



**A COVALENTLY MODIFIED, AMPHIPHILIC ALGINATE DERIVATIVE: UTILITY IN ANTI CANCER DRUG DELIVERY**

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A new emulsion gelation method was used to prepare nanoparticle for water-soluble drugs using sodium alginate as the polymer. The goal of this article was to investigate the role of alginate stabilized emulsion and their potential role for drug delivery. The polymer acts as a barrier between phases in oil-in-water emulsions to increase stability. The oil entrapped calcium alginate nanoparticles showed good sustained release, scanning electron microscopy demonstrated minute oil globules on the particles and also through the inner surface of particles. The particles also showed floating behavior depending on the type of the oil that have been used or the preparation on. Controlled release of nanoparticles was investigated.