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## CHAPTER 2

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**Figure 24.** Panel A: surface elasticity vs. surface pressure dependencies for monomolecular films of (C<sub>12</sub>Mal)<sub>2</sub>Ca<sub>2</sub>+SPC at Mal mole fractions: 0.8 (magenta line); 0.6 (red line); 0.5 (blue line); 0.2 (black line). Panel B: surface pressure-area dependencies for monomolecular films of (C<sub>12</sub>Mal)<sub>2</sub>Ca<sub>2</sub>+SPC at Mal mole fraction 0.5 and different rates of surface compression: 2 (magenta line); 5 (red line); 10 (blue line); 50 mm/min (black line). Panel C: surface elasticity vs. surface pressure dependencies isotherms for monomolecular films of (C<sub>12</sub>Mal)<sub>2</sub>Ca<sub>2</sub>+SPC (red line) and (C<sub>12</sub>Mal)<sub>2</sub>Cd<sub>2</sub>+SPC (black line). (C<sub>12</sub>AAS)Na<sub>2</sub> mole fraction is 0.5. **12**

**Figure 25.** BAM images of (C<sub>12</sub>Glu)<sub>2</sub>Ca<sub>2</sub>+SPC mixed monolayers, (C<sub>12</sub>Glu)<sub>2</sub>Ca<sub>2</sub>/SPC (0.2:0.3 M/M). Surface pressure  $\pi$  (mN/m): = A, 0; B, 10; C, 20 and D, 30. White bar represent 100 $\mu$ m. Temperature: 298K. **12**

**Figure 26.** Variations in the hydrodynamic diameter ( $d_h$ , A) and zeta potential ( $Z.P$ , B) for (C<sub>12</sub>Glu)<sub>2</sub>Ca<sub>2</sub>+SPC (in the presence of 30 mole% cholesterol) with time. System: mole-fractions of (C<sub>12</sub>Glu)<sub>2</sub>Ca<sub>2</sub>,  $\alpha_{(C_{12}Glu)_2Ca_2}$ :  $\square$ , 0.2;  $\circ$ , 0.4;  $\Delta$ , 50;  $\nabla$ , 60 and  $\diamond$ ; 80. Temperature: 298K. **12**

**Figure 27.** Representative TEM images of  $(C_{12}Glu)_2Ca_2+SPC$  mixed vesicle  $(C_{12}Glu)_2Ca_2:SPC$ , 12  
6:4 (M/M). Temperature: 298K.

**Figure 28.** Variation of human blood lymphocyte cell viability (%) with  $\alpha_{C_{12}AAS_2M_2}$  of 12  
[[ $(C_{12}AAS)_2M_2$ ]+SPC mixed vesicles in the presence of 30 mole% of cholesterol.