

The effect of different alkaline treatment condition on flexural properties of kenaf bast- unsaturated polyester composite

Abstract

The biocomposites were prepared by using kenaf bast fiber mat as reinforcing materials at different percentage. The kenaf bast fiber was treated with alkaline at different sodium hydroxide (NaOH) percentage. From the results obtained, surface morphology of the treated kenaf bast fiber shows less impurity than untreated kenaf bast fiber. As for composites prepared from alkaline treated kenaf bast fiber, it showed higher mechanical properties as compared to those prepared from untreated kenaf bast fiber. The percentage of kenaf fiber in composites also plays a crucial role in determining the composite properties.

Keywords — Composite, kenaf bast, lignocellulosic, unsaturated polyester