Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

Kinetic selectivity effects of binary mixtures on nanotube bundles: Internal and external adsorption SEYOUM TSIGE, MERCEDES CALBI, JARED BURDE, Southern Illinois University Carbondale — We investigate kinetic selectivity effects that take place during the adsorption of a binary mixture inside a nanotube and on the external surface of a bundle. By using a kinetic Monte Carlo Scheme we allow adsorption on sites with different binding energy (external surface) and we restrict adsorption/desorption only to the end sites in the case of the internal adsorption. In both cases, we analyze the appearance of an overshoot in the fractional coverage of the weaker species (before equilibrium) observed previously for a single, homogeneous, one-dimensional chain.

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Date submitted: 21 Nov 2008 Electronic form version 1.4