Supporting Information for

Ion Pair Amphiphile: A Neoteric Substitute that Modulates the Physico-Chemical Properties of Biomimetic Membranes

Pritam Guha,[†] Biplab Roy,[†] Gourab Karmakar,[†] Prasant Nahak,[†] Suraj Koirala,[‡]

Manish Sapkota,[‡] Takeshi Misono,[§] Kanjiro Torigoe,[§] Amiya Kumar Panda*,[†]

[†]Department of Chemistry, University of North Bengal, Darjeeling – 734 013, West Bengal, India

[‡]Department of Pharmaceutics, Himalayan Pharmacy Institute, Majhitar, Rangpo, East Sikkim – 737136, India

§Department of Pure and Applied Chemistry, Tokyo University of Science, 2641 Yamazaki, Noda 278-8510 Japan

*Email: akpanda1@yahoo.com

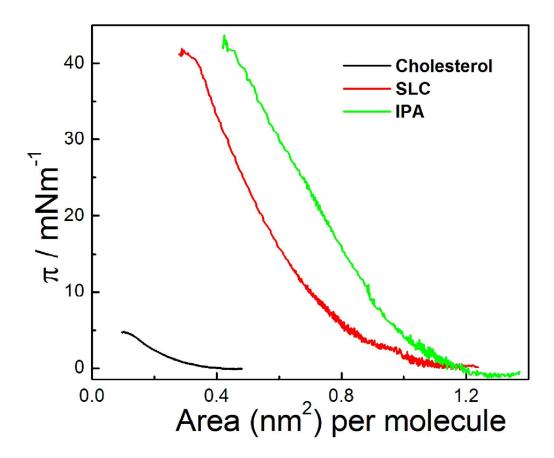


Figure S1. Surface pressure (π) – area (A) isotherm for the monomolecular films of pure components at 25 °C, as demonstrated in Figure.

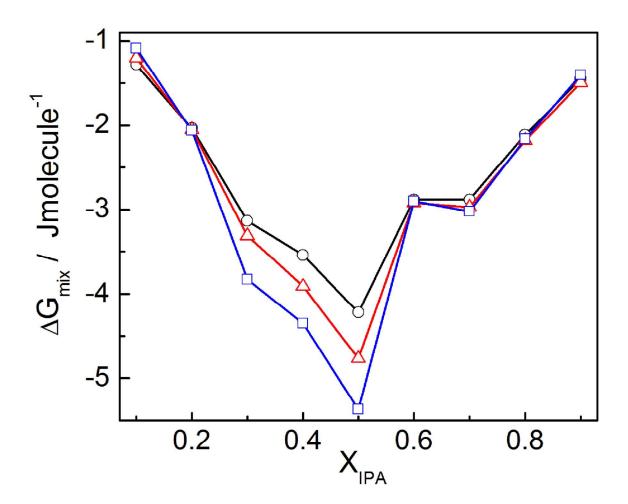


Figure S2. Variation of ΔG_{mix} as a function of composition for mixed monolayers of SLC+IPA at 25 °C. Surface pressures (π / mNm⁻¹) are: O, 10; Δ , 20 and \Box , 30.

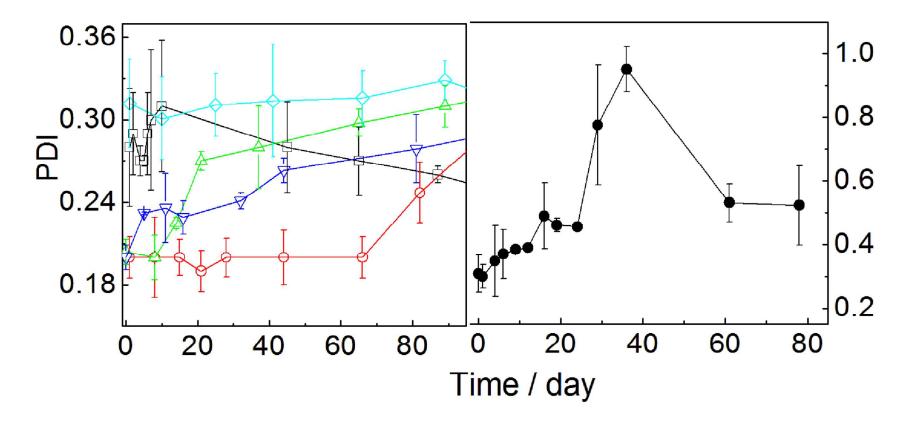


Figure S3. Variation of polydispersity index for the SLC+IPA (in presence of 30 mole% cholesterol) vesicles with time. Mole fraction of x_{IPA} : \Box , 0; O, 0.1; Δ , 0.2; ∇ , 0.3; \bullet , 0.4 and \Diamond , 0.5.

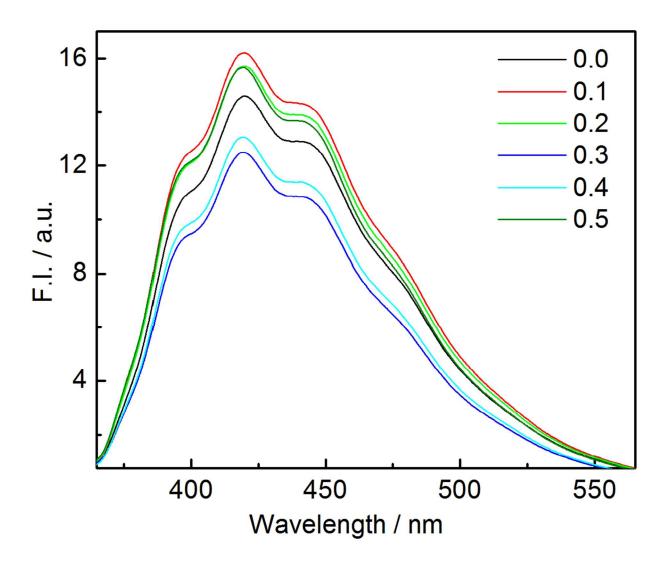


Figure S4. Fluorescence spectra of 10 μ M DPH in PBS buffer (pH 7.4) in vesicles of varying composition at 25 °C. Excitation wavelength (λ_{ex}) = 357 nm. Mole fraction of IPA are mentioned inside the Figure.