

Synthesis and Study the Effect of HNTs on PVA/Chitosan Composite Material

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Abstract : Composites materials of Poly (vinyl alcohol) (PVA)/Chitosan (CS) have been synthesized and characterized successfully. HNTs have been added to composites to enhance the mechanical and degradation properties by hydrogen bonding interactions, compatibility, and chemical crosslink between HNTs and PVA. PVA/CS/HNTs composites prepared with different concentration ratio. SEM micrographs of composites surface showed that more agglomeration with more chitosan ratio. Mechanical and degradation properties were characterized and the result indicates that Mechanical and degradation of 80%PVA/5%Chitosan/15%HNTs higher than the others PVA/CS/HNTs composites.

Keywords : PVA/chitosan, composites, PVA/CS/HNTs, HNTs

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