

# **Unsaturated polyester-kenaf composites: The effects of a modified montmorillonite filler on the tensile properties**

## **Abstract**

This study has been embarked to use the nanofiller to compensate the adverse effect of the lignocellulosic filler. Unsaturated polyesterkenaf composites filled with various types of MMT filler were produced. The study showed that the incorporation of untreated montmorillonite filler (UNT-MMT) and cetyl trimethyl ammonium bromide-modified (CTAB-MMT) had improved the tensile properties. The superior properties of those with CTAB-MMT were attributed to more effective distribution of MMT in the matrix, the availability of effective high aspect ratio MMT and increased compatibility of MMT with the matrix as the results of the introduction of long polymer chain from CTAB.