

Ion interaction at the interface of Langmuir monolayers

Doseok Kim

Department of Physics, Sogang University

Lipid bilayer in the cell membrane consisting of amphiphilic molecules exposes hydrophilic headgroups to aqueous phase. This two-dimensional, crowded environment is where the headgroups interact with water molecules, ions, and other biological molecules in cytoplasm. In this lecture I will introduce Langmuir monolayers consisting of molecules having amine- and quaternary amine headgroups investigated by sum-frequency vibrational spectroscopy, to show their novel counterion adsorption and protonation/deprotonation behavior.