

CHMI-24-09: Enhancing Fiber Composites Performance with Optimal Sizing

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This project focuses on improving the performance of fiber-reinforced composites by optimizing the surface treatment (or sizing) of fibers such as carbon, glass, and natural fibers. Sizing is critical for ensuring strong bonding between fibers and matrix materials, directly impacting the strength and durability of composites. The CHMI team is developing custom sizing formulations compatible with recyclable thermoplastic resins, supporting applications in aerospace, automotive, wind energy, and more. By tailoring fiber-matrix interfaces, the project aims to enhance mechanical properties, enable sustainable manufacturing, and reduce development costs for industry partners.