

Ordering of surfactant molecules [ts150]

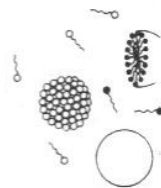
Surfactant molecules have highly soluble polar heads and barely soluble hydrocarbon tails.

Increasing the surfactant concentration produces a succession of structures.

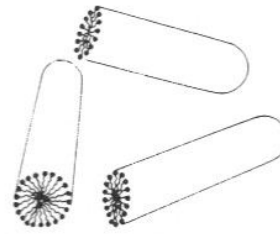
Some structures exhibit short-range order, others exhibit long-range order.



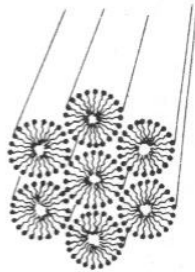
Molecules



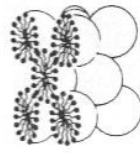
Spherical micelles



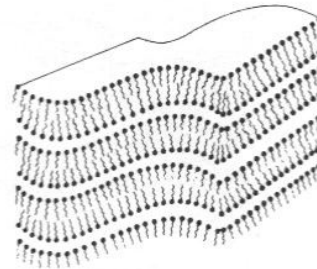
Cylindrical micelles



Hexagonal phase



Cubic phase



Lamellar phase

[from Yeomans 1992]