



				البحث الثالث
Kinetic studies and grafting mechanism for methyl aniline derivatives onto chitosan: Highly adsorptive				عنوان البحث
copolymers for dye removal from aqueous solutions				
شارك في البحث ثلاثة باحثين.				المؤلفون
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Abstract: A polysaccharide, chitosan received vast attention because of its nontoxic, low cost and biodegradable properties. In this study, three promise grafted chitosan copolymers using methyl polyaniline conducting polymeric isomers were successfully synthesized through oxidative-radical copolymerization using ammonium persulphate as initiator in acidic medium. The kinetic behaviors of graft copolymerization were extensively studied under various parameters. Moreover, the rate of grafting copolymerization is affected by concentrations of monomer, initiator, and HCl in addition to temperature. The activation energy (Ea), enthalpy of activation (Δ H*) and negative value of entropy (Δ S*) support the progress of copolymerization. Environmental impacts of the grafted polymers in water detoxification were manifested. A comparison study for adsorption of remazol red dye from aqueous solutions onto Ch–g-PMeANIs was investigated.