

Electronic Supplementary Information for *Soft Matter* manuscript:
Structural Properties of Cationic Surfactant-Fatty Alcohol Bilayers:
Insights from Dissipative Particle Dynamics

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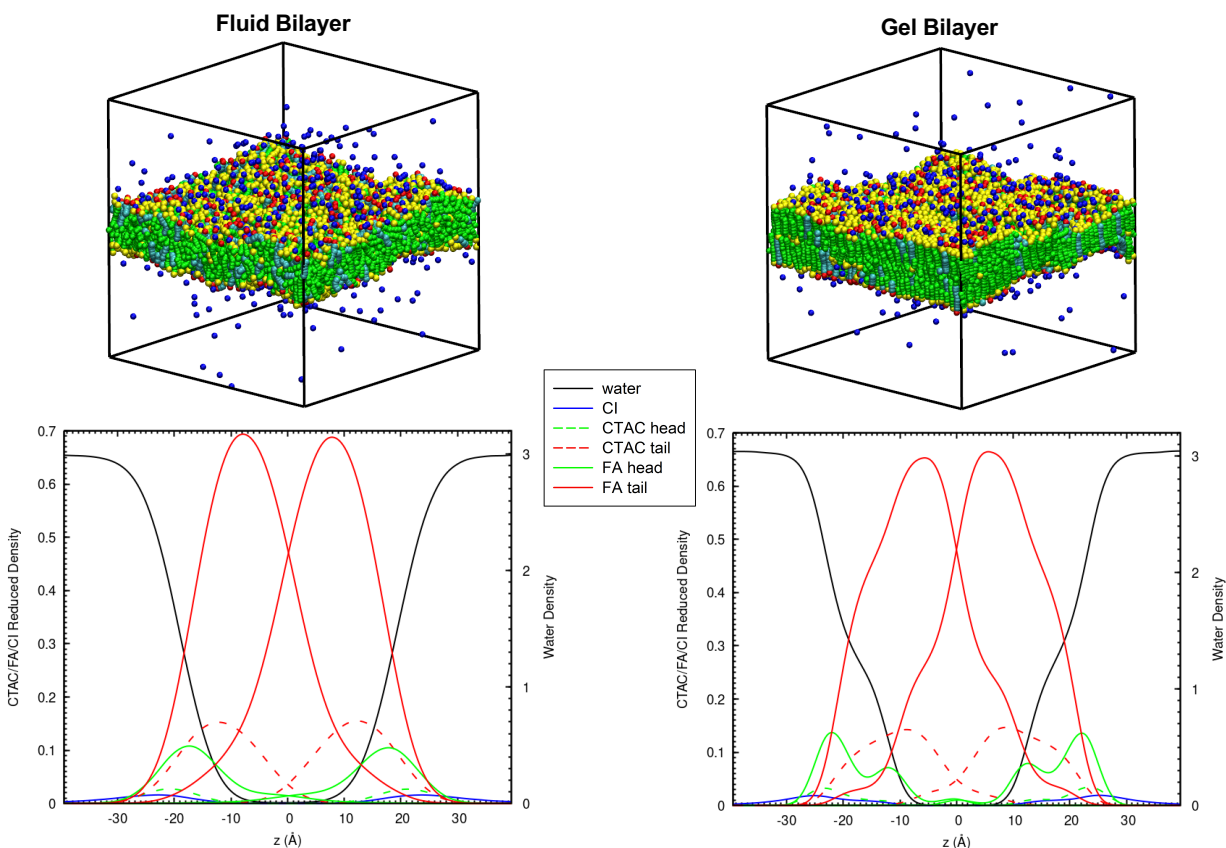


Figure S1: The bilayer snapshots and density profiles of water, CI, and CTAC and FA heads and tails for the fluid (left column) and gel (right column) bilayers of System 2; z denotes coordinates across the bilayers. All density profiles except the water density profile are reduced by the number density of liquid water $\rho_w = 3$. In the bilayer snapshots, the blue spheres represent CI, the red and cyan spheres depict CTAC head and tail beads, respectively, and the yellow and green spheres represent FA head and tail beads, respectively. Water beads are suppressed for the sake of clarity.

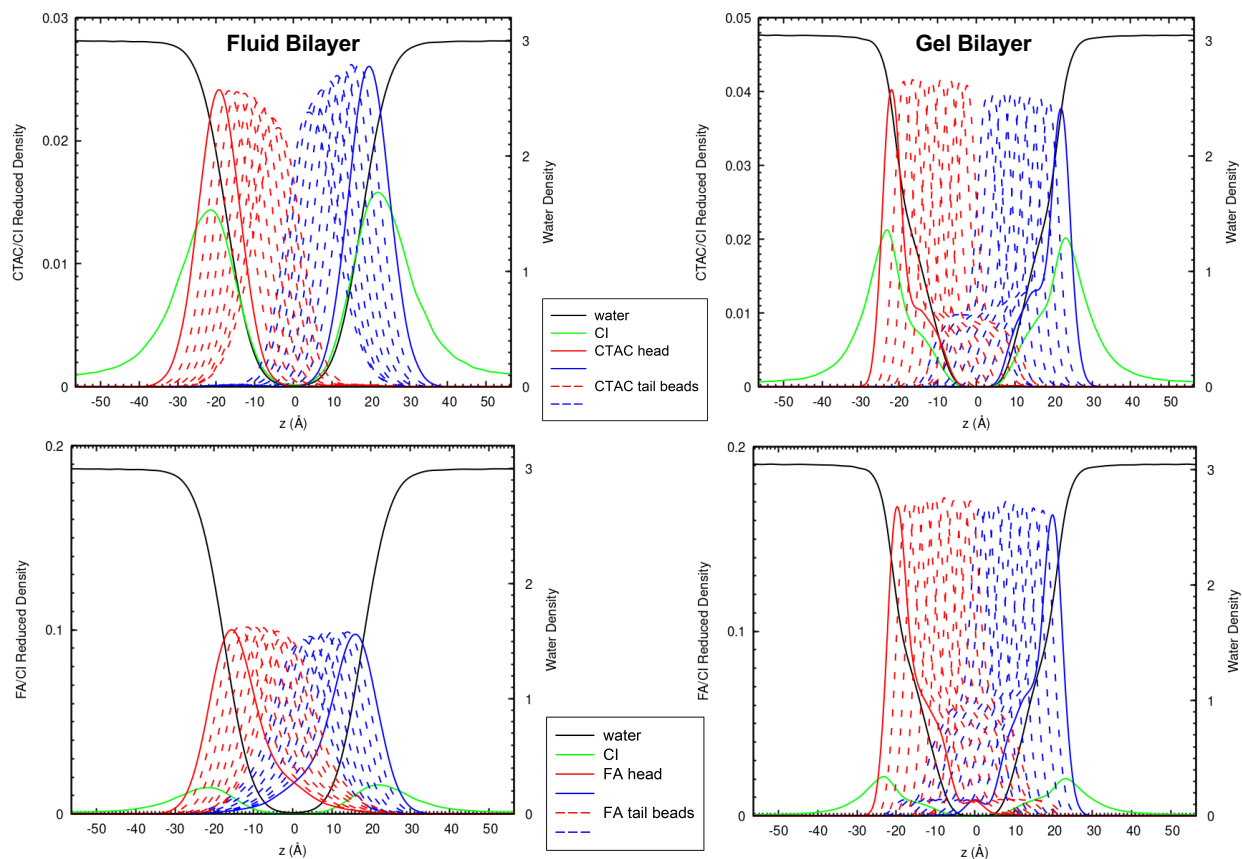


Figure S2: The density profiles of water, CI, and CTAC and FA heads and tail beads for the fluid (left column) and gel (right column) bilayers of System 1; z denotes coordinates across the bilayers. All density profiles except the water density profile are reduced by the number density of liquid water $\rho_w = 3$.

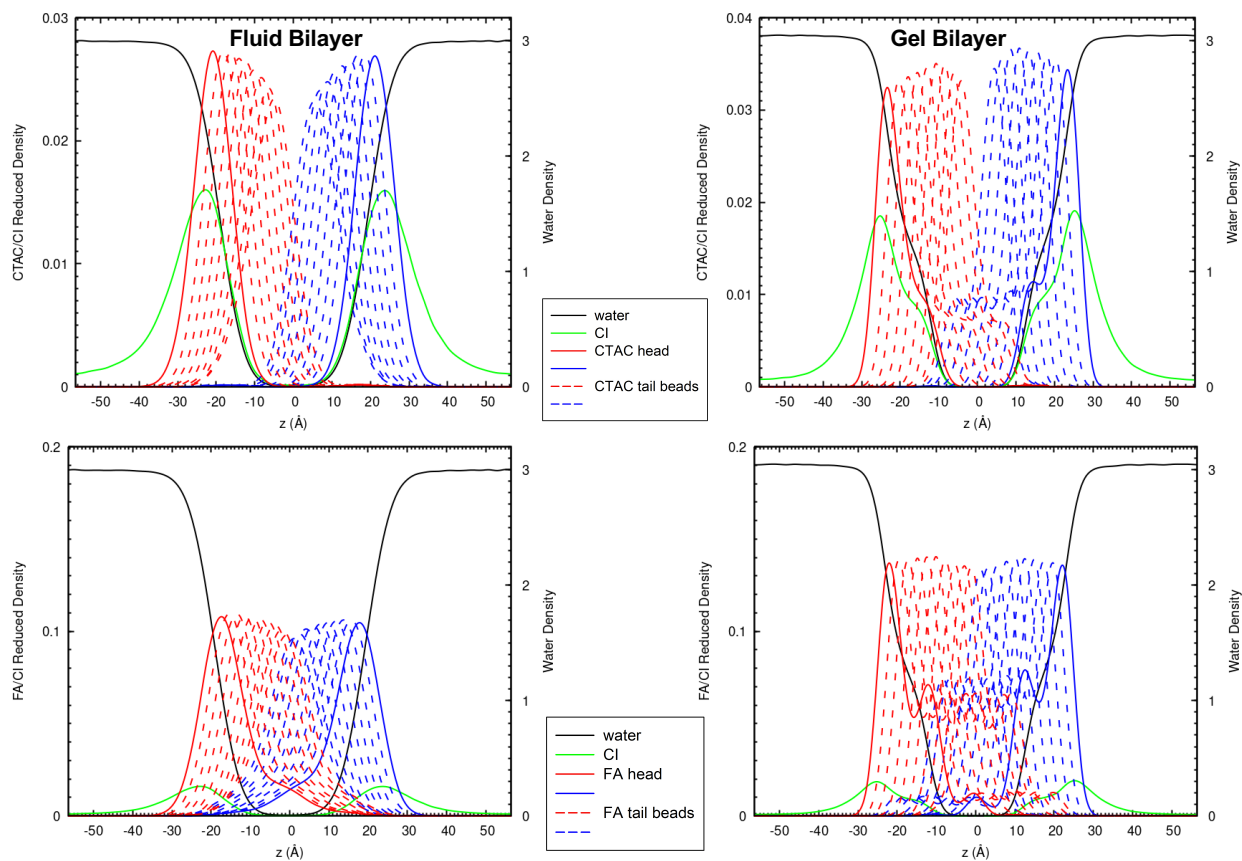


Figure S3: The density profiles of water, CI, and CTAC and FA heads and tail beads for the fluid (left column) and gel (right column) bilayers of System 2; z denotes coordinates across the bilayers. All density profiles except the water density profile are reduced by the number density of liquid water $\rho_w = 3$.

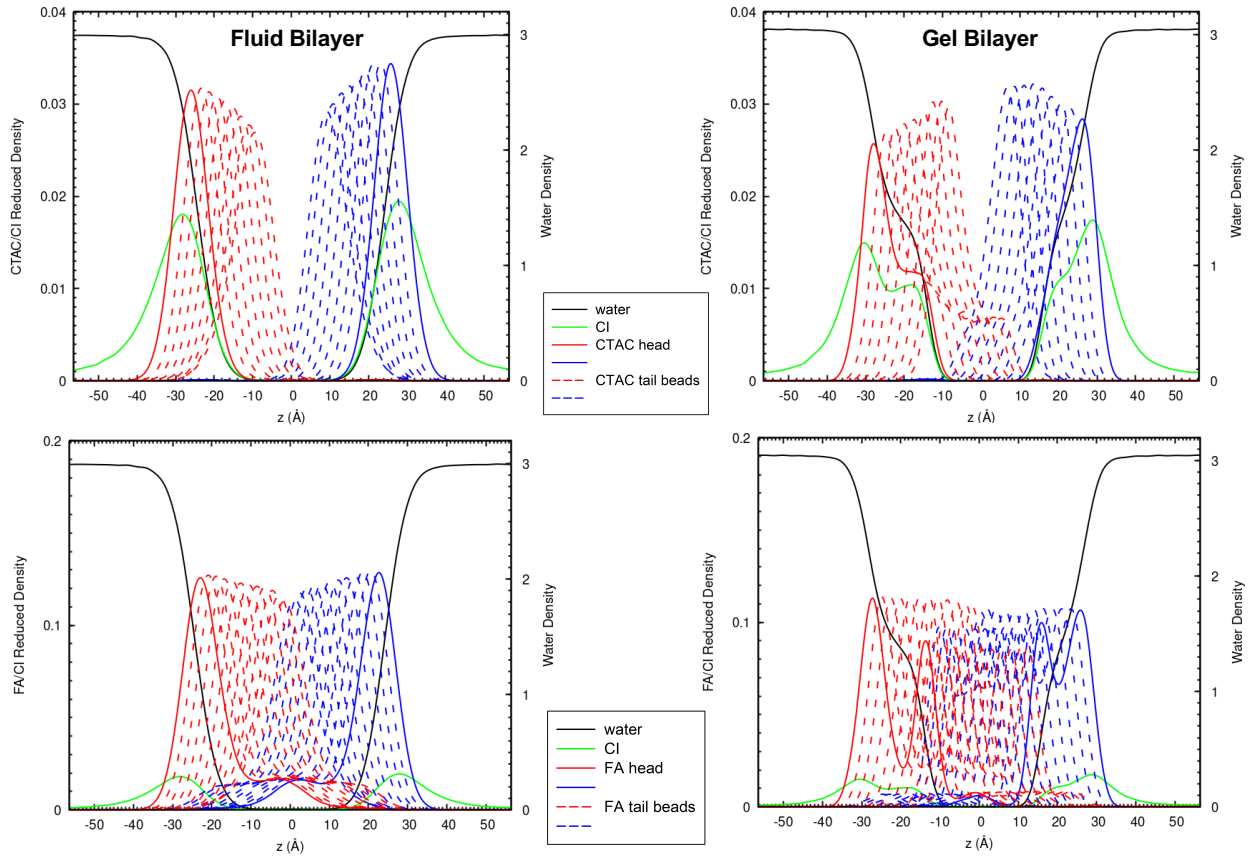


Figure S4: The density profiles of water, CI, and CTAC and FA heads and tail beads for the fluid (left column) and gel (right column) bilayers of System 3; z denotes coordinates across the bilayers. All density profiles except the water density profile are reduced by the number density of liquid water $\rho_w = 3$.

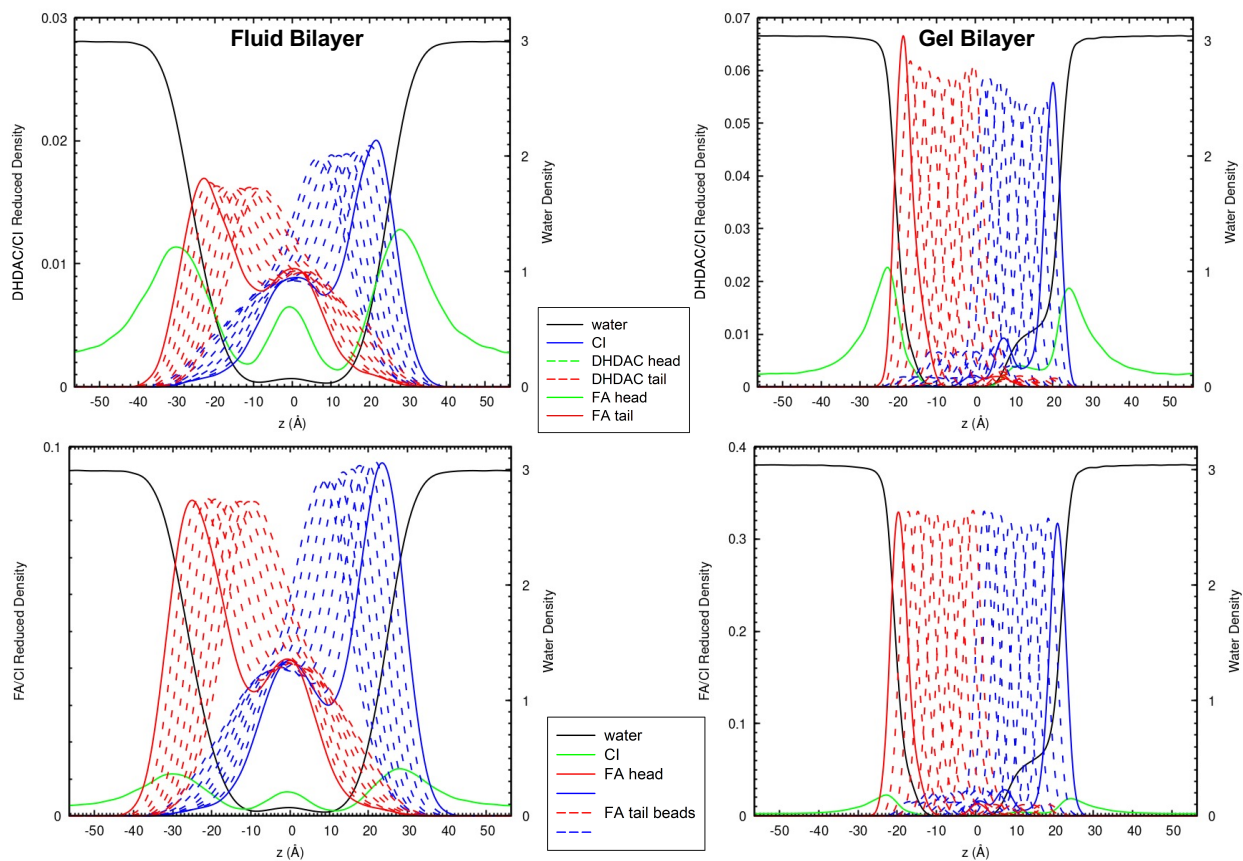


Figure S5: The density profiles of water, Cl, and DHDAC and FA heads and tail beads for the fluid (left column) and gel (right column) bilayers of System 1a; z denotes coordinates across the bilayers. All density profiles except the water density profile are reduced by the number density of liquid water $\rho_w = 3$.

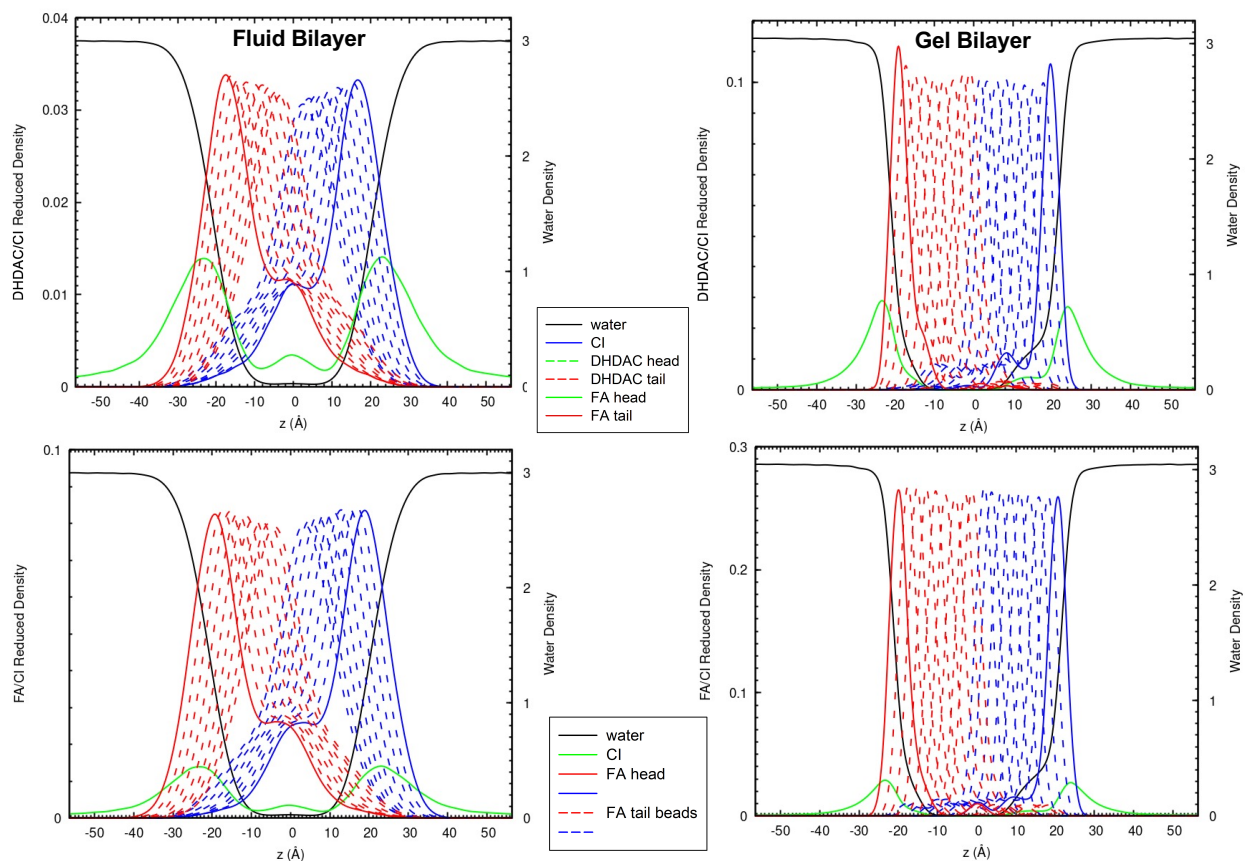


Figure S6: The density profiles of water, Cl, and DHDAC and FA heads and tail beads for the fluid (left column) and gel (right column) bilayers of System 1b; z denotes coordinates across the bilayers. All density profiles except the water density profile are reduced by the number density of liquid water $\rho_w = 3$.

S1 Video Files

Video files illustrate fluid and gel bilayers for Systems 1, 2, and 3, and Systems 1a and 1b. The video files demonstrate the motion of the surfactant and FA chains, and CIs within the bilayers and inter-lamellar water layer.