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## ANTIBACTERIAL PROPERTIES OF PET/COTTON FABRIC WITH

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The PET/cotton fabric with Ag-loading Tio2 nano antibacterial agent was prepared by Pad-Dry method. The morphologies structure and antibacterial properties were characterized by using transmission electron microscopy (TEM), scanning electron microscopy (SEM), EDAX and ATCC-100 test method. TEM observations of ag-loading Tio2 nano antibacterial agent showed the particle were 30-70 nm. SEM micrograph of treated fabrics indicated that the nanoparticles were well dispersed of the surface of sample. EDAX pattern showed that the percent of nano particles increased on the surface of samples with increase concentration of colloid solution nanoparticles but the percent of ag and Tio2 was different in each percent. The results prepared of antibacterial test method indicated excellent antibacterial effect on all specimens against s- aureus and klebsiella penumoniae.