper	**Adhesion and Mechanical Performance of Co-Consolidated Titanium-Thermoplastic Composite Joints** *Vanessa Marinosci , ThermoPlastic composites Research Center (TPRC)*	Tuesday, October 31	3:30 PM - 3:55 PM	C108
Technical Paper	**Development of Joining Techniques for Carbon Fiberbased Polymer Matrix Composites** *Mehmet Erdem Iris , Turkish Aerospace*	Tuesday, October 31	4:00 PM - 4:25 PM	C108
Technical Paper	**Improvement of the Joining Performance of Fiber-Reinforced Composite with Polyamide 66 Nanofibers Produced by the Electrospinning Method** *Gözde Esenoğlu , TAI - Turkish Aerospace Industries, Inc.*	Tuesday, October 31	4:30 PM - 4:55 PM	C108
Technical Paper	**Experimental and Numerical Analysis of Adhesive Bonding for the Mounted Mirrors used in the MUVI Instrument** *Colin Harrop , California Polytechnic State University, San Luis Obispo*	Wednesday, November 1	9:00 AM - 9:25 AM	C108
Technical Paper	**Nanomechanical Property Characterization of Composite Adhesive Bonding Systems with Long-term Environmental Exposures** *Rita Olander , University of Washington*	Wednesday, November 1	9:30 AM - 9:55 AM	C108

Business, Regulatory, and Workforce Development				
Session Type	**Title**	**Date**	**Time**	**Location**
Technical Paper	**Workforce Development for Composite Manufacturing Based on Immersive Technology** *Minhazur Rahman , The University of Texas at Arlington*	Tuesday, October 31	1:00 PM - 1:25 PM	C105
Design, Analysis, and Simulation				
Session Type	**Title**	**Date**	**Time**	**Location**
Education Session	**A Test and Simulation Approach for Accurate Crash Safety Prediction in Aerospace** *Tim Hall , Engenuity Ltd*	Tuesday, October 31	1:00 PM - 1:55 PM	C103
Technical Paper	**Utilizing the Extended Finite Element Method to Model Energy Minimizing Crack Growth Behavior** *Seyed Soltani , Florida Polytechnic University*	Tuesday, October 31	2:00 PM - 2:25 PM	C103
Technical Paper	**Thermo-chemical Model for Microwave Curing of Continuous Carbon Fiber Reinforced Composites** *Nayan Pundhir , Missouri University of Science and Technology*	Tuesday, October 31	2:30 PM - 2:55 PM	C103
Technical Paper	**Block Fatigue Testing Techniques Considering Hold Time, Frequency, and Residual Stress-Strain Curves** *Jackson Morgan , Winona State University*	Tuesday, October 31	3:00 PM - 3:25 PM	C103
Education Session	**Demystifying Technical Datasheets: The Truth Behind the Data** *Rachael Geerts , PRO-SET Epoxy*	Tuesday, October 31	3:30 PM - 4:25 PM	C103
Technical Paper	**Composite Solid Rocket Motor Case Optimization with Matlab Genetic Algorithm** *Aleksandr Breit , California Polytechnic State University,*	Tuesday, October 31	4:30 PM - 4:55 PM	C103
Education Session	**How to Accomplish Low Stress While Molding Epoxy** *Ryan Furno , Sigma Plastic Services*	Wednesday, November 1	9:00 AM - 9:55 AM	C103
Technical Paper	**Reducing Warpage in a Hybrid Large-Scale Additive Manufacturing and Compression Molding Process** *Nikhil Garg , Oak Ridge National Laboratory*	Wednesday, November 1	10:00 AM - 10:25 AM	C103
Technical Paper	**A Revised Finite Element Analysis Approach to Designs and Optimize Composite Lattice Reinforcements and Simulate the Mechanical Properties of Composite Lattice Reinforced Plastics** *Meghana Kamble , WEAV3D Inc.*	Wednesday, November 1	10:30 AM - 10:55 AM	C103
Technical Paper	**Accelerated Tensile-Tensile Fatigue S-N Curve Characterization of PP-GF30 and PA66-GF50 using Block Testing and Cumulative Damage Theory** *Eric Kerr-Anderson , Winona State University*	Wednesday, November 1	11:00 AM - 11:25 AM	C103
Technical Paper	**Thermoset Material Data Cards and Process Modeling - A Game Changer for SMC Market** *Mohamed Selim , Owens Corning*	Wednesday, November 1	11:30 AM - 11:55 AM	C103
Technical Paper	**Analysis Directed Design of a Nonlinear, Force-limiting Composite Shock Isolator for Advanced Applications** *Jonathan Gosse , CES*	Wednesday, November 1	1:30 PM - 1:55 PM	C103
Technical Paper	**Application of K-nearest Neighbors Algorithms for Void Classification in Composite Oriented Strand Board** *Wenyue Hu , Advanced Composites Design Lab, University of Southern California*	Wednesday, November 1	2:00 PM - 2:25 PM	C103

Technical Paper	**Design Optimization of a Multi-Material, Fiber-Reinforced Composite-Intensive Body-in-white of a Mid-size SUV** *Amit Deshpande , Center for Composite Materials, University of Delaware*	Wednesday, November 1	2:30 PM - 2:55 PM	C103
Technical Paper	**Optimization of Corrugated Structures in Free Vibration** *Caleb Erlenborn , Cal Poly San Luis Obispo*	Wednesday, November 1	3:00 PM - 3:25 PM	C103
Education Session	**Fracture Mechanics for Design and Reliability** *Felix Chen ,*	Wednesday, November 1	3:30 PM - 4:25 PM	C103
Technical Paper	**Rebar for Plastics – A Novel Approach to Part Optimization with Hybrid Length-scale Composites** *Christopher Oberste , WEAV3D Inc*	Wednesday, November 1	4:30 PM - 4:55 PM	C103

Green & Sustainability

Session Type	Title	Date	Time	Location
Technical Paper	**The Role of AI and IIoT in Reaching New Standards of Sustainability** *Avner Ben-Bassat , Plataine*	Tuesday, October 31	2:30 PM - 2:55 PM	C102
Technical Paper	**Mechanical Performance Enhancement of Thermoplastics by Surface-Modified Pyrolytic Carbon Black Additives from Waste Tires** *Bendaoud Nohair PhD, Centre de développement des composites du Québec (CDCQ)*	Wednesday, November 1	1:30 PM - 1:55 PM	C106
Technical Paper	**Impacts of Mechanical Recycling on the Thermal and Mechanical Properties of ULTEM 1000** *John Misasi PhD, Western Washington University*	Wednesday, November 1	2:00 PM - 2:25 PM	C106
Technical Paper	**Large Scale Carbon Fiber Hybrid Composite Automotive Parts from Recycled Material** *Halil Tekinalp , ORNL*	Wednesday, November 1	2:30 PM - 2:55 PM	C106
Technical Paper	**Use of Thermal Black as Filler in PLA Films for Agricultural and Industrial Applications** *Mihaela Mihai PhD, National Research Council of Canada*	Wednesday, November 1	3:00 PM - 3:25 PM	C106
Technical Paper	**Physical, Mechanical, and Thermoformability Behavior of Natural Fiber Reinforced Biocomposites** *Liqing WEI PhD, Hanwha Azdel, Inc.*	Wednesday, November 1	3:30 PM - 3:55 PM	C106
Technical Paper	**Natural Fibers as a Load-bearing Constituent in Composite Structural Components** *Santino Wist , Institut für Textiltechnik der RWTH Aachen University*	Wednesday, November 1	4:00 PM - 4:25 PM	C106
Technical Paper	**Materials and Design Study of Thermoplastic Composite Pipes for Liquid Hydrogen Distribution in Aviation** *Daniel Barfuss , herone GmbH*	Wednesday, November 1	4:30 PM - 4:55 PM	C106
Technical Paper	**Design for Sustainability in Highly Flame Resistant Phenolic Sheet Molding Compound** *Hugh MacDowell , Teijin Automotive Technologies*	Wednesday, November 1	11:00 AM - 11:25 AM	C109
Technical Paper	**Three-point Bending of Honeycomb-core Sandwich Beams with Composite Oriented Strand Board Face Sheets** *Wenyue Hu , Advanced Composites Design Lab, University of Southern California*	Wednesday, November 1	11:30 AM - 11:55 AM	C109

Manufacturing & Processing Technologies				
Session Type	**Title**	**Date**	**Time**	**Location**
Education Session	**Industry 4.0 Applied to Process Control in Autoclaves and Ovens** *Peter Sherwin , Eurotherm*	Tuesday, October 31	1:00 PM - 1:55 PM	C102
Technical Paper	**Real-time Process Optimization Using In-mold Dielectric Analysis and Machine Learning** *Alec Redmann , NETZSCH Instruments North America*	Tuesday, October 31	2:00 PM - 2:25 PM	C102
Education Session	**Technical Developments in Automated Ply Placement** *Joseph Summers , Airborne UK*	Tuesday, October 31	3:00 PM - 3:55 PM	C102
Education Session	**Unidirectional Tapes – The Incumbents of the Composite Industry** *Aaditya Suratkar , Fraunhofer ICT*	Tuesday, October 31	4:00 PM - 4:55 PM	C102
Technical Paper	**Heated Tool Recipe Development for Rapid Consolidation of Thermoplastic Automated Fiber Placement Laminate** *Joseph Heil , Spirit AeroSystems*	Tuesday, October 31	2:00 PM - 2:25 PM	C105
Education Session	**Class-A Polyurethane Overmolding of Injection Molded Parts** *Dan Rozelman , Krauss Maffei*	Wednesday, November 1	9:00 AM - 9:55 AM	C102
Education Session	**Separator Reduction Through Human Factors Statistical Analysis** *Paul Hylenski Jr., ST ENGINEERING*	Wednesday, November 1	10:00 AM - 10:55 AM	C102
Education Session	**Effects of Contamination in Hybrid Overmolded Parts** *Claire Steggall-Murphy , Victrex*	Wednesday, November 1	11:00 AM - 11:55 AM	C102
Education Session	**Implementing Automated Composites Manufacturing Processes in Traditional Production Markets** *Andrew Pokelwaldt , AWALDT LLC*	Wednesday, November 1	9:00 AM - 9:55 AM	C106
Technical Paper	**Cold Laser Ablation as a Remediation Strategy for Contaminated CFRP Surfaces** *Joann Hilman , Brighton Science*	Wednesday, November 1	10:00 AM - 10:25 AM	C108
Technical Paper	**An Automated and Reliable Approach to Monitor the Surfaces of Carbon Fiber Reinforced Polymers Prior to Bonding for Successful Adhesion** *Lucas Dillingham , Brighton Science*	Wednesday, November 1	10:30 AM - 10:55 AM	C108
Technical Paper	**Characterization of Thermoplastic Composites made by Oven Consolidation and Stamp Forming** *Joseph Heil , NIAR*	Wednesday, November 1	11:00 AM - 11:25 AM	C108
Technical Paper	**Tensile Property Prediction of Long Fiber Thermoplastic Composites Manufactured byLFT-D-IM Process** *Chanwoo Joung , Ulsan National Institute of Science and Technology (UNIST)*	Wednesday, November 1	11:30 AM - 11:55 AM	C108
Education Session	**Automated Flashing Removal for Composite Parts** *Matthew Kirby, Southwest Research Institute*	Wednesday, November 1	1:30 PM - 2:25 PM	C108
Education Session	**Manufacturing Large, Complex Composite Structures with Dry Fiber and Resin Infusion Significantly Lowers Cost and Production Time vs Parts Made with Pre-preg** *Tom Margraf , Spintech Holdings Inc*	Wednesday, November 1	2:30 PM - 3:25 PM	C108
Technical Paper	**In-Process Surface Analysis of a Sub-Scale Aerospace Component** *Mark Benson , Fives Lund*	Wednesday, November 1	3:30 PM - 3:55 PM	C108

Technical Paper	**Crystallinity Variability in Thick Section Pet Composites** *Chad Ulven , North Dakota State University*	Wednesday, November 1	4:00 PM - 4:25 PM	C108
Technical Paper	**Thermoset Composite Forming for Efficient Manufacturing** *Simon Hind , National Research Council Canada*	Wednesday, November 1	4:30 PM - 4:55 PM	C108
Education Session	**Recent Developments with Composite Manhole Covers Help Solve a Leading Cause of Water Pollution** *Chad Nunnery , Composite Access Products*	Wednesday, November 1	1:30 PM - 2:25 PM	C109
Technical Paper	**Foreign Object Debris (FOD) in Composites Fabrication: Detection, Correction and Prevention** *Chris Page , Aligned Vision*	Wednesday, November 1	2:30 PM - 2:55 PM	C109
Technical Paper	**Hydroxy Functional Co-Curable Polyurethane Films for Composite Surfacing** *Matthew Amick , AkzoNobel*	Wednesday, November 1	3:00 PM - 3:25 PM	C109
Technical Paper	**Consolidation of Braided Carbon Fiber/ Thermoplastic Composite Tubes by Induction Welding** *Jaspreet (Jessie) Pandher , University of South Carolina, McNAIR Center*	Wednesday, November 1	3:30 PM - 3:55 PM	C109
Technical Paper	**In-situ Pultrusion of Nylon 6 Based Profiles – Key Parameters of the Process** *Michael Wilhelm , Fraunhofer ICT*	Wednesday, November 1	4:00 PM - 4:25 PM	C109
Education Session	**Replacing Metal with Continous Fiber Reinforced Thermoplastics** *Peter McCormack , Dieffenbacher*	Thursday, November 2	11:30 AM - 12:25 AM	CAMX Theater

Market Applications

Session Type	Title	Date	Time	Location
Technical Paper	**Evaluation and Application of FRP Pedestrian Bridges** *P.V. Vijay , West Virginia University*	Wednesday, November 1	10:00 AM - 10:25 AM	C106
Technical Paper	**Effect of Fire Exposure on Mechanical Properties of Fiber Reinforced Polymer Composite Utility Structures** *Ray Liang , West Virginia University*	Wednesday, November 1	10:30 AM - 10:55 AM	C106
Technical Paper	**Response of GFRP Composites Under High Temperature** *Rakesh Gupta , West Virginia University*	Wednesday, November 1	11:00 AM - 11:25 AM	C106
Technical Paper	**Additive Manufacturing of a 3D Printed Continuous Carbon Fiber Composite Cycling Shoe** *Cole Nielsen , Orbital Composites Inc*	Wednesday, November 1	11:30 AM - 11:55 AM	C106
Education Session	**EMI Shielding Evolution and Application Case Studies** *Christian Oberleitner , Gallois SP2 CARBON*	Thursday, November 2	10:30 AM - 11:25 AM	CAMX Theater

Non-Destructive Evaluation & Materials Testing

Session Type	Title	Date	Time	Location
Technical Paper	**Review on Unique Methods of Interfacial Adhesion Evaluation via Wettability and Electro-Micromechanical Techniques for Various Fibers/Thermoset or Thermoplastic Composites** *JOUNG-MAN PARK PhD, Gyeongsang National University*	Tuesday, October 31	1:00 PM - 1:25 PM	C109
Technical Paper	**Validation of a New Clamping Solution for Tensile Testing of Impregnated Carbon and Glass Fiber Rovings for Applications in Composites** *Shantanu Bhat , Institut für Textiltechnik of RWTH Aachen University*	Tuesday, October 31	1:30 PM - 1:55 PM	C109

Technical Paper	**Investigating Marine Environmental Degradation of Additive Manufacturing Materials for Renewable Energy Applications** *Paul Murdy , National Renewable Energy Laboratory*	Tuesday, October 31	2:00 PM - 2:25 PM	C109
Technical Paper	**A Methodology to Conduct Push-Out Tests to Evaluate the Degradation in Interfacial Shear Strength of Carbon Fiber/ Vinyl Ester Composites due to Long-term Exposure To Seawater** *Dayakar Penumadu , University of Tennessee*	Tuesday, October 31	2:30 PM - 2:55 PM	C109
Technical Paper	**Infrared Thermography Based Rapid Fatigue Life Characterisation of Advanced Composites** *Suhasini Gururaja , Auburn University*	Tuesday, October 31	3:00 PM - 3:25 PM	C109
Technical Paper	**Non-invasive Characterization of Fiber Reinforced Automotive Composites through Thermography** *Hannah Maeser , University of Tennessee, Knoxville*	Tuesday, October 31	3:30 PM - 3:55 PM	C109
Technical Paper	**A Method to Improve Detection of Release Fabric in Fiber Reinforced Composite by through Transmission Ultrasound** *Gary LeMay , Spirit AeroSystems Inc.*	Tuesday, October 31	4:00 PM - 4:25 PM	C109
Technical Paper	**Design of Test Methods for Deployable Composite Booms** *William Montgomery , University of South Carolina*	Tuesday, October 31	4:30 PM - 4:55 PM	C109
Education Session	**Top 10 Quality Assessment Techniques for Composite Laminates** *Donald Klosterman PhD, University of Dayton*	Wednesday, November 1	9:00 AM - 9:55 AM	C109
Technical Paper	**Experimental Investigation of Glass Fiber Reinforced Polymer Columns under Compression** *chao Zhang , west virginia university*	Wednesday, November 1	10:00 AM - 10:25 AM	C109
Technical Paper	**Durability Monitoring of Fiber Reinforced Polymer Composite Bridge Deck System – Morgan County Bridge Case Study** *John Unser , Composite Applications Group*	Wednesday, November 1	10:30 AM - 10:55 AM	C109