

## **The flexural and impact properties of kenaf-polypropylene composites filled with montmorillonite filler**

### **Abstract**

Kenaf- Polypropylene composites filled with montmorillonite (MMT) filler were produced. The incorporation of MMT had improved the flexural and impact properties. Addition of compatibilizer, had improved the flexural and impact properties of the composites. This showed that the compatibility between MMT filler and kenaf particles with PP matrix was increased, giving way for better stress distribution from the matrix to the fillers/particles. The lower value of MFI with the incorporation of MMT, compatibilizer and kenaf indicated the interaction between the components. Scanning electron microscopy (SEM) results showed the evidence of compatibility between MMT and PP matrix with the addition of compatibilizer.

### **Keyword:**

Compatibilizer; Composite; Kenaf; Lignocellulosic; Montmorillonite; Polypropylene