

Title: **Effect of Chemical Treatment on the Mechanical Properties of Pultruded Kenaf Fibre Reinforced Polyester Composites**

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Abstract

In this study, Pultruded Kenaf Reinforced Composites (PKRC) has been successfully produced using pultrusion technique. The chemical treatment using sodium hydroxide (NaOH) at different concentration (3%, 6% and 9% M) were carried out to modify the fibre properties. After successfully characterized, it was found that kenaf fibre treated with 6% NaOH recorded the best improvement in term of mechanical properties. In particular, treated pultruded kenaf reinforced composites (TPKRC) shows better tensile and flexural properties compared to those of untreated pultruded kenaf reinforced composites (UTPKRC). It was found that NaOH at 6% concentration give the best composite properties in term of mechanical properties over the range of NaOH concentration studied.