Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information:-

Liposome-Based Nanocapsules for the Controlled Release of Dietary Curcumin: PDDA and Silica Nanoparticles-coated DMPC Liposomes Enhance the Fluorescence Efficiency and Anticancer Activity of Curcumin

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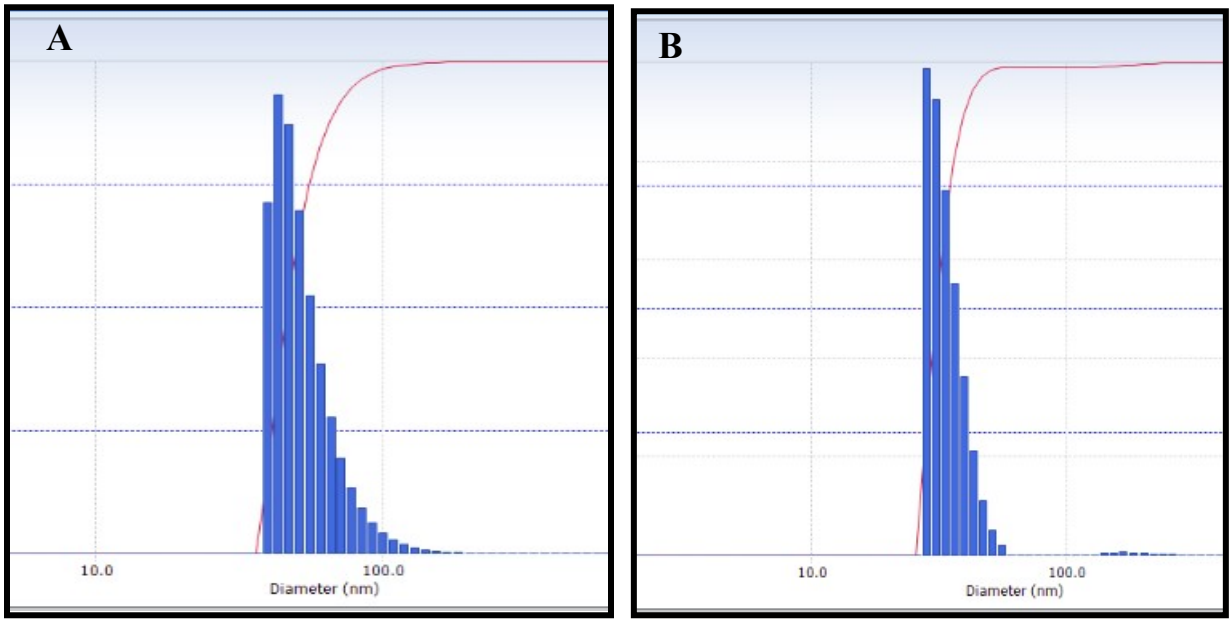
Beer-Lambert Law

According to Lambert-Beer's law, the absorbance is directly proportional to the concentration according to the equation below

$$A = l \times C \times \varepsilon$$

Where A is the relative absorbance, l is the path length of the beam of light through the material sample, C is the concentration of the analyte and ε assigned to the molar extinction coefficient.



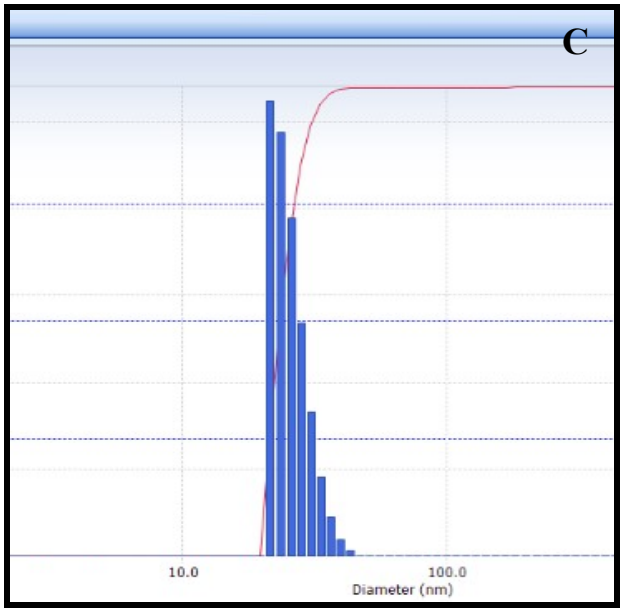


Figure S1: DLS measurements for (A) N1, (B) N2 and (C) N3.

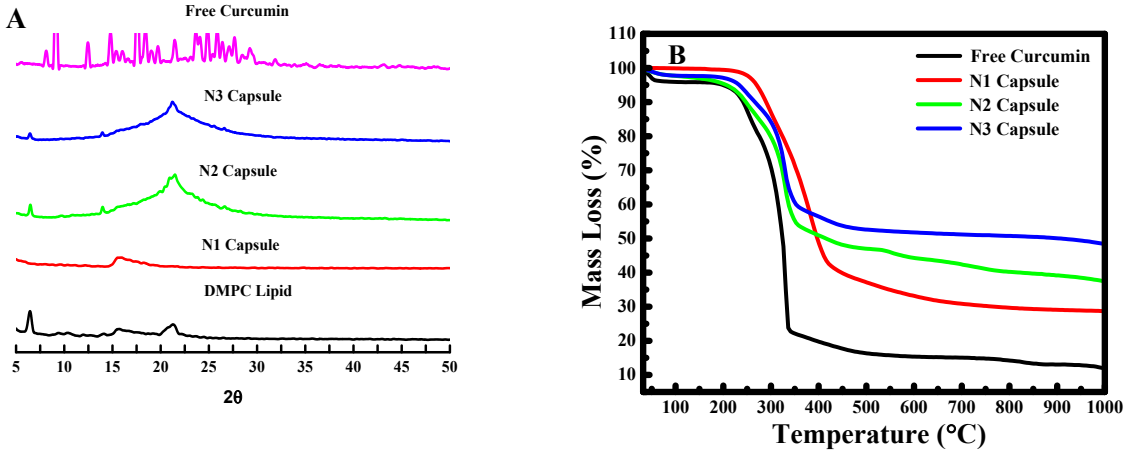


Figure S2: (A) XRD Patterns of DMPC lipid, N1, N2, N3 and Free Curcumin; and (B) TGA spectra of N1, N2, N3 and Free Curcumin.

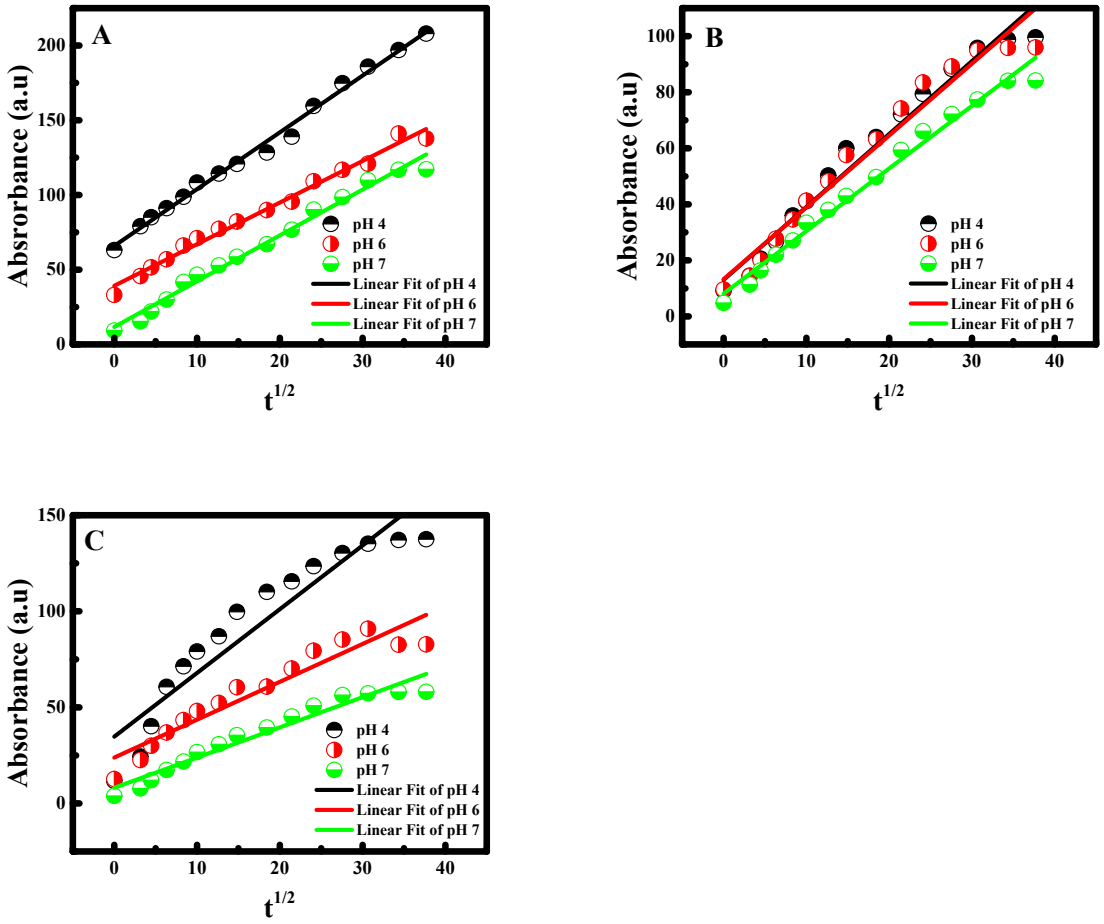


Figure S3: Data fitted with Higuchi model for curcumin drug release for (A) N1; (B) N2 and (C) N3 at different pH.

Table S1: Higuchi constant obtained for the different nanocapsules at pH 4, 6, and 7.

		R^2	K_h constant
N1 capsule	*4*	0.99651	3.79864
	6	0.98738	3.7838
	7	0.99346	3.0646
N2 capsule	*4*	0.98628	2.60236
	6	0.98099	2.56431
	7	0.99279	2.23489
N3 capsule	*4*	0.96304	1.8790
	6	0.95335	1.97146
	7	0.97489	1.57234