

Mechanical Properties of Biodegradable Polyester/Silk Composites

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Aliphatic polyester is an important thermoplastic polymer widely used, either alone or in composites with other materials. However, many properties of these polymers fall short of the required properties for many potential applications. Silk has distinguishing features than other biomaterials which are the very high strength in combination and excellent elasticity. The mechanical properties of fiber reinforced polymeric composites are very important in deciding their end application. Also, mechanical properties of composites depend on the properties of constituent fibers, the matrix, and the fiber/matrix interfacial shear strength (IFSS). Silk fiber makes a good use of as effective reinforcements for biocomposite through surface modification.