



2024 UNDERGRAD SUMMER RESEARCH SYMPOSIUM

9:00 AM, Welcome and Introductions – Dr. Suresh Advani

9:10 AM, Session 1 – Chair Dr. Ankita Bisht

Cayden Walker <i>UD Mechanical Eng. (Honors)</i>	SINGLE FIBER TENSILE TESTING (SFTT) TO EVALUATE STRENGTHS OF ORIGINAL AND 14-MINUTE OXIDIZED T700-FOE UNIDIRECTIONAL CARBON FIBERS
Iveena Mukherjee <i>University of Pennsylvania (Fall 2024)</i>	ENHANCING POLYETHYLENE FIBER STRENGTH: INSIGHTS FROM MOLECULAR DYNAMICS
Alexander Barry <i>Cornell University</i>	OUT-OF-PLANE MECHANICAL PROPERTY AND DAMAGE CHARACTERIZATION OF WOVEN FABRIC S-2 GLASS EPOXY COMPOSITE FOR INPUTS TO A NON-LINEAR MATERIAL MODEL
Lucas Castle <i>UD Mechanical Eng. (Honors)</i>	IN-PLANE MECHANICAL PROPERTY AND DAMAGE CHARACTERIZATION OF GLASS EPOXY COMPOSITES FOR MATERIAL MODELLING
James Pollock <i>UD Mechanical Eng. (Honors)</i>	DIFFERENT ACOUSTIC SIGNALS IN TENSILE TESTING OF CONTINUOUS AND SHORT CARBON FIBER COMPOSITES
Sohaib Abu Obaid <i>University of Delaware</i>	DAMAGE EVALUATION AND CORRELATION TO TENSILE STRENGTH AS A FUNCTION OF CONSOLIDATION PRESSURE FOR UHMWPE
Stephen Wagner <i>Syracuse University, Aerospace Eng.</i>	THE EFFECTS OF RECYCLING PROCESSES ON FIBER MECHANICAL PROPERTIES

9:35 AM, Poster Discussions and Poster Evaluations (30 Mins)

Voting for Session 1 – Scan QR Code to Vote



10:05 AM, Session 2 – Chair Dr. Ankita Bisht

Matthew Blair <i>UD Mechanical Eng.</i>	EFFECTS OF RECYCLING PROCESSES ON FIBER MATRIX INTERFACE OF CARBON FIBER
Meghana Akella <i>UD Chemical and Biomolecular Eng.</i>	CREATING NON-ISOCYANATE THERMOPLASTIC POLYURETHANE FROM WASTE PET
Lucas Christman <i>UD Mechanical Eng.</i>	MEASUREMENT OF FLUID CONDITIONS FOR THE TUFF FIBER ALIGNMENT PROCESS
Cayden Walker <i>UD Mechanical Eng. (Honors)</i>	EVALUATION OF IM7 FIBER CUTTING PROCESS DEVELOPED BY COMPOSITES AUTOMATION LLC
Shawn Yong <i>UD Biomedical Eng.</i>	UNDERSTANDING THE CHARACTERIZATION OF THERMAL DECONSOLIDATION FOR FLAX FIBER REINFORCEMENTS IN THERMOPLASTIC COMPOSITES
Megan Malherb <i>University of South Carolina, Civil & Environmental Eng.</i>	THE RECYCLABILITY OF A FLAX FIBER REINFORCED POLYMER COMPOSITE

10:25 AM

Poster Discussions and Poster Evaluations (30 Mins)

Voting for Session 2 – Scan QR Code to Vote



10:55 AM, Session 3 – Chair Dr. Tom Cender

Charles Whealton <i>UD Mechanical Eng. (Honors)</i>	VISCOELASTIC BEHAVIOR OF HIGHLY ALIGNED DISCONTINUOUS FIBER THERMOPLASTIC MELTS
Aditya Rustagi <i>Jr., Charter School of Wilmington</i>	THERMOSET TAPE PLACEMENT FOR MULTIFUNCTIONAL COMPOSITE STRUCTURES
Melanie Heider <i>UD Information Sciences & Materials Science and Eng. (Honors)</i>	ADDITIVE MANUFACTURING OF LUNAR REGOLITH FOR ELECTROMAGNETIC APPLICATIONS
Greg Marella & Furdeen Hasan <i>UD Chemical and Biomolecular Eng.</i>	COMPACT AND FAST-SCANNING PASSIVE MMWAVE IMAGING TESTBED
Gianluca Tiso <i>UD Mechanical Eng. (Honors)</i>	ELECTROPHORETIC DEPOSITIONS OF CARBON NANOTUBES ON LONG DISCONTINUOUS CARBON FIBERS
Myles Wommack & Luke Ballenger <i>UD Electrical & Computer Eng.</i>	EXPLORING CERAMIC NANOPARTICLES FOR CONDUCTIVE ABS FILAMENTS IN ADDITIVE MANUFACTURING

11:15 AM

Poster Discussions and Poster Evaluations (30 Mins)

Voting for Session 3 – Scan QR Code to Vote



11:45 AM	Group Photo Voting Tabulations
12:00 PM	Award Announcements and Photos
12:30 PM	CCM PICNIC – Perkins Student Center Hens Zone

