

Updated: 4.8.2026

Materials Technology (MAT)-Composites and Joining			
Tuesday, June 2		Wednesday, June 3	
8:00 AM	Continental Breakfast		
9:00 AM	MAT280: Composites Core Program (CCP) 2.0 - Overview Amit Naskar, Oak Ridge National Laboratory	9:00 AM	MAT319: CCP 2.0 Thrust 4.1 - Precise High-Speed Manufacturing of Thermoplastic composites Using Additive - Compression Molding (AM-CM) Vipin Kumar, Oak Ridge National Laboratory
9:15 AM	MAT340: CCP 2.0, Thrust 1.1 - Synthesis and Melt Spinning of Renewable Pitch for Low-Cost Carbon Fiber Precursor Michael Toomey, Oak Ridge National Laboratory	9:15 AM	MAT320: CCP 2.0 Thrust 4.2 - Designing and Manufacturing Adaptable Large-scale Hierarchical Materials with Tailorable Toughness Seokpum Kim, Oak Ridge National Laboratory
9:30 AM	MAT290: CCP 2.0, Thrust 1.2 - Next generation carbon fibers for vehicles from waste polyolefins via selective C-H functionalization Logan Kearney, Oak Ridge National Laboratory	9:30 AM	MAT318: CCP 2.0 Thrust 4.3 - Recyclable Cellulose Fiber Reinforced Vitrimers Composites Amit Naskar, Oak Ridge National Laboratory
		9:45 AM	MAT326: CCP 2.0 Thrust 4.4 - 3D Printing of High-fidelity Heteroatom Containing Functional Carbons for Thermal Management Joshua Damron, Oak Ridge National Laboratory
10:00 AM	MAT292: CCP 2.0, Thrust 1.3 - A Viable Route from Acrylic Textiles to Low Cost Carbon Fiber Felix Paulauskas, Oak Ridge National Laboratory	10:00 AM	MAT321: CCP 2.0 Thrust 4.5 - Bio-inspired High-Performance 3D Printed Carbon Composite with Sensing: Surface modification and AI/ML Approaches Rigoberto Advincula, Oak Ridge National Laboratory
		10:15 AM	MAT350: Joining Core Program (JCP) 3.0 - Overview Zhili Feng, Oak Ridge National Laboratory
10:30 AM	MAT291: CCP 2.0, Thrust 1.4 - High-molecular Weight Polyethylene Fibers for Self-reinforced Composites Amit Naskar, Oak Ridge National Laboratory	10:30 AM	MAT351: JCP 3.0 Thrust 1.1 - Toward Industry Readiness of Body Structure Joining (PNNL) Aashish Rohatgi, Pacific Northwest National Laboratory
10:45 AM	MAT293: CCP 2.0, Thrust 1.5 - High-performance Polymer-Fiber-Reinforced Polymer Composites (PFRPs) Yao Qiao, Pacific Northwest National Laboratory		
11:00 AM	MAT323: Natural Fiber-Reinforced Composites With bio-based Resin Matrix Wenbin Kuang, Pacific Northwest National Laboratory	11:00 AM	MAT352: JCP 3.0 Thrust 1.2 - Toward Industry Readiness of Body Structure Joining (ORNL) Yong Chae Lim, Oak Ridge National Laboratory
11:30 AM	Lunch		
1:10 PM	MAT286: CCP 2.0, Thrust 2.1 - Spatio-temporal Damage Characterization of Multifunctional Composites Christopher Bowland, Oak Ridge National Laboratory	1:10 PM	MAT353: JCP 3.0 Thrust 2.1 - Specialized joining for HEV/BEV systems (ORNL) Jian Chen, Oak Ridge National Laboratory
1:40 PM	MAT287: CCP 2.0, Thrust 2.2 - Advanced Discontinuous-Continuous Carbon Composites with Embedded Electronics in High Rate Processes Uday Vaidya, The University of Tennessee Knoxville	1:40 PM	MAT354: JCP 3.0 Thrust 2.2 - Specialized joining for HEV/BEV systems (PNNL) Piyush Upadhyay, Pacific Northwest National Laboratory
1:55 PM	MAT288: CCP 2.0 Thrust 2.3 - Lightweight Multi-functional Materials for Self-sensing, Powering and Actuation Seokpum Kim, Oak Ridge National Laboratory		
2:25 PM	MAT289: CCP 2.0 Thrust 2.4 - Data-driven Lightweight Multifunctional Composite Design for Improved Thermal Management and Energy Harvesting Sumit Gupta, Oak Ridge National Laboratory	2:10 PM	MAT355: JCP 3.0 Thrust 3.1 - Advanced Characterization, AI/ML and Computational Methods (PNNL) Ayoub Soulami, Pacific Northwest National Laboratory
2:40 PM	MAT324: CCP 2.0 Thrust 2.5 - Electrospun Nanofiber Networks for Multifunctional Composites Christopher Bowland, Oak Ridge National Laboratory		
2:55 PM	MAT325: CCP 2.0 Thrust 2.6 - Sensing and Fatigue Behavior Characterization of Multifunctional Composites Maria Feng, Columbia University	2:40 PM	MAT356: JCP 3.0 Thrust 3.2 - Advanced Characterization, AI/ML and Computational Methods (ANL) Dileep Singh, Argonne National Laboratory
3:30 PM	Break		
3:45 PM	MAT314: CCP 2.0 Thrust 3.1 - Waste Plastics to High Value Polymers Daniel Merkel, Pacific Northwest National Laboratory	3:45 PM	MAT357: JCP 3.0 Thrust 3.3 - Advanced Characterization, AI/ML and Computational Methods (ORNL) Wei Zhang, Oak Ridge National Laboratory
4:00 PM	MAT315: CCP 2.0 Thrust 3.2 - Circular Economy for Unwanted Shredded Automotive Waste (CE-SAW) Caitlyn Clarkson, Oak Ridge National Laboratory		
4:30 PM	MAT316: CCP 2.0 Thrust 3.3 - Materials and Manufacturing Innovation for Sustainable Automotive Composites – Bioderivable and Recyclable Composites Nicholas Rorrer, National Laboratory of the Rockies	4:15 PM	MAT358: JCP 3.0 Thrust 4.1 - Corrosion Mitigation of Dissimilar Material Joints (ORNL) Yong Chae Lim, Oak Ridge National Laboratory
		4:45 PM	MAT359: JCP 3.0 Thrust 4.2 - Corrosion Mitigation of Dissimilar Material Joints (PNNL) Vineet Joshi, Pacific Northwest National Laboratory
5:00 PM	MAT317: CCP 2.0 Thrust 3.4 - High Throughput Recycling of Long CF from Cured Thermoset Composites Cassandra Reese, Pacific Northwest National Laboratory		