

Electronic Supplementary Information (ESI)

Spectroscopic investigation of fluorinated phenols as pH-sensitive probes in mixed liposomal systems

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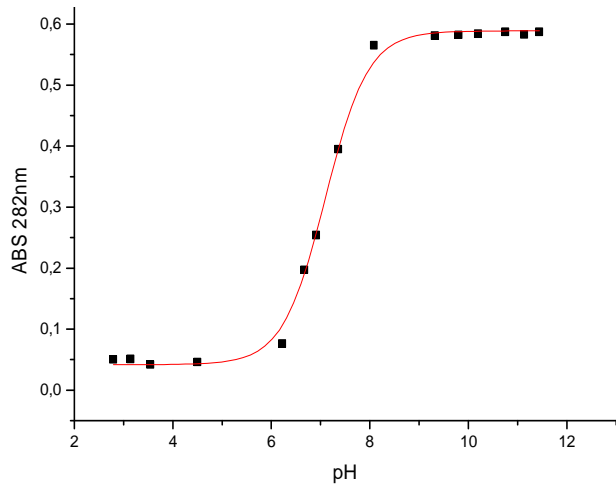
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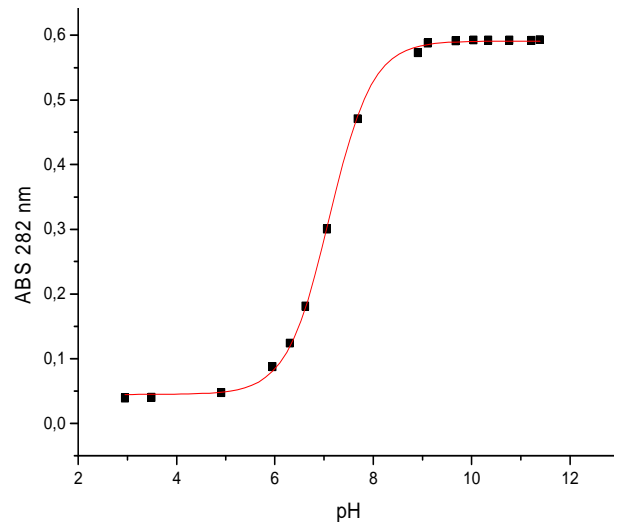
I. Index

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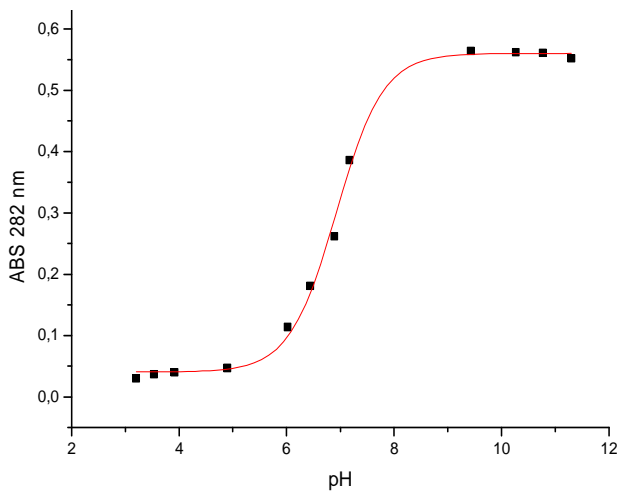
II. 3FP UV-vis titrations in POPC/DDAB liposomes



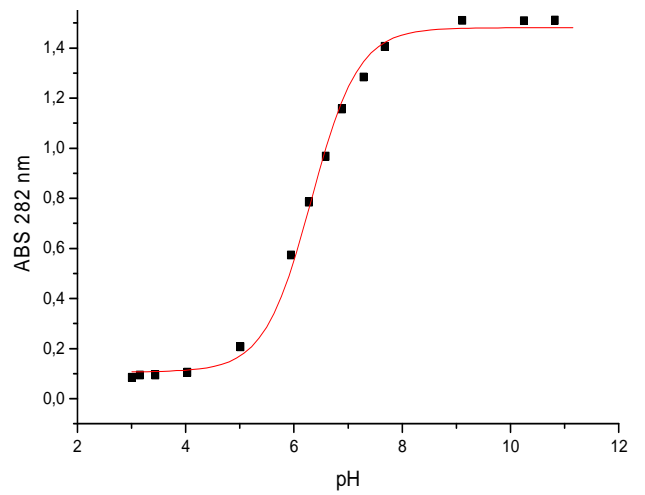
POPC/DDAB 75/25



POPC/DDAB 50/50

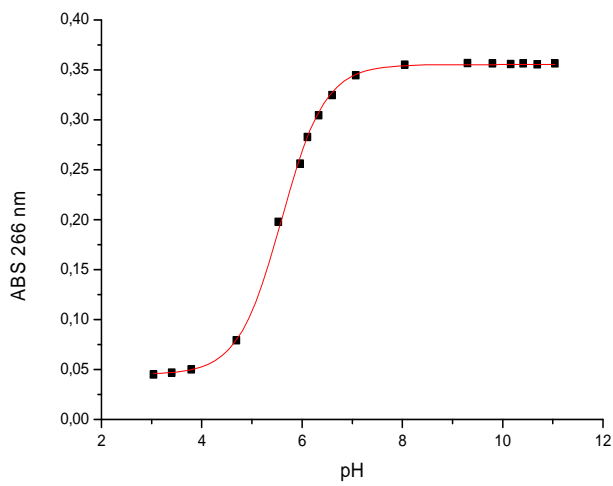
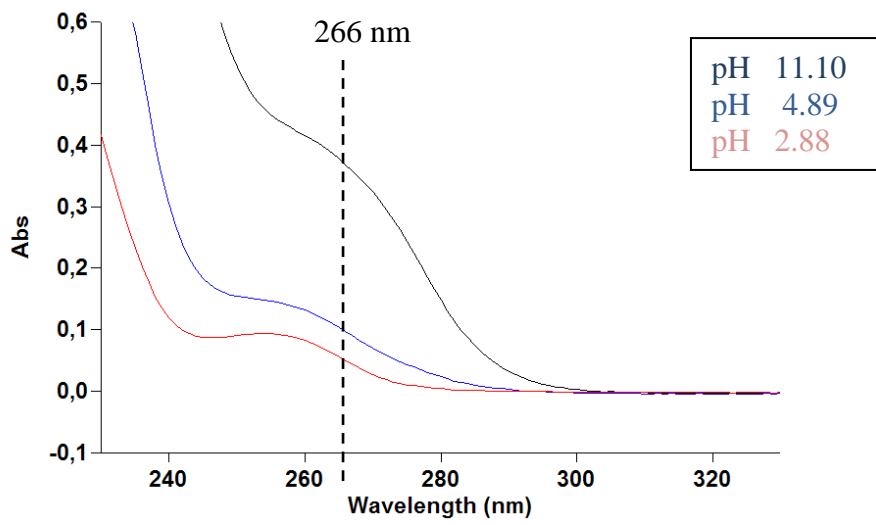


POPC/DDAB 25/75

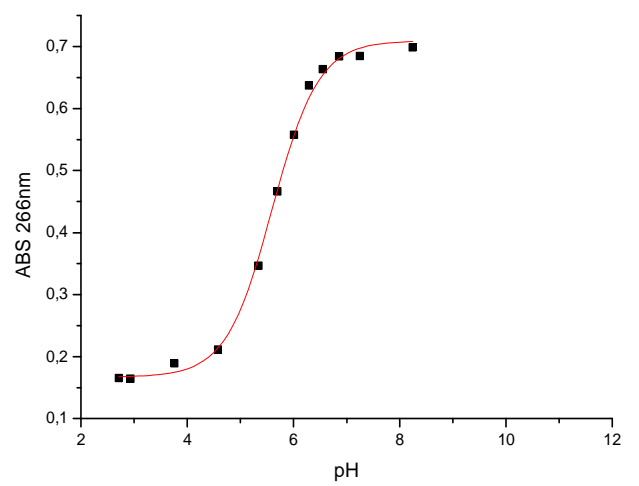


DDAB liposomes

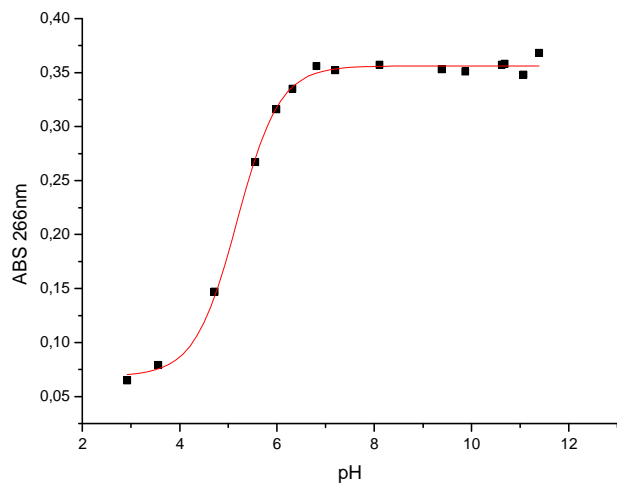
III. 4FP UV-vis spectra and titrations in POPC/DDAB liposomes



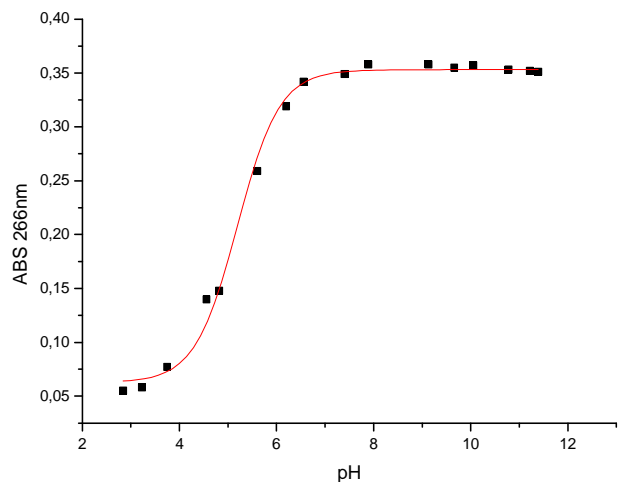
Water



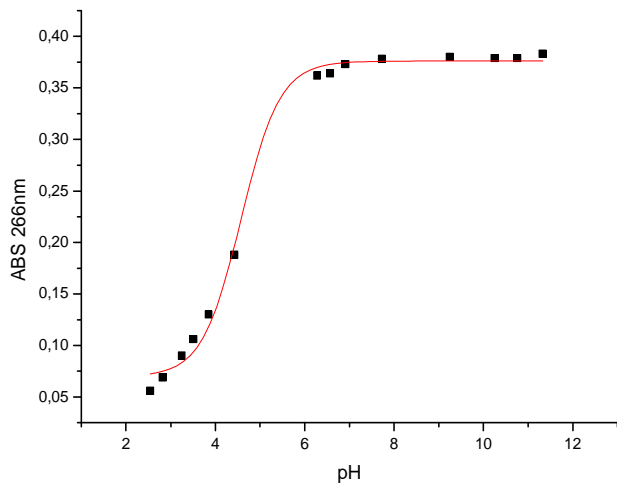
POPC liposomes



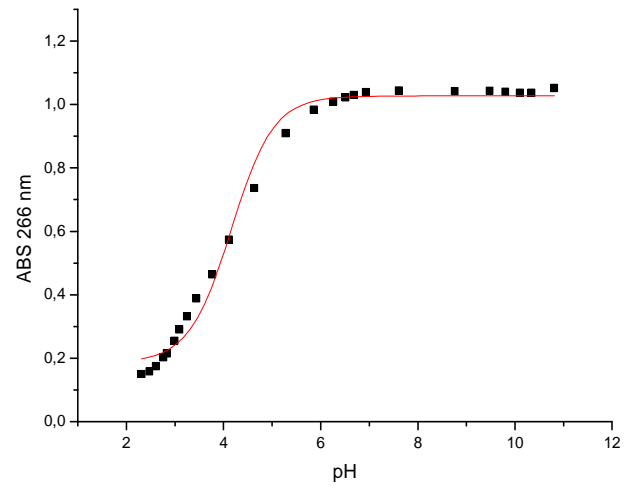
POPC/DDAB 75/25



POPC/DDAB 50/50

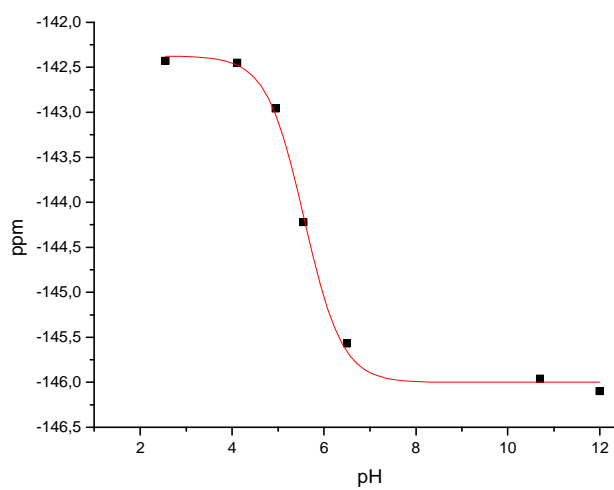
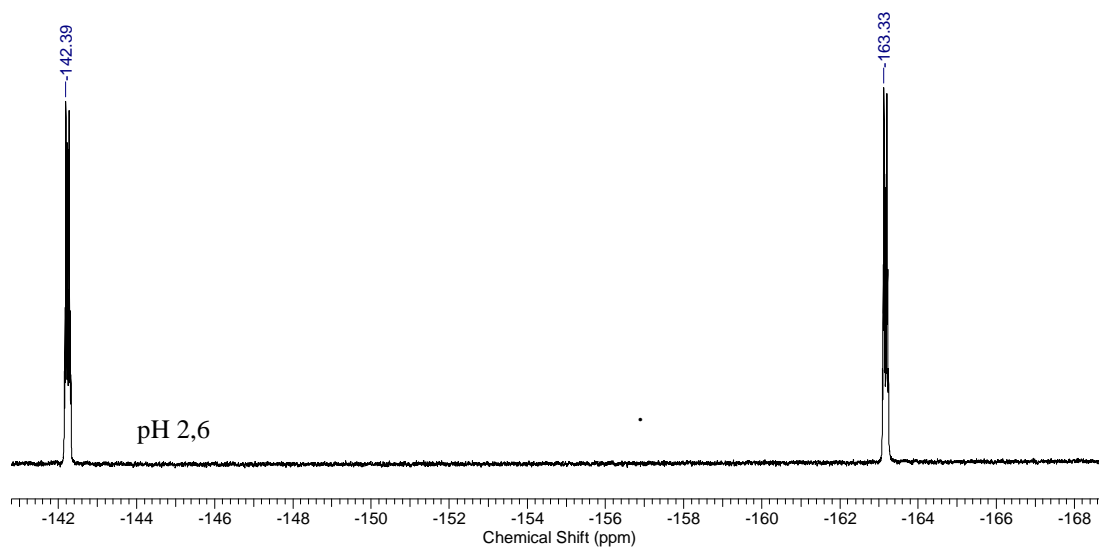
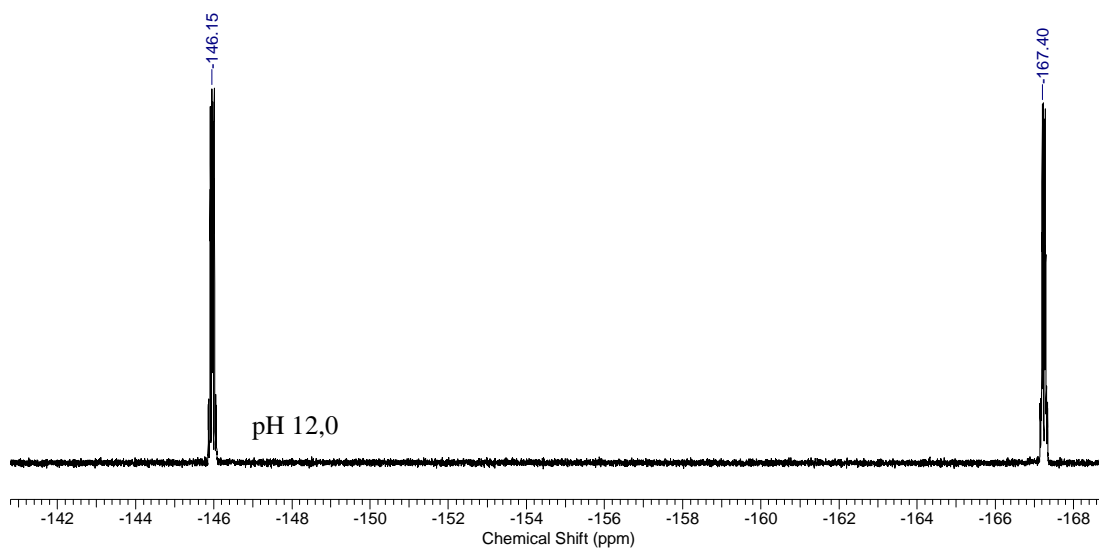


POPC/DDAB 25/75

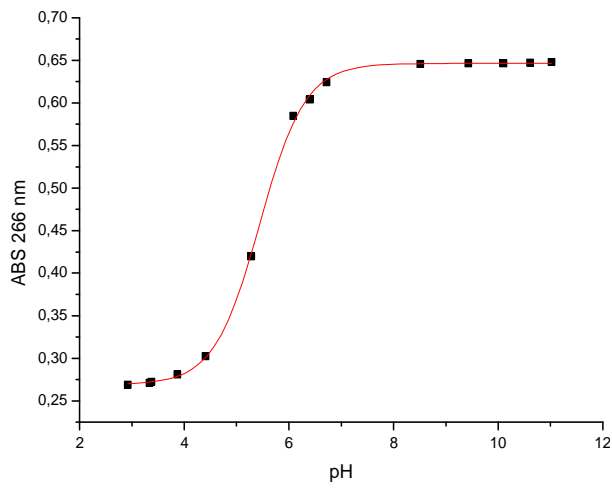
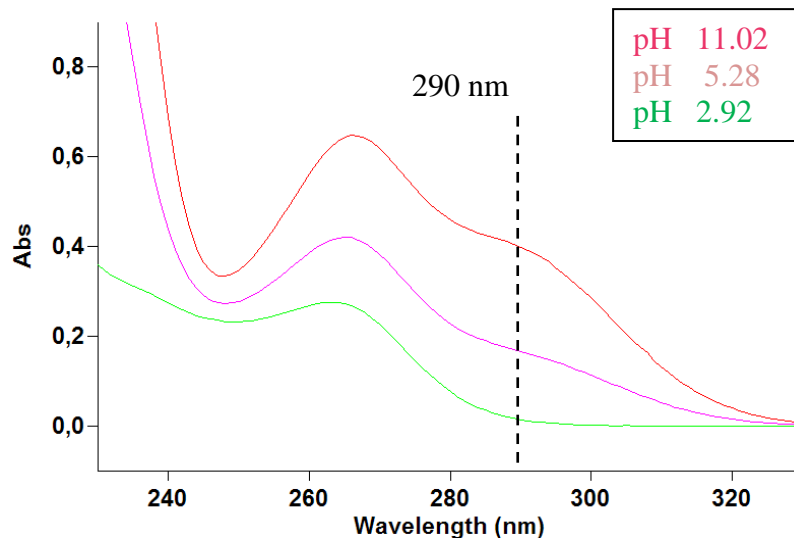


DDAB liposomes

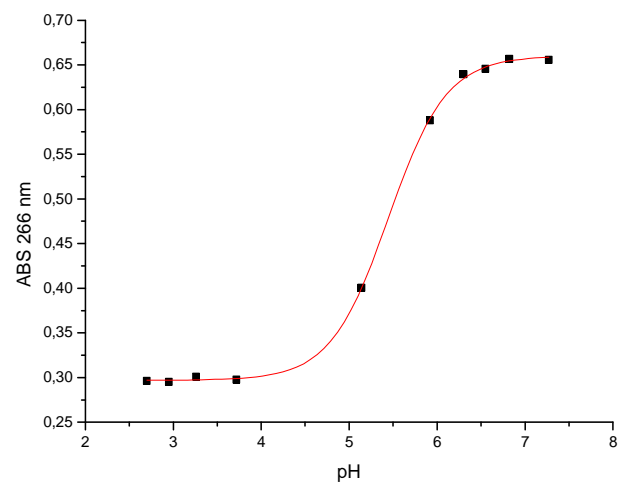
IV. 4FP ^{19}F -NMR spectra and titration in water



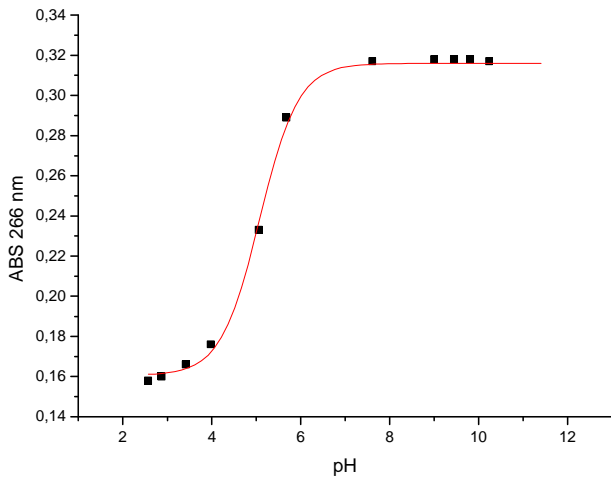
V. 5FP UV-vis spectra and titrations in POPC/DDAB liposomes



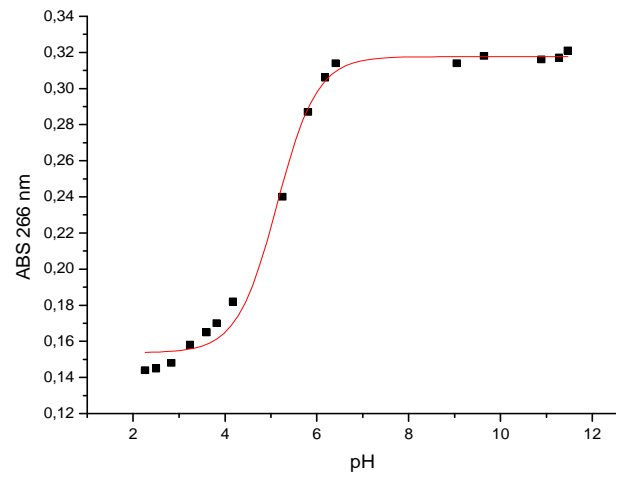
Water



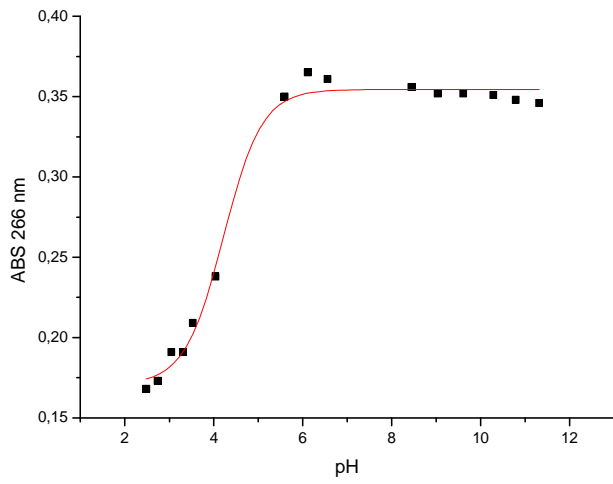
POPC liposomes



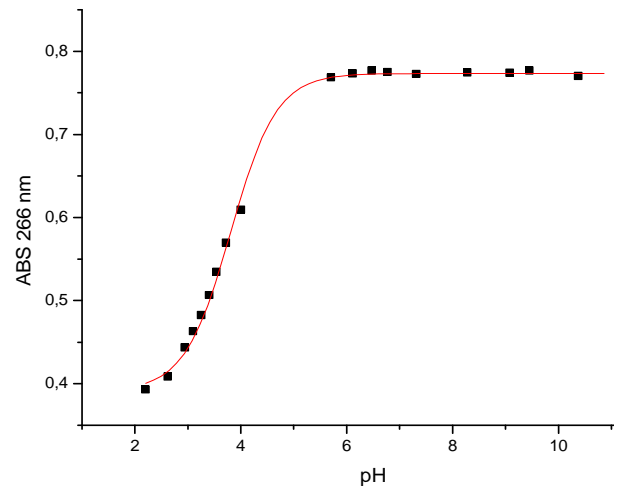
POPC/DDAB 75/25



POPC/DDAB 50/50

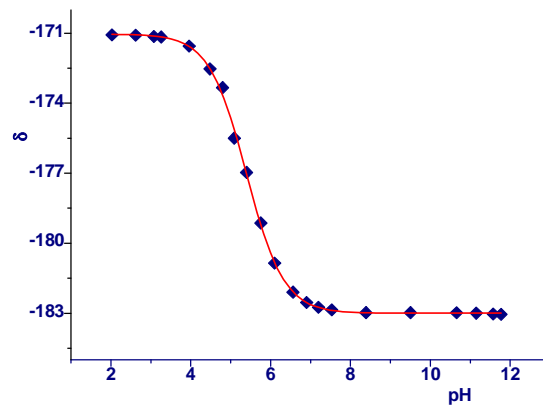
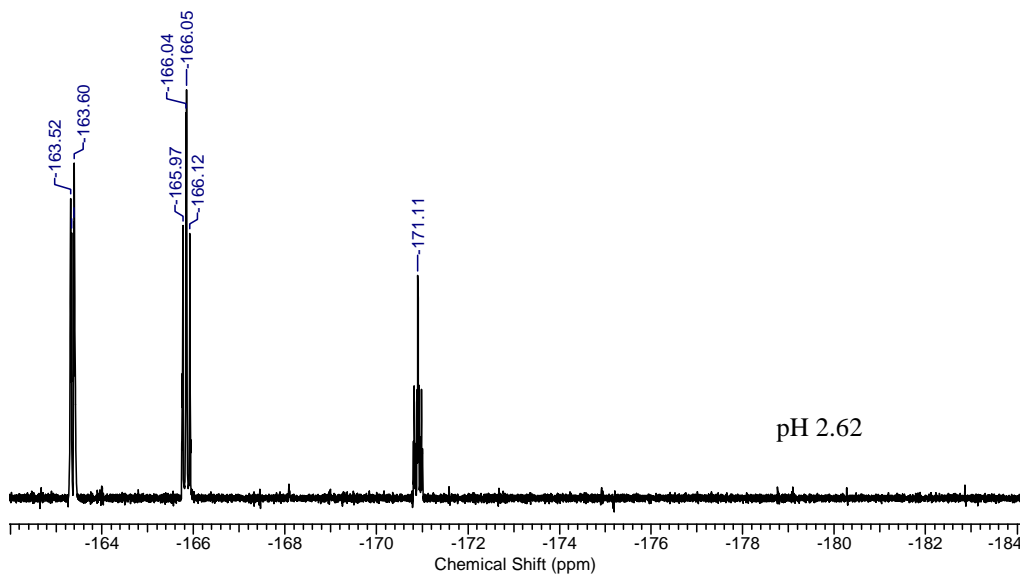
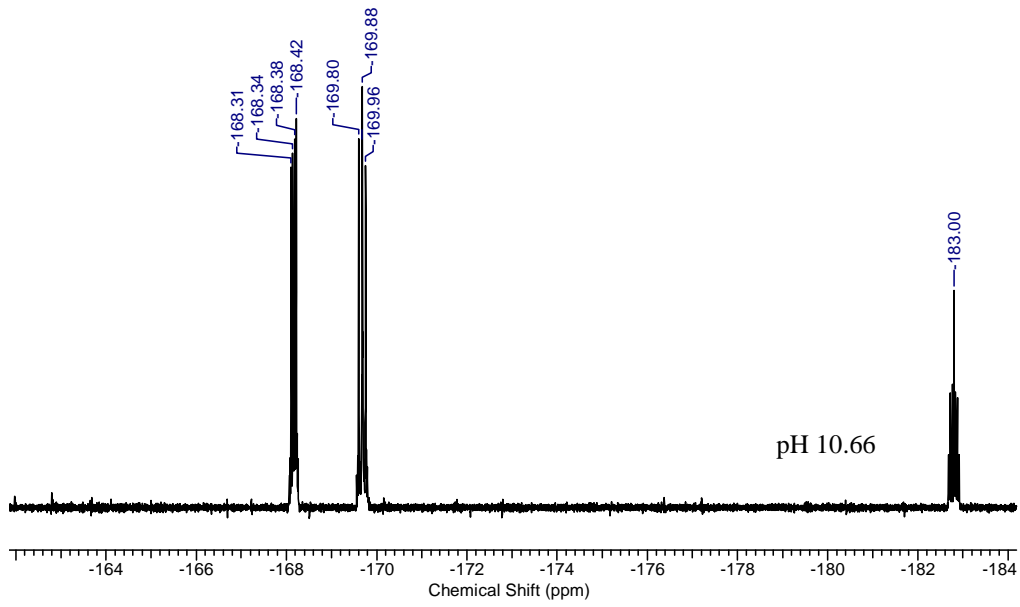


POPC/DDAB 25/75



DDAB liposomes

VI. 5FP ^{19}F -NMR spectra and titration in water

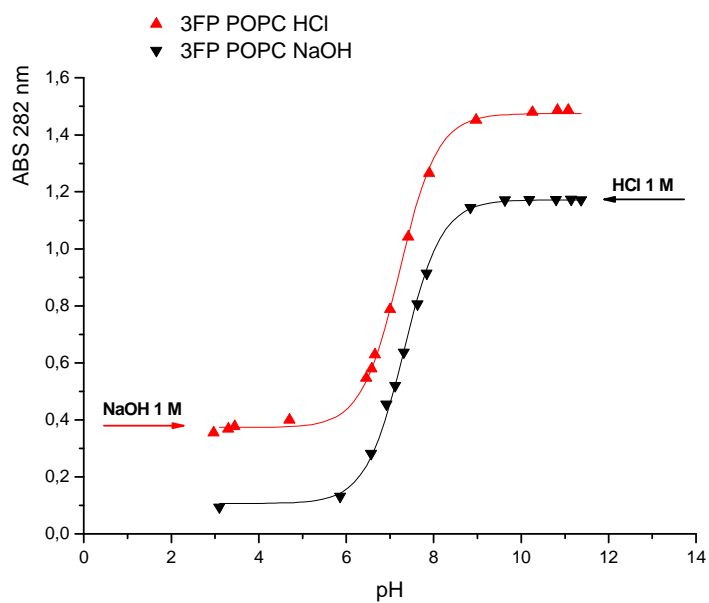


VII. Table of the mean size of the liposomal systems measured after extrusion by Dynamic Laser Light Scattering at 25°C.

System	Mean diameter after extrusion / nm			
	-	3FF	4FF	5FF
POPC liposomes	119 ± 2 (0.10)	122 ± 3 (0.13)	122 ± 1 (0.18)	121 ± 1 (0.21)
POPC/DDAB 75/25 liposomes	125 ± 2 (0.10)	124 ± 1 (0.11)	113 ± 1 (0.23)	124 ± 1 (0.14)
POPC/DDAB 50/50 liposomes	126 ± 1 (0.15)	119 ± 2 (0.19)	119 ± 2 (0.16)	112 ± 1 (0.22)
POPC/DDAB 25/75 liposomes	109 ± 2 (0.12)	109 ± 2 (0.18)	110 ± 2 (0.10)	109 ± 1 (0.11)
DDAB liposomes	122 ± 2 (0.10)	125 ± 2 (0.25)	126 ± 2 (0.13)	111 ± 3 (0.30)

Polidispersity Index is shown in brackets

VIII. Titration plots of 3FP starting from pH 11 and pH 3.



Titration of 3FP in the presence of POPC liposomes prepared in HCl 3.3 mM, adding NaOH 1 M: $pK_a = 7.22$ (in red), titration of 3FP in the presence of POPC liposomes prepared in NaOH 3.3 mM, adding HCl 1 M: $pK_a = 7.31$ (in black). The red line is shifted upwards to avoid overlapping with the black line.