

LIQUID CORE-POLYMER SHELL PARTICLES

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Core-shell particles, dispersed in water, with liquid cores and polymer shells of controlled thickness and morphology, are excellent candidates for the controlled release of "active" molecules, such as pharmaceuticals, agrochemicals, perfumes, flavors, dyes, inks, etc. In this paper we will discuss the preparation and characterization of a variety of different systems, including ones with aqueous cores and others with non-aqueous cores, depending on the nature of the active material to be released. Some data will be presented for release rates of model active materials, and how this is affected by the changes in the various system parameters, such as the size of the liquid core and the polymer shell thickness, the nature of the polymer, and the swellability/solubility of the polymer.