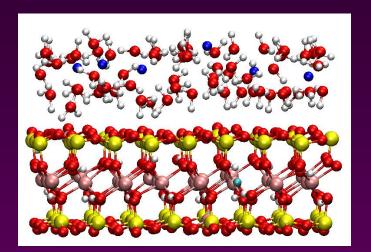
## Structure and Dynamics of Aqueous and Aqueous-Hydrocarbon Fluids between Charged Surfaces

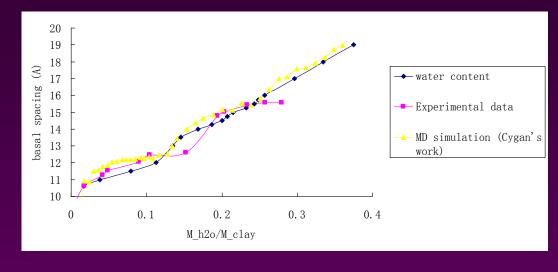


Yongsheng Leng, Department of Mechanical and Aerospace Engineering,

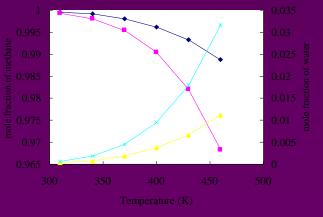
The George Washington University, Washington, D.C. 20052

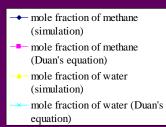


A snapshot of the two-layer aqueous hydration film near Na-montmorillonite clay surface



Swelling curves predicted by GCMC molecular simulations agree with experimental and other MD simulation results for a Na-montmorillonite clay





Mole fraction of water and methane in the mixture in gas phase