ABSTRACT

Growth of latest composite materials or alteration of existing composite materials to get mechanically durable structural components is the real challenge for the most of the industrial engineers. In the present work, change in the performance of epoxy polymer nanocomposites, such as mechanical and physical properties by the addition of Tungsten Carbide (WC) nanoparticles in to it has been studied. Different weight percentages (2.5%, and 5%) of particles were added to the neat epoxy. Tensile test, flexural test ,density and Hardness and Dsc were studied. Experiments results show that improvement in both tensile and flexural strength at 2% of particles loading. While At higher percentage of particles loading, there is decrease in mechanical properties has been observed.