

The experiments of this study were divided into three parts : the first was to prepare the Zinc dodecyl benzenesulfonate($Zn(DBS)_2$).This composites prepared from $Zn(DBS)_2$ and polyaniline will create a comb-shaped structure and properties of the complex composite was investigated by WXR, POM, TGA, to analyze the layer structure, crystal structure, and thermal properties. The second was to prepare the conducting nanocomposites of polyaniline and clay at master batch. We analyzed the conducting master batch with WXR, UV-vis, TGA, ESCA, to characterize the intercalation, conjugated structure of polyaniline , thermal properties, and the binding energy changes. Finally, it was to prepare the conducting polyblends prepared from master batch and regular organic polymers with WXR, TGA, SEM, Miliohm meter were used to analyze the compatibility, thermal properties, morphology, electrical conductivity of the polyblends.