SUPPORTING INFORMATION

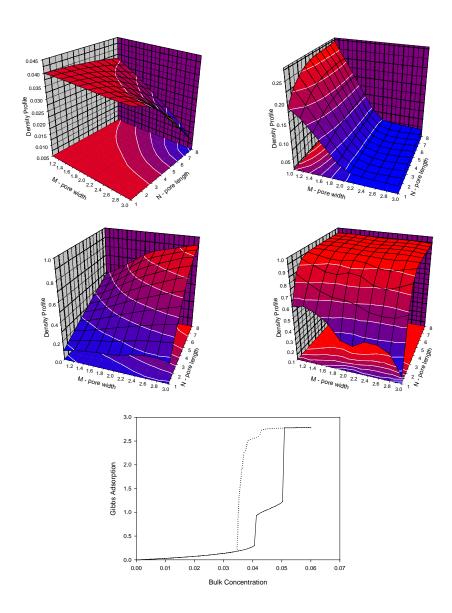


Figure 1S. Left panel presents initial two-dimensional density profile generated from eqs 4 and 5. Right panel shows the final density profile. The Gibbs excess adsorption/desorption isotherm is also presented below. The computations were performed for the following parameters: N=15, M=5, $\alpha=-1.1$, $\varepsilon_s/k_bT=-1.2$, and bulk density $\rho_\infty=0.04$.

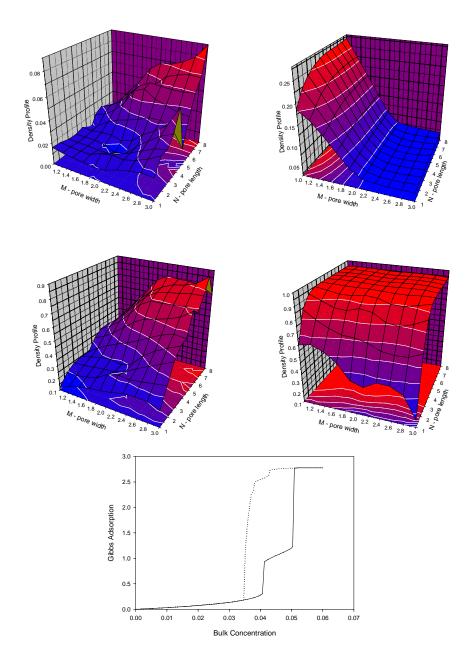


Figure 2S. Left panel presents initial two-dimensional density profile generated from eqs 9 and 11. Right panel shows the final density profile. The Gibbs excess adsorption/desorption isotherm is also presented below. The computations were performed for the following parameters: N=15, M=5, $\alpha=-1.1$, $\varepsilon_s/k_bT=-1.2$, and bulk density $\rho_\infty=0.04$.

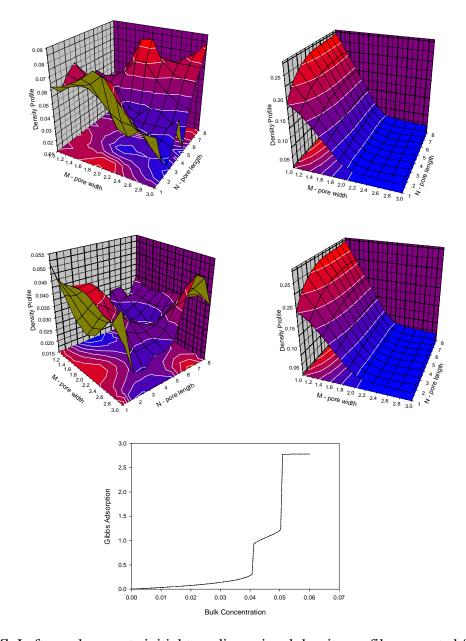


Figure 3S. Left panel presents initial two-dimensional density profile generated from eqs 9 and 10. Right panel shows the final density profile. The Gibbs excess adsorption/desorption isotherm is also presented below. The computations were performed for the following parameters: N=15, M=5, $\alpha=-1.1$, $\varepsilon_s/k_bT=-1.2$, and bulk density $\rho_\infty=0.04$.