

Supplementary Information

Self assembly of Synthetic Liposome like Curcumin Nanoparticle

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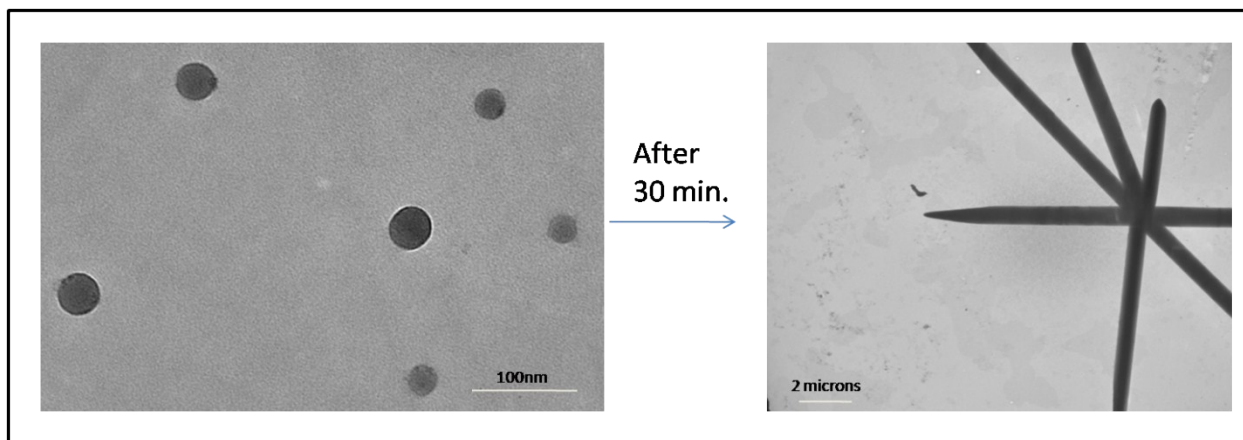


Figure S1: TEM images showing the formation of curcumin nanoparticle in binary solvent of ethanol and water. Curcumin nanoparticles formed in binary solvent are highly unstable, particles start evolving soon after formation (5min) and forms needle shaped particle after 30 min.

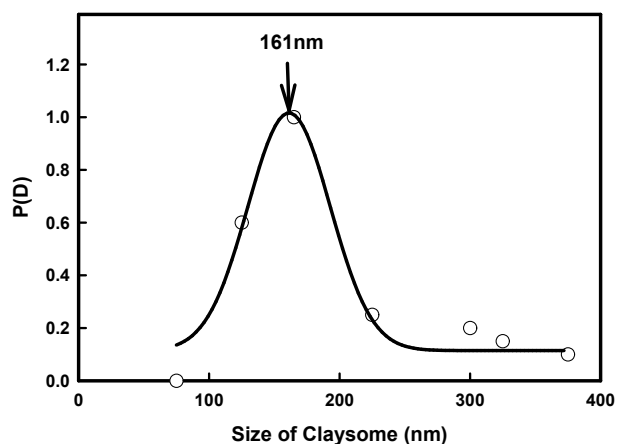


Figure S2 Gaussian particle size distribution of Claysome particle (with 0.05% nanoclay) as obtained from DLS. Maximum number of particles had diameter of 161 (± 10) nm, and very few particles had diameter >250 nm. This was consistent with size obtained from SEM images (as shown in inset of Figure 1).

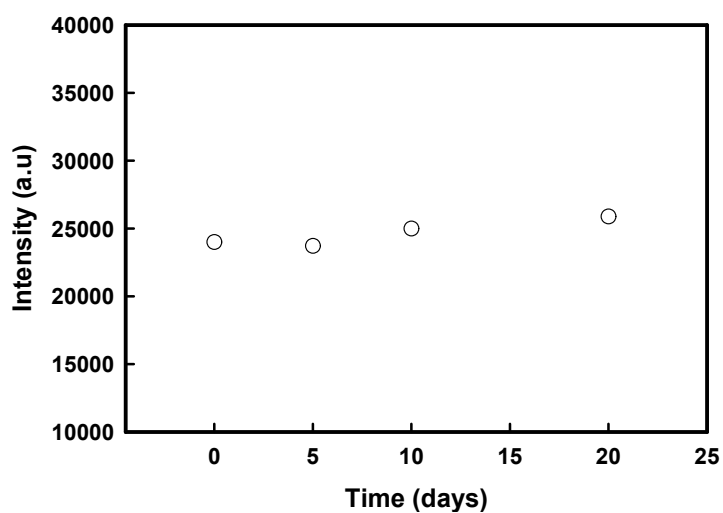


Figure S3 It shows the scattered intensity of core-shell particle (with 0.05% Nanoclay) from light scattering as a function of time. It shows that count rate remains constant as a function of time, which confirms the stability of particles.

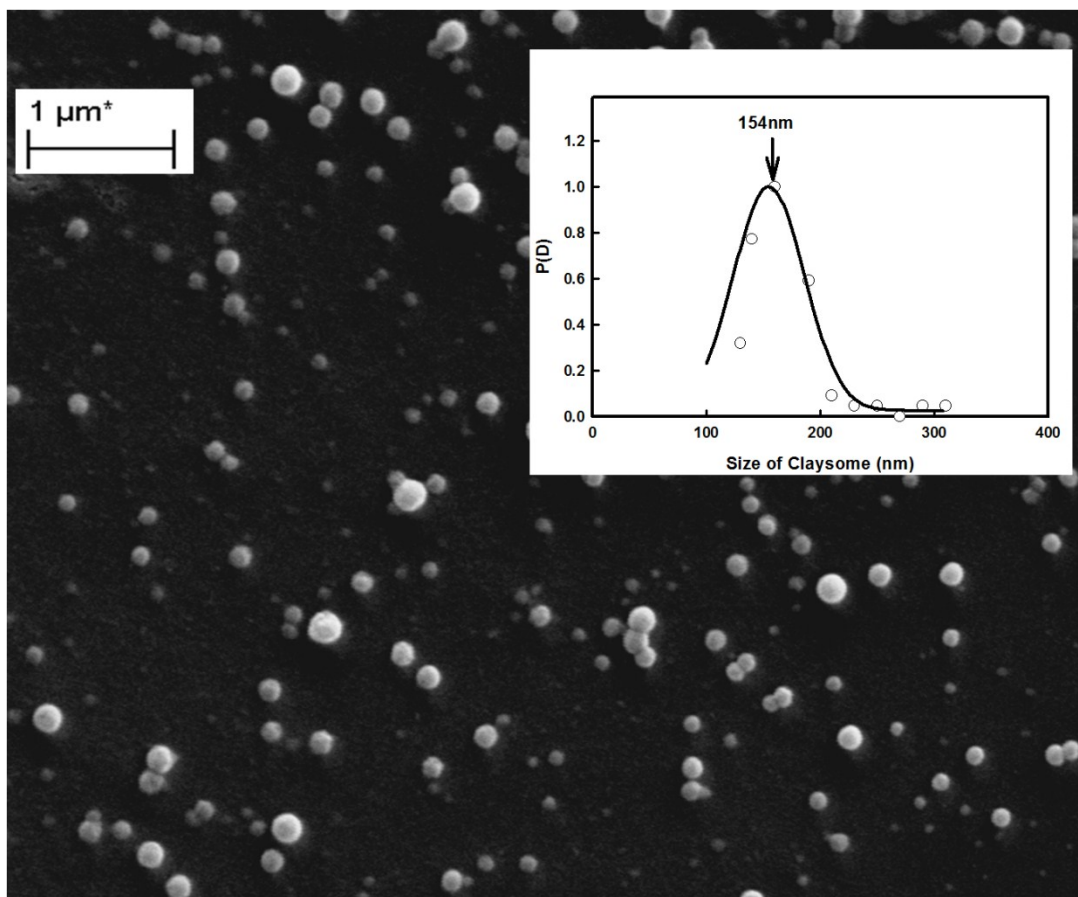


Figure S4 SEM image depicting the claysome assembly formed by nanoclay (0.05%) and curcumin nanoparticle, after a period of 20 days. Inset shows the Gaussian particle size distribution of claysomes (obtained from SEM image). The maximum number of Claysome (core-shell) particles had diameter of 154 ± 5 nm.