

# Effect of Surface Treatment on Mechanical Properties of Rice Husk Reinforced Recycled High Density Polyethylene (rHDPE) Composites

## Abstract

The aim of this work was to investigate the effect of surface treatment on rice husk reinforced recycled high density polyethylene (rHDPE) composites. Three types of surface treatment on rice husk were carried out which were maleated treatment, alkaline treatment and acrylic acid treatment. The characteristics and mechanical properties of the composites were analysed. The results for all treatments showed that tensile strength and break elongation of composites decreased significantly when the rice husk filler loading increased. Further findings showed that maleated treatment on rice husk can further enhance the mechanical properties due to the present of ester bond formed in FTIR analysis.