聚胺基甲酸酯-奈米金複合材料性質分析

In this study, polyurethane-nanogold nanocomposites were prepared by linear and nonlinear polyol, respectively. The remark on this research is the high content of gold nanoparticles (GNPs) in the nanocomposites. How the GNPs affect the structure and properties of the polymer, and in order to promote its range of application in the future were discussed in the study. The analysis of TGA indicates that the decomposed temperatures of the prepared nanocomposites are higher than that of their relative pure polyurethanes. DMA, mechanical tests, and gel content results reveal that the mechanical properties and degree of cross-link are raised by increasing the content of GNPs.