

The cellulose made up the principal structure of many plants. The content varies according to the vegetable species, from approximately 40% in wood, to 95-99% in cotton fibers. Several ways are possible to bring an additional function to cellulose: new fibers, modification of the fibrous structure, physical or chemical treatment by a surface treatment. And due to the contribution of functions, the formerly passive cellulose becomes active. Capacity of cyclodextrins to facilitate the inclusion of hydrophobic molecules, and others chemical derivatives like the dyes, can be exploited to obtain new porous materials modify with particular performances. In this work, a porous cellulosic material modifies was obtained by chemical modification and fixing of β -cyclodextrin on polymeric surface. The results were confirmed by infra-red analysis (FTIR) and scanning electron microscopy (SEM). The experiments of adsorption of balance of a reactive dye were made in aqueous solutions for 48 hours. Our results indicate the formation of a permanent chemical bond between the β - cyclodextrin and the fibrous material, and the modification is done without change of the polymer structure, the inclusion of the molecules of dyes in the cavity of cyclodextrin is due to the several interactions. The results of dye adsorption in aqueous medium show the aptitude of porous materials to fix the dangerous industrial dyes, and used in the processing industrial liquid waste