

Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Pathways of Spontaneous Vesicle Formation of ABA Amphiphilic Molecules in Selective Solvent. WEI JIANG, HONGBO DU, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences — We study the pathways of spontaneous vesicle formation of the ABA amphiphilic molecules in selective solvent by Monte Carlo simulation. Simulation results reveal that the pathway for the spontaneous vesicle formation of the amphiphilic molecules in selective solvent depends strongly on the annealing speed. We can not use one pathway model to describe the vesicle formation even though for the same system and condition. Hydrophobic molecules diffusing in spherical micelles and oblate membrane closing may coexist for the vesicle formation.

Wei Jiang
Changchun Institute of Applied Chemistry, Chinese Academy of Sciences

Date submitted: 05 Nov 2007

Electronic form version 1.4