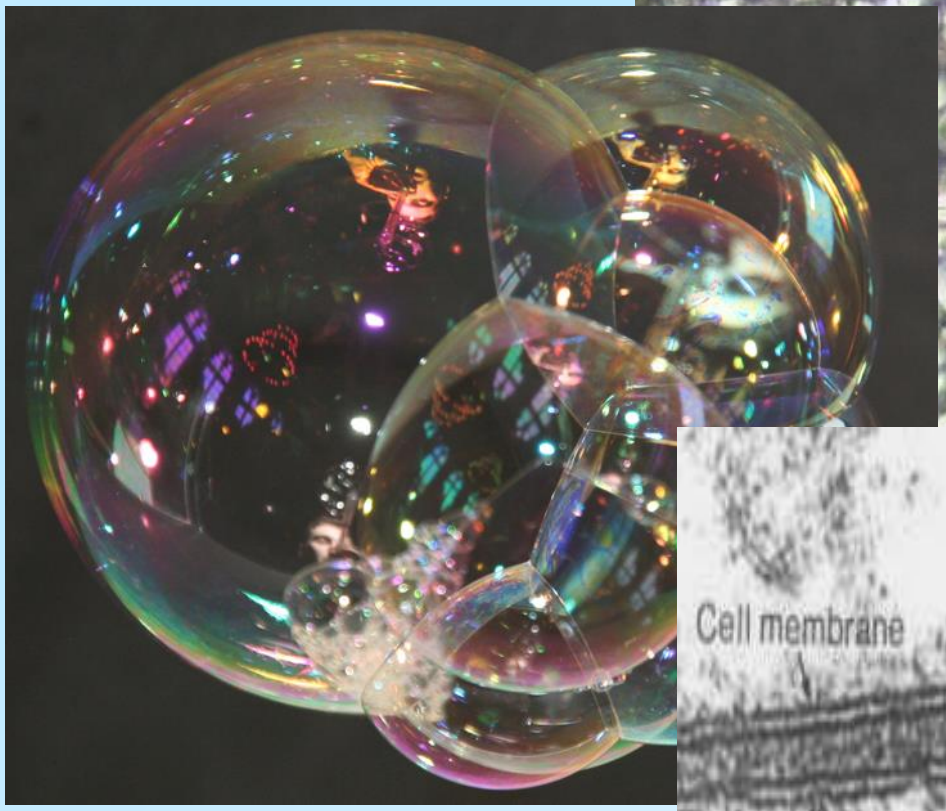
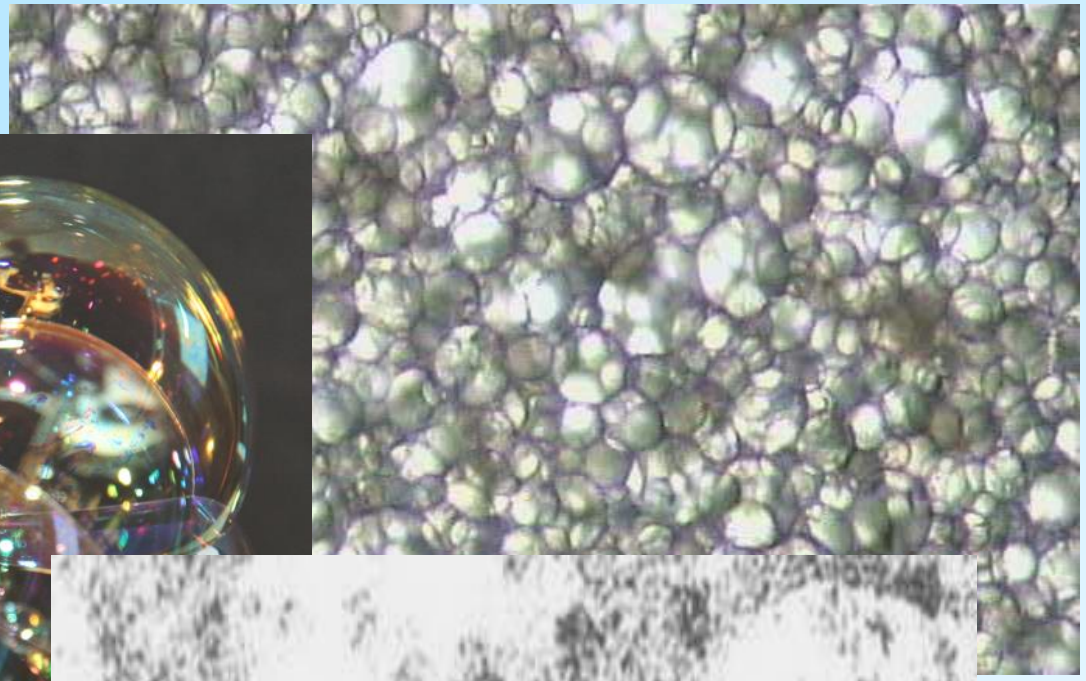
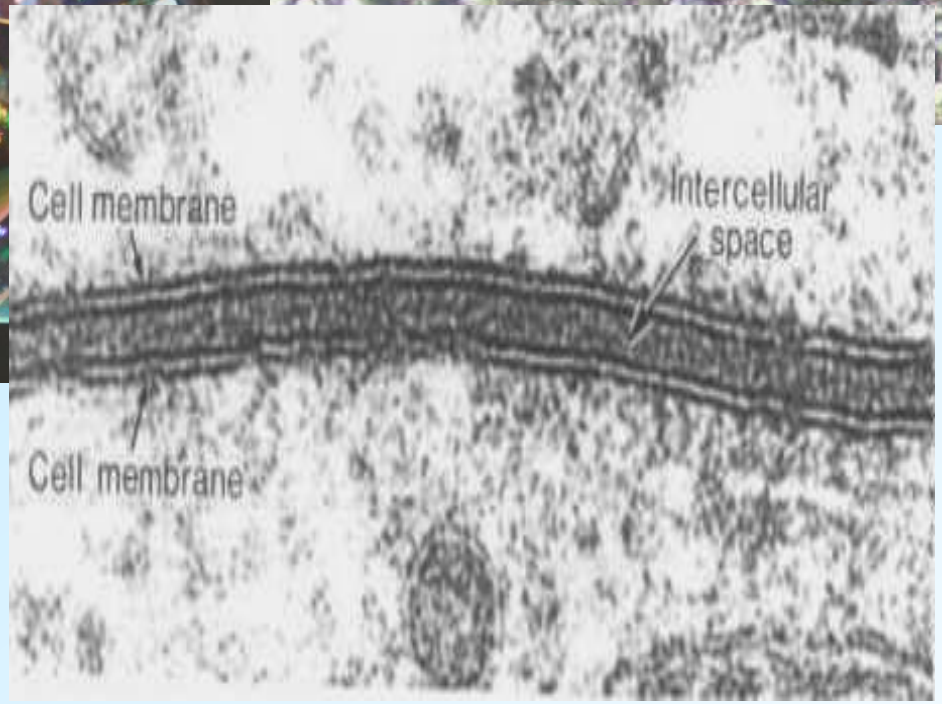
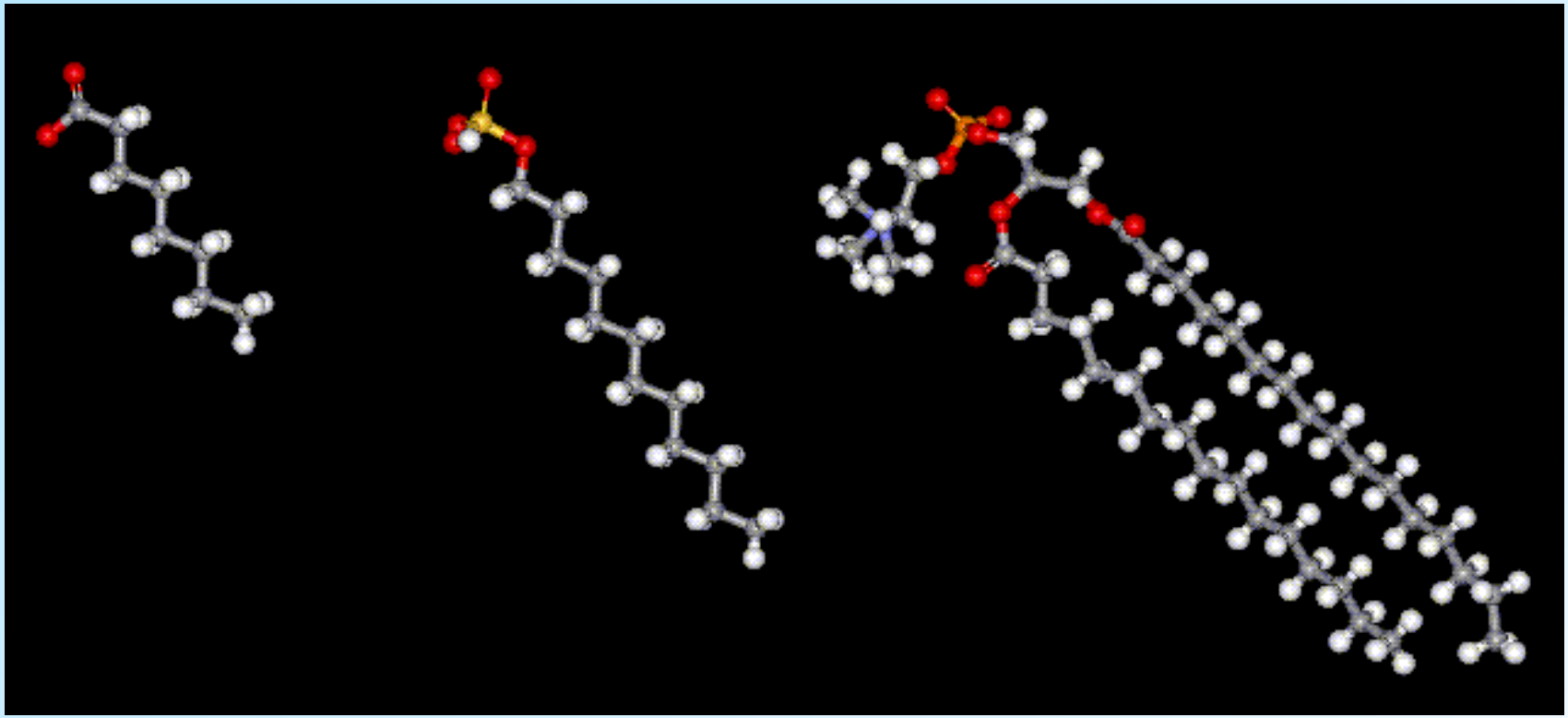
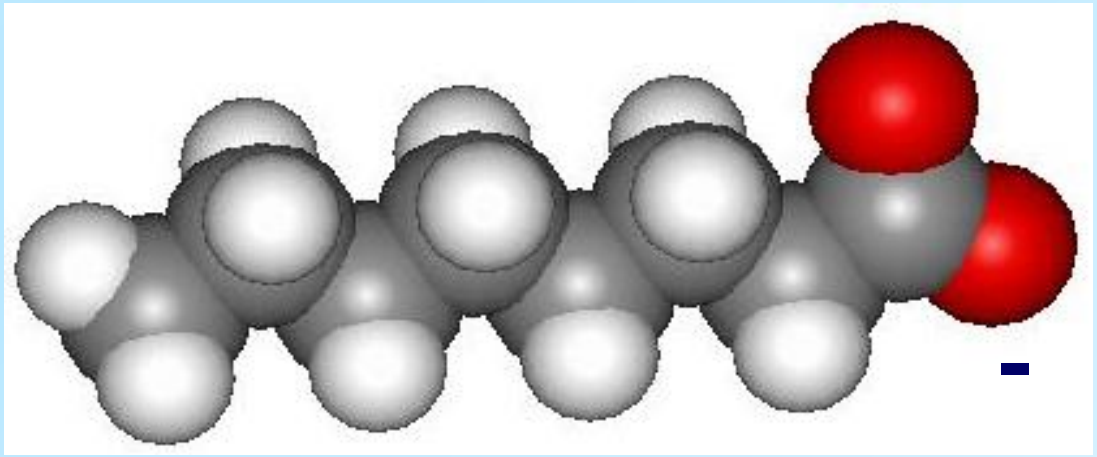





Cell membrane
Intercellular space
Cell membrane

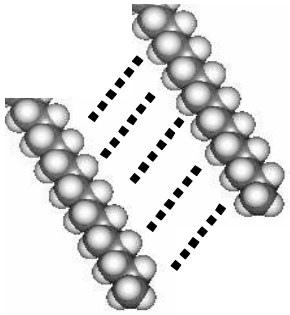
Molécules amphiphiles

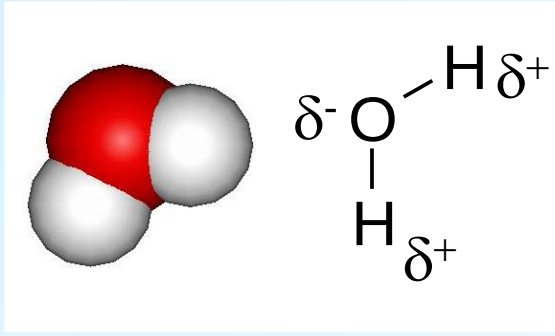


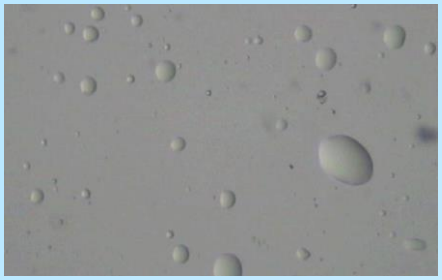


lipophile **hydrophile**

Chaînes carbonées apolaires
Elles interagissent avec
d'autres chaînes carbonées
forces de Van der Waals
entre dipôles électriques temporaires



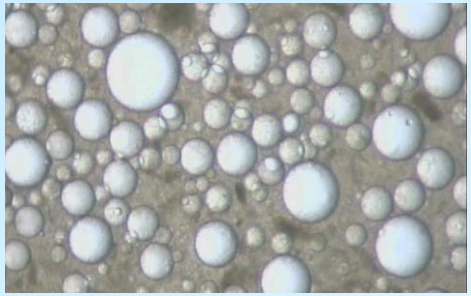


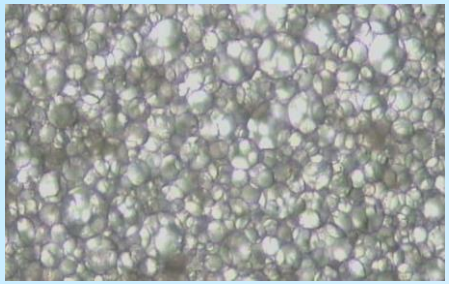


Gouttes d'huile en suspension dans l'eau

Mayonnaise

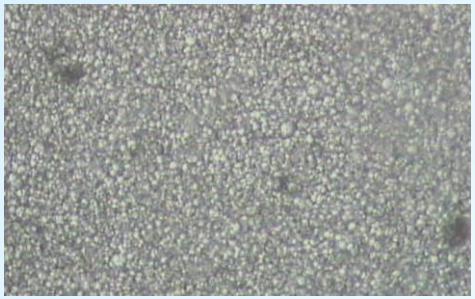
mayonnaise : état 1





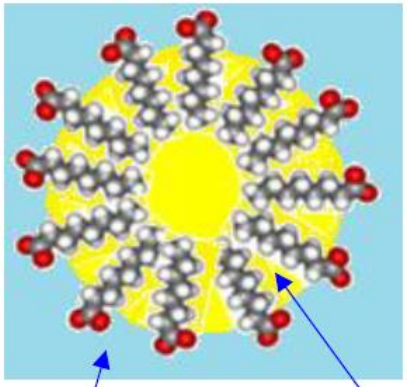
mayonnaise : état 2

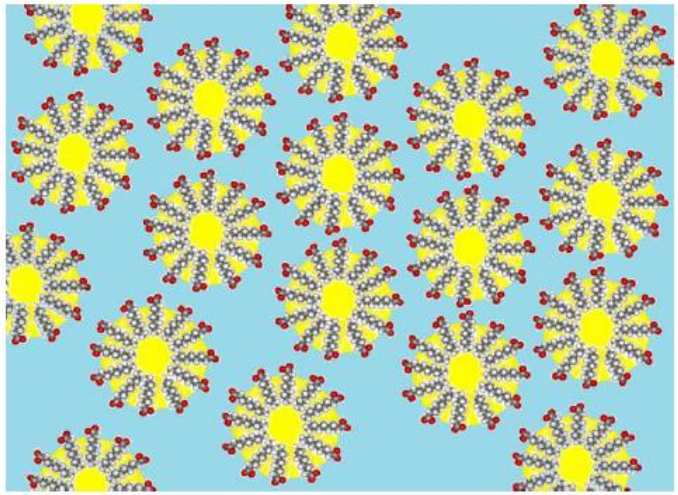
mayonnaise : état 3



MICELLE

La mayonnaise est une **émulsion** constituée de gouttes d'huile,
les micelles, séparées par un film d'eau.





Eau

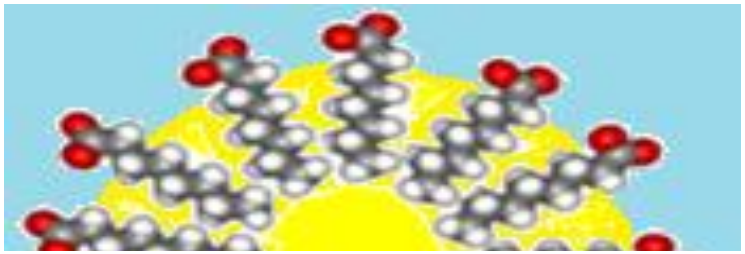
Huile

Nettoyage

Tache d'huile

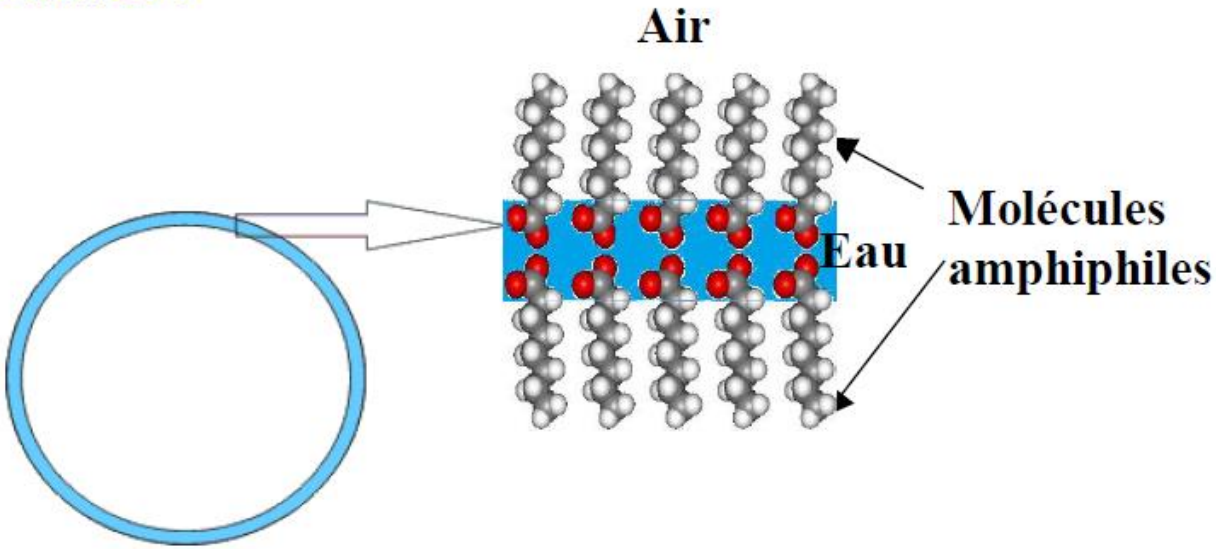
Tissu

Eau + détergeant

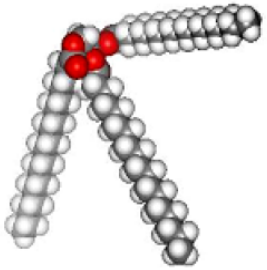
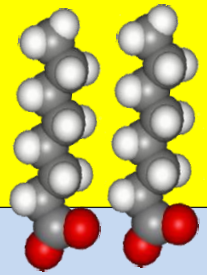


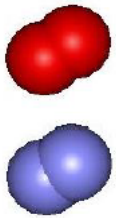
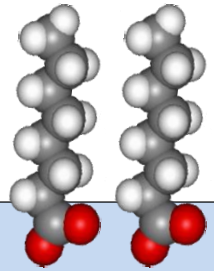
Bulles

Structure des bulles :

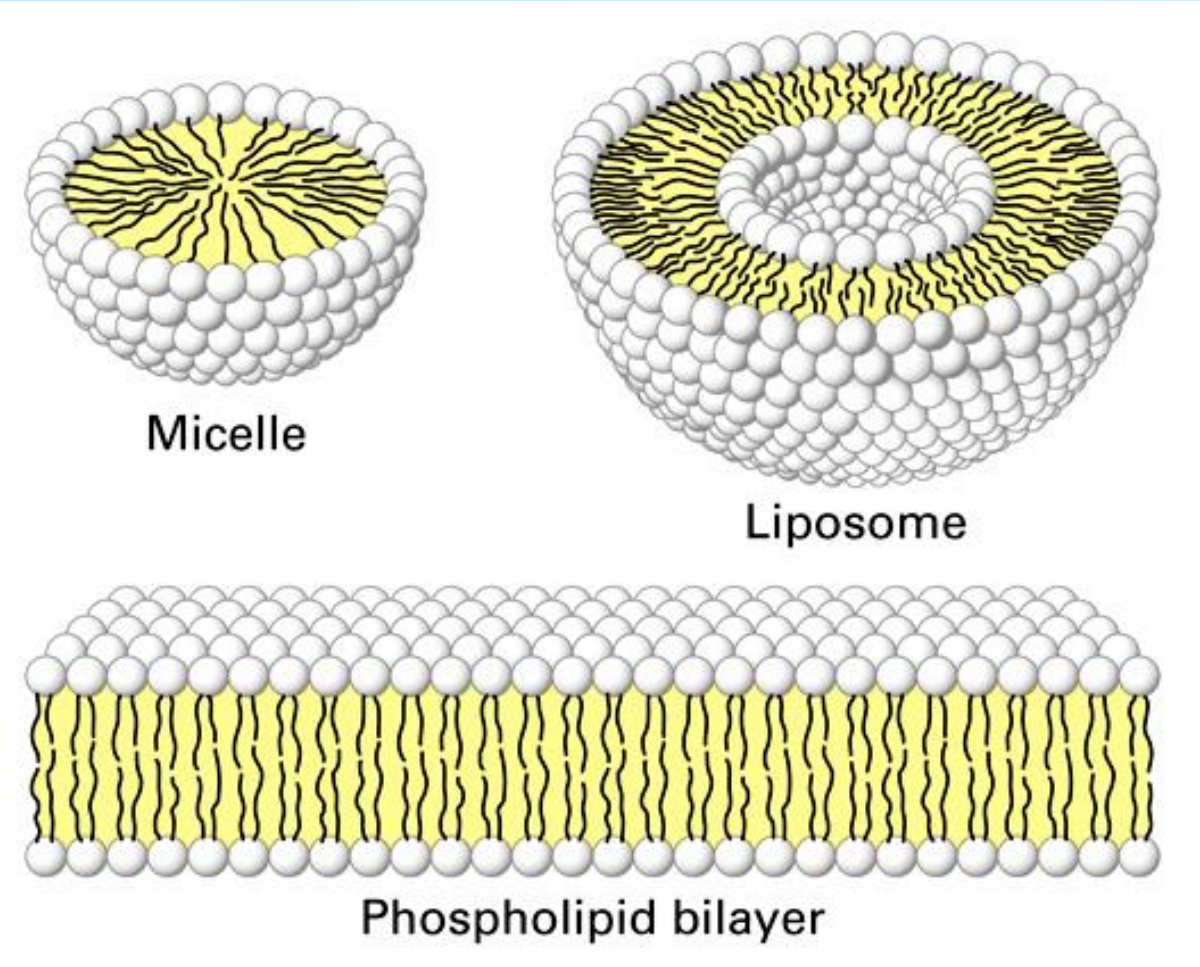


Il se forme une bicouche de molécules amphiphiles qui emprisonnent une mince pellicule de liquide.

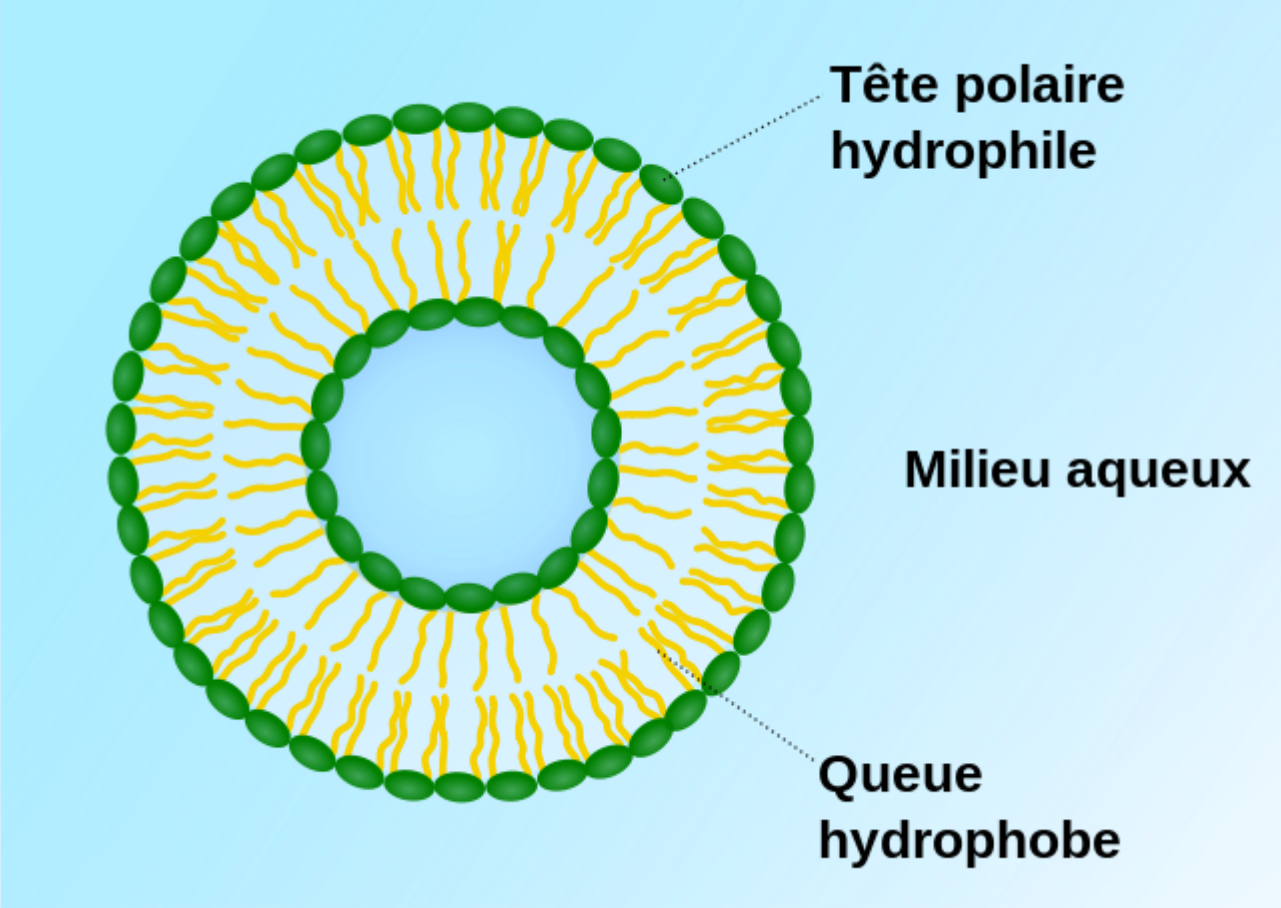
Huile Triglycérides **Chaine carbonées apolaires**		
Eau H_2O **Molécule polarisée**		

Air N_2 et O_2 **Molécules non polarisées**		
Eau H_2O **Molécule polarisée**		

Structures



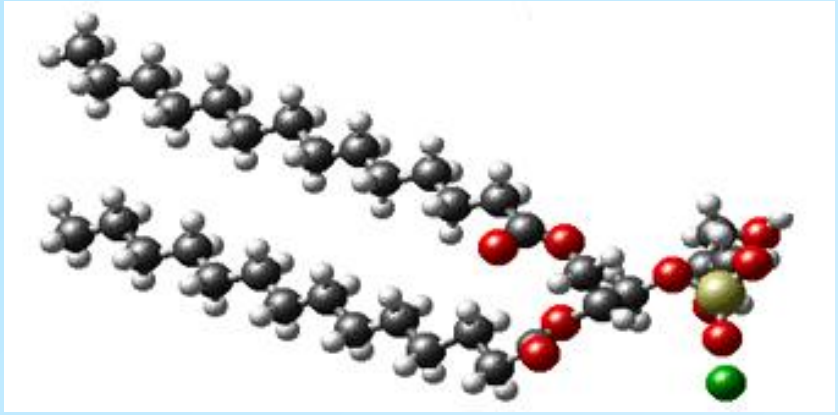
LIPOSOMES

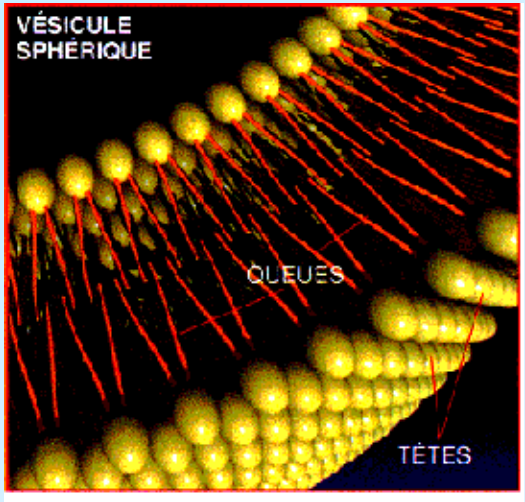


Membranes cellulaires

DMPG

sodium 2,3-dimyrisotyl-D-glycero-1-phosphate



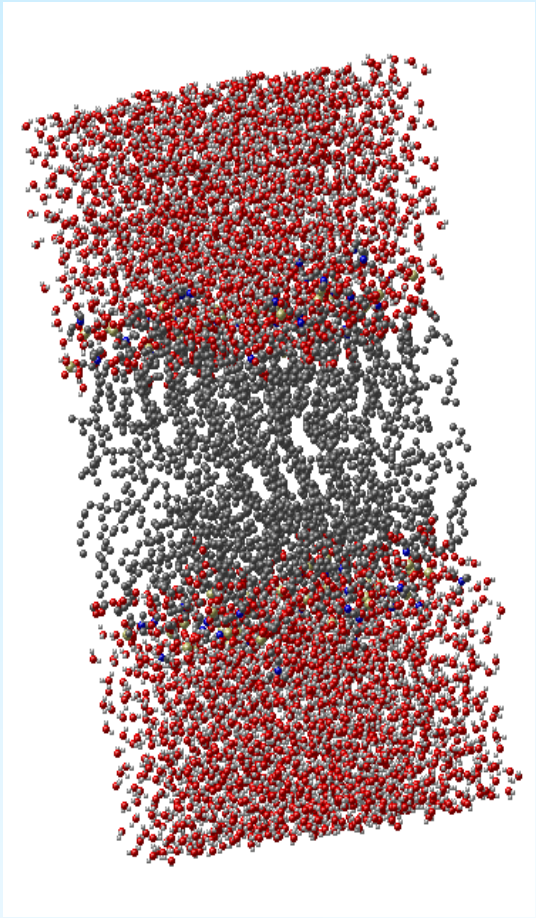


BICOUCHE de phospholipides

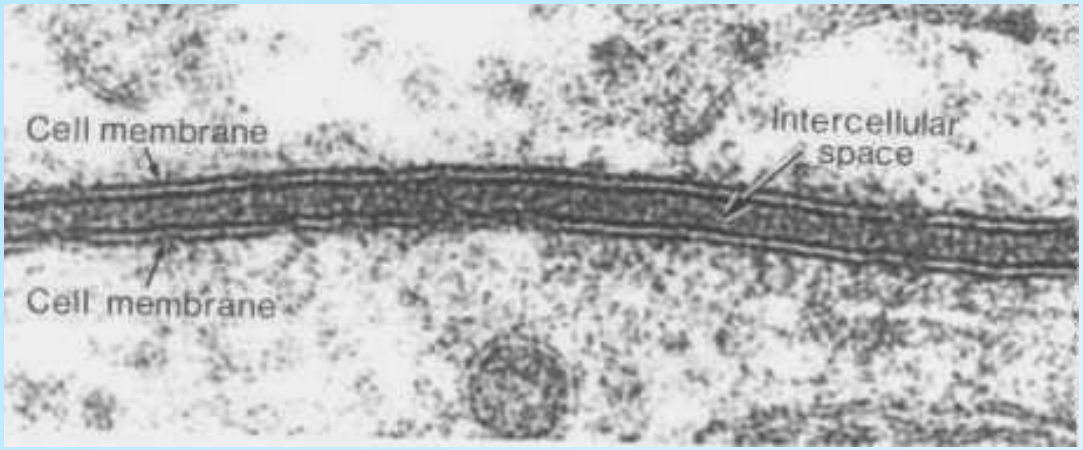
eau →

phospholipides →

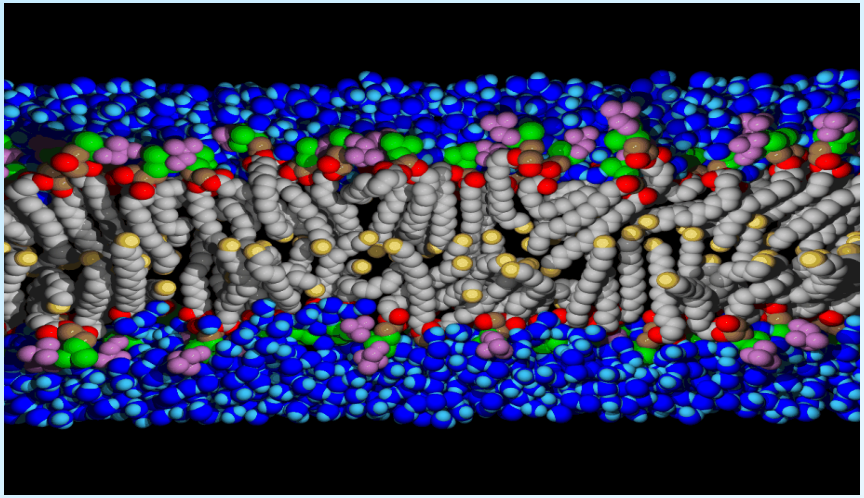
eau →



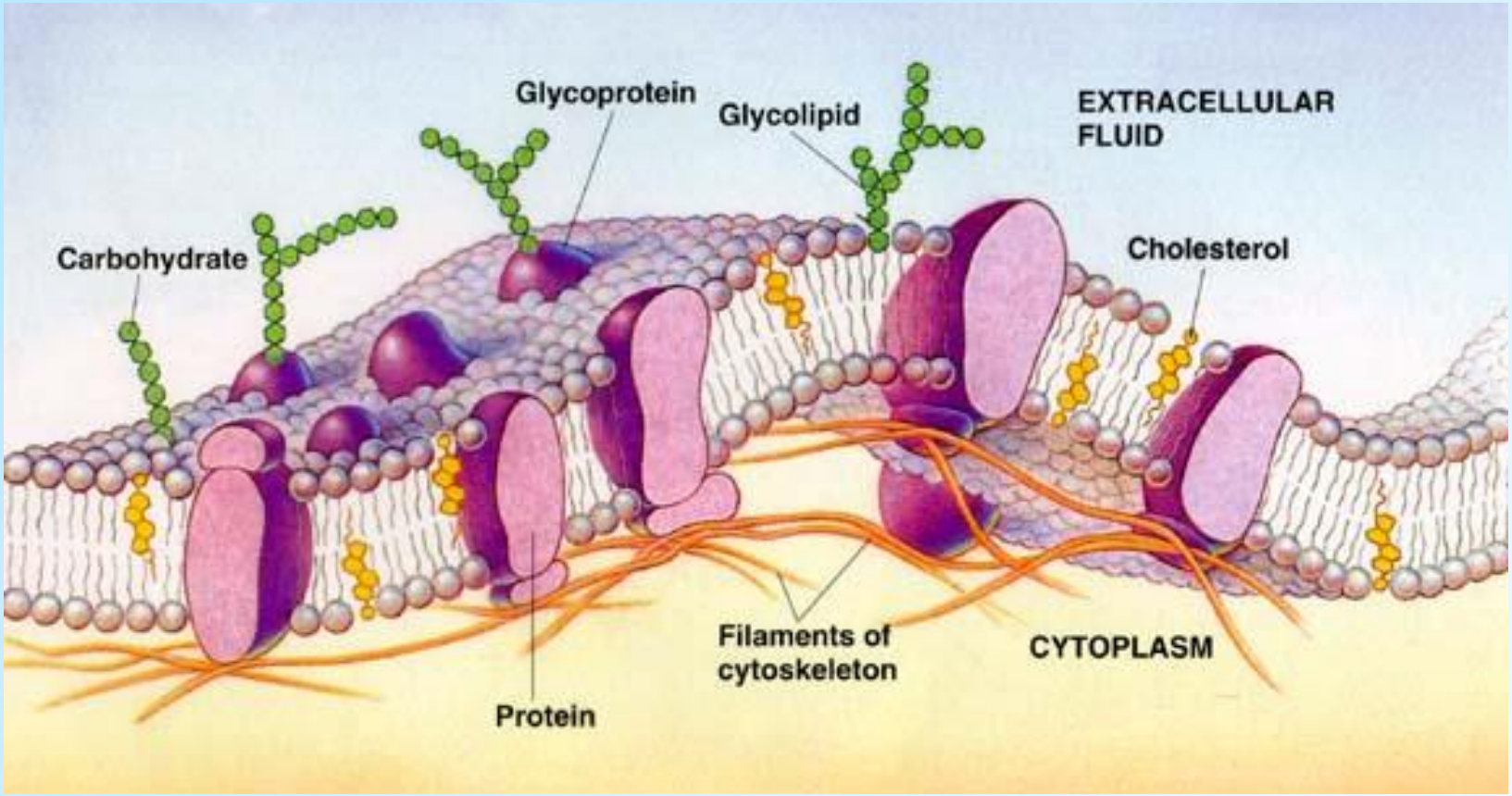
Vue au microscope électronique



Simulation moléculaire simplifiée



Complexité


Glycoprotein
Glycolipid
EXTRACELLULAR FLUID
Carbohydrate
Cholesterol
Filaments of cytoskeleton
CYTOPLASM
Protein

Pompe sodium - potassium