

Influence of hydrated silica surfaces on interfacial water in the presence of clathrate hydrate forming gases

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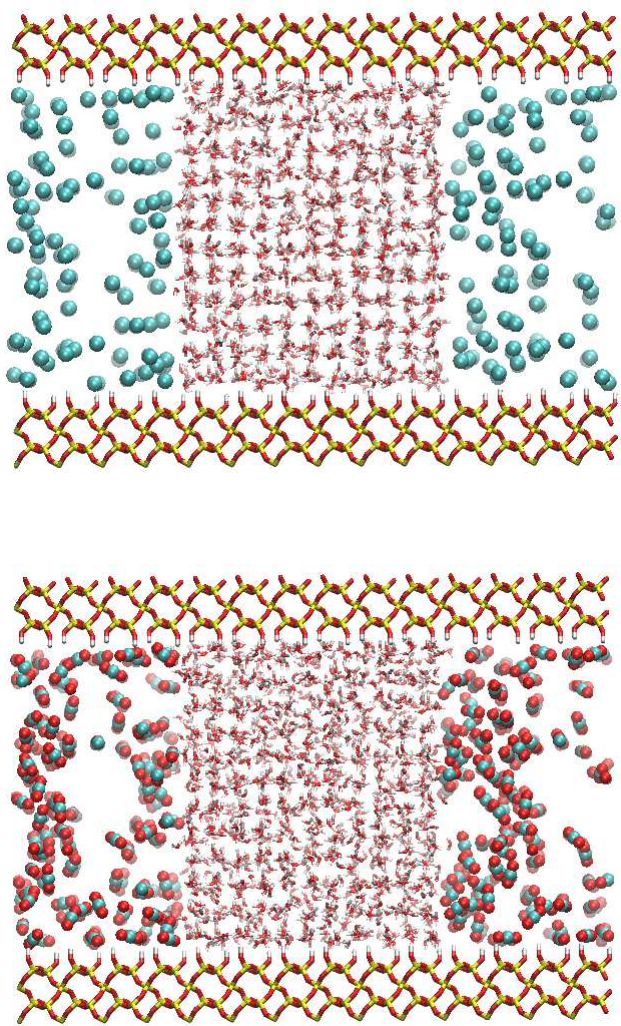


Figure S1. The initial setup configurations for the simulation 3 (water and methane gas) and 5 (water and carbon dioxide gas)

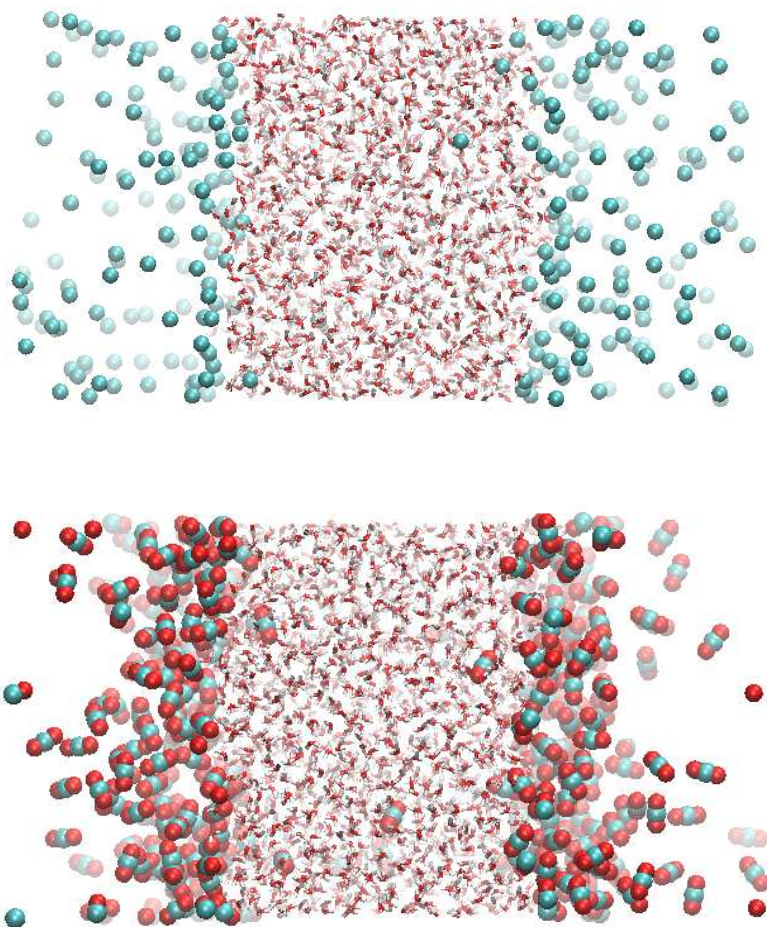


Figure S2. Snapshots of CH₄ and CO₂ gas distribution adjacent to a flat water surface. The gas concentration is enhanced near the interface.

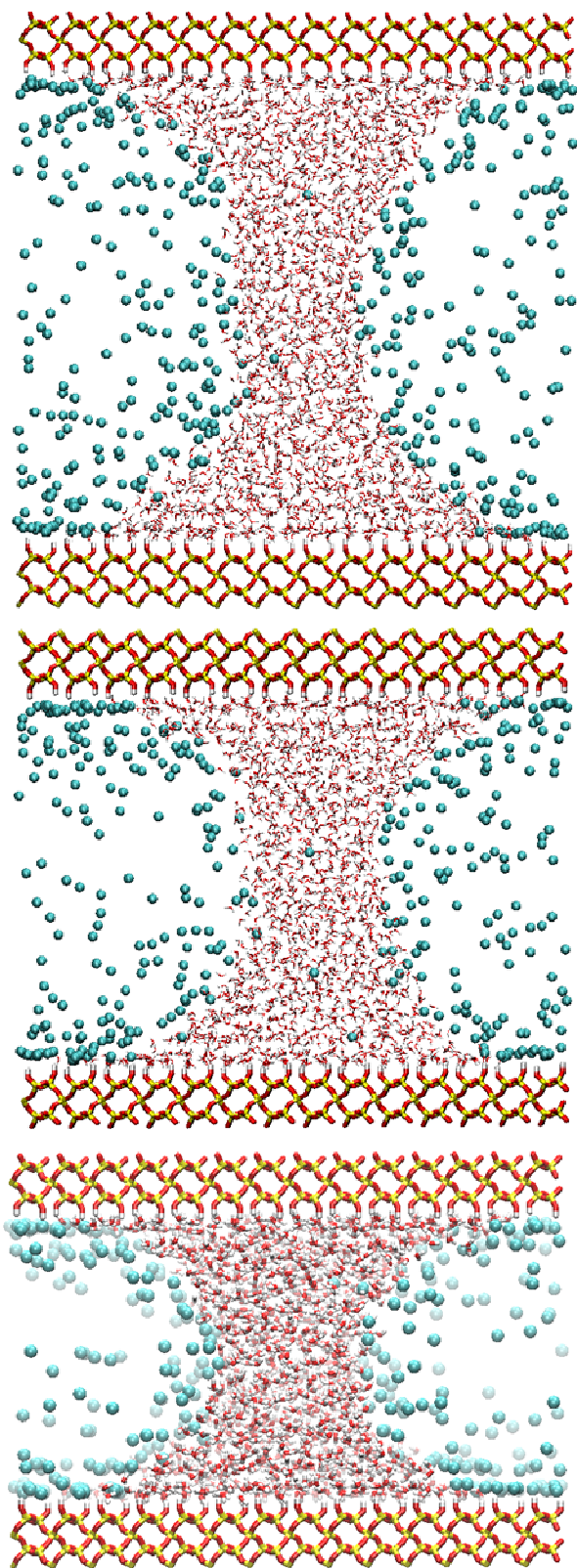


Figure S3. Snapshot from Simulations 3, 3a, and 3b after 2 ns showing the meniscus and methane gas phase for systems with silica layer separations of $y = 62$, 50, and 38 Å. The shape of the meniscus changes but the contact angle remains the same in these three cases