

Phospholipid crystalline clusters induced by adsorption of novel amphiphilic triblock copolymers to monolayers

5 Electronic Supplementary Information (ESI)

Surface Pressure - Area Isotherms.

Variable area experiments, namely surface pressure (π)/area (A) isotherms for monolayer films of the lipid DPPC- d_{62} and the block copolymer (PGMA₁₄)₂-PPO₃₄ at the air-water
10 interface, see Fig. 1, were carried out in a rectangular Teflon trough (Riegler & Kirstein, Berlin, Germany) with dimensions 300 mm $\times$ 60 mm equipped with a Wilhelmy film balance for monitoring the surface pressure π . The available area was varied during the experiment by changing the distance
15 between two mobile Teflon barriers positioned symmetrically to the trough center at a compression rate of 1 $\text{\AA}^2$ or 2.6 $\text{\AA}^2$ per molecule per min for lipid and copolymer, respectively. The temperature of the trough was maintained constant at 20°C.

20 Since the copolymer isotherm approximates the reduction in the surface occupied by a copolymer molecule with increasing surface pressure as adsorption proceeds, the copolymer molecular area at the equilibrium surface pressure ($\pi_{\text{eq}}=37.8 \text{ mN}\cdot\text{m}^{-1}$) was taken as a first approximation from the
25 copolymer compression isotherm at the same π value.

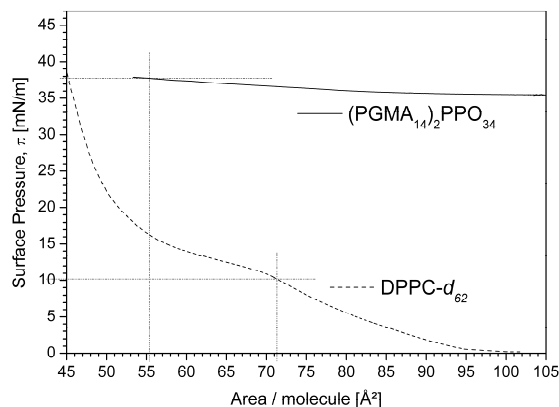


Fig.1 Surface pressure (π) / area (A) isotherms of 1,2-dipalmitoyl- d_{62} -sn-glycero-3-phosphocholine (DPPC- d_{62}) and (PGMA₁₄)₂-PPO₃₄ monolayer
30 films at the air-water interface at 20°C.