



Dyeing of polyester with disperse dyes: Part 3. Characterization of ZnO nanoparticles treated polyester fabrics for antibacterial, self-cleaning and UV protective

Alya M. Al-Etaibi^{1,*}, and Morsy Ahmed El-Asery²

¹Natural Science Department, College of Health Science, Public Authority for Applied Education and Training, Fayha, 72853, Kuwait.

²Dyeing, Printing and Textile Auxiliaries Department, Textile Research Division, National Research Centre, 33 El Buhouth St., Dokki, Cairo, Egypt.

Abstract: The aim of this study is to utilize (ZnO) nanoparticles for obtaining the added value of the dyed fabrics. The average size of nano ZnO particles used is less than 100 nm. Polyester fabrics were treated with ZnO nanoparticles to improve its light fastness, antibacterial activities, UV-protective, self-cleaning.

Keywords: Nanotechnology; UV-protective; Self-cleaning; Polyester fabrics; light fastness.

Alya M. Al-Etaibi *et al* /International Journal of ChemTech Research, 2016,9(8),pp 162-169.
