

Experimental analysis of the machinability of biocomposites: orthogonal cutting process



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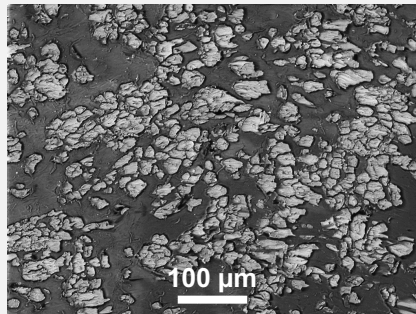
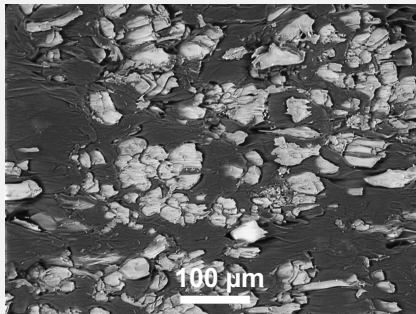
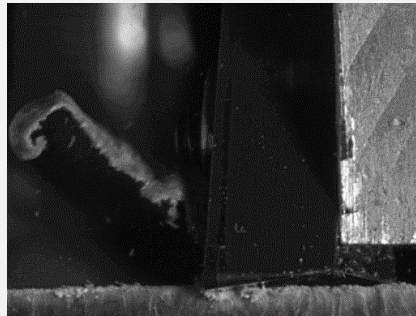
Effect of sample temperature

Rake angle $\gamma = 0^\circ$ and cutting speed $V_c = 6$ m/min

Room temperature



Low temperature



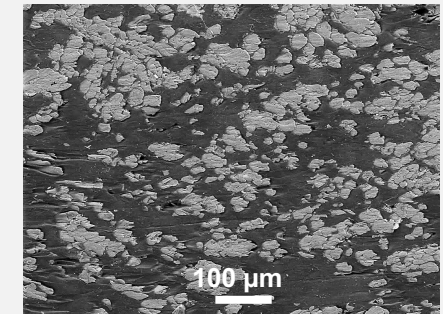
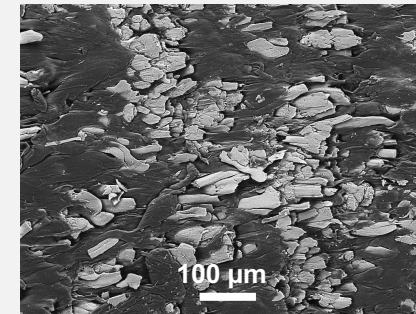
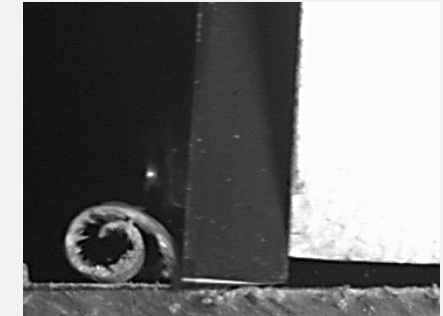
Effect of Fiber orientation

Rake angle $\gamma = 3^\circ$ and cutting speed $V_c = 12$ m/min

$\theta = 90^\circ$



$\theta = 45^\circ$



❑ Chegdani, F., Takabi, B., El Mansori, M., Tai, B.L., Bukkapatnam, S.T.S. "Effect of flax fiber orientation on machining behavior and surface finish of natural fiber reinforced polymer composites", Journal of Manufacturing Processes, Vol. 54, 2020, pp. 337-346

❑ Chegdani, F., Takabi, B., Tai, B.L., El Mansori, M., Bukkapatnam, S.T.S. "Thermal Effects on Tribological Behavior in Machining Natural Fiber Composites", Procedia Manufacturing, Vol. 26, 2018, pp. 305-316