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## THE INVESTIGATION OF CNT DISPERSION IN PVC/CNT NANOCOMPOSITES PRODUCED BY SOLVENT EVAPORATION METHOD

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Modification of polymer matrix by nanometric particles presents currently one of the most significant science research directions.

Carbon nanotubes (CNT) are nanoparticles mainly used to polymer modification, due to their special mechanical and electrical properties. The usage of poly (vinyl chloride) (PVC) as a nanocomposites matrix is dictated by the wide application of this material in practice. Obtaining appropriate CNT dispersion in polymer matrix influences on nanocomposites properties. These are the reasons to undertake study of PVC/CNT nanocomposites formation and their structure.

The goal of our research was a possibility of obtaining proper homogeneous CNT dispersion in PVC matrix and formation PVC/CNT nanocomposite by solvent evaporation method. For this purpose optical microscopy (OM) and scanning electron microscopy (SEM) studies were performed. Furthermore, the surface topography of PVC/CNT nanocomposites were examined by atomic force microscopy (AFM).