Mesoporous core encapsulating polyaspartamide Nano aggregates for Drug

오주현, 김덕준*
성균관대학교
(djkim@skku.edu*)

Mesoporous materials nanoparticle coated with a series of biodegrabable graft copolymer polyaspartamide derivatives were synthesized by grafting of O-(2-aminoethyl)-O'-methylpoly(ethylene glycol) 5000(MPEG) on polysuccinimide(PSI). And mesoporous silica nanoparticles coated with polymer. These features make mesoporous materials excellent candidates for controlled drug delivery systems.
The chemical structure of the polymer and the degree of substitution of the prepared polymer was confirmed using FT-IR, 1H NMR spectroscopy and 1C NMR spectroscopy. And mesoporous material channel structure of the nanospheres was observed by transmission electron microscopy (TEM). And this polymeric micelle can be loading a large amount of drug a potential carrier for the drug delivery system.