

Abstract Details

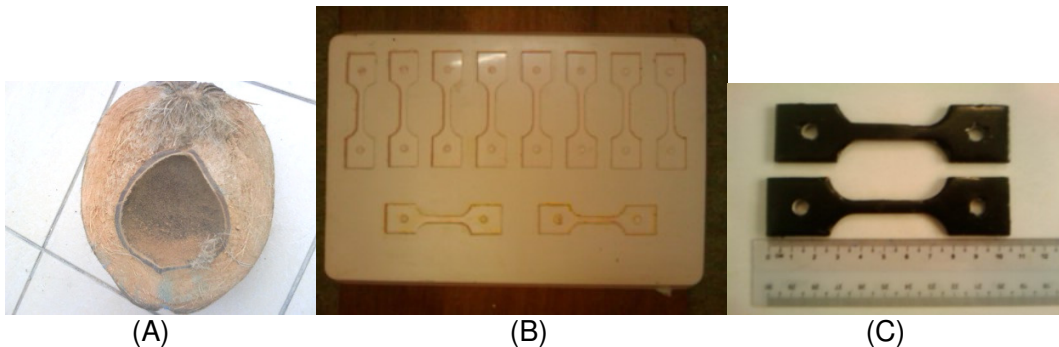
Tensile Behaviour's of Activated Carbon (AC) Coconut Shell Reinforced Recycle Polyethylene (PET) Hybrid Composites

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This research is to develop the natural Activated Carbon (AC) composites prepared from carbon coconut shell reinforced with recycled polyethylene (PET). Carbon coconut shell were selected from in-productive of coconut shell (without endocarp and exorcap) specifically namely as carbon Komeng coconut shell (CKCS) with different weight percentages of AC(2, 4 and 6wt%) and recycled PET(4, 6 and 8wt%) contents. The entire specimens were prepared using SRM (Silicon Rubber Moulds) with dumbbell shape and rectangular shape according to the standard ASTM D2099 and ASTM D256 respectively. The mechanical properties of all samples were investigated to characterise the quality of the samples. The morphological study of reinforced samples was also conducted in this research by using SEM machine. The results showed that tensile stress increases when AC is increased specifically for samples with (PET-2wt%+AC-8 wt%) with maximum tensile stress as 388.37MPa.



List of Photo's:

- (A) Komeng Coconuts (Without endocarp and exorcap).
- (B) Silicon Rubber Moulds (SRM).
- (C) Tensile Specimen Dumbbell Shape (ASTM D2099).

You may include diagrams and pictures here.
(300 words max.)