• Why do phospholipids self-assemble in solution, what structures do they form, and why are they relevant to cell biology?

Phospholipids contain a hydrophilic head and 2 hydrophobic tails.

They self assemble in bilayers with the hydrophobic tails in the centre and the hydrophilic heads at the interface with the solution.

Lipid bilayers (intercalated with proteins) make up over 50 % of cell membranes in biology, as the bilayer arrangement makes an effective barrier against the free passage of water and ions into and out of cells.

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