

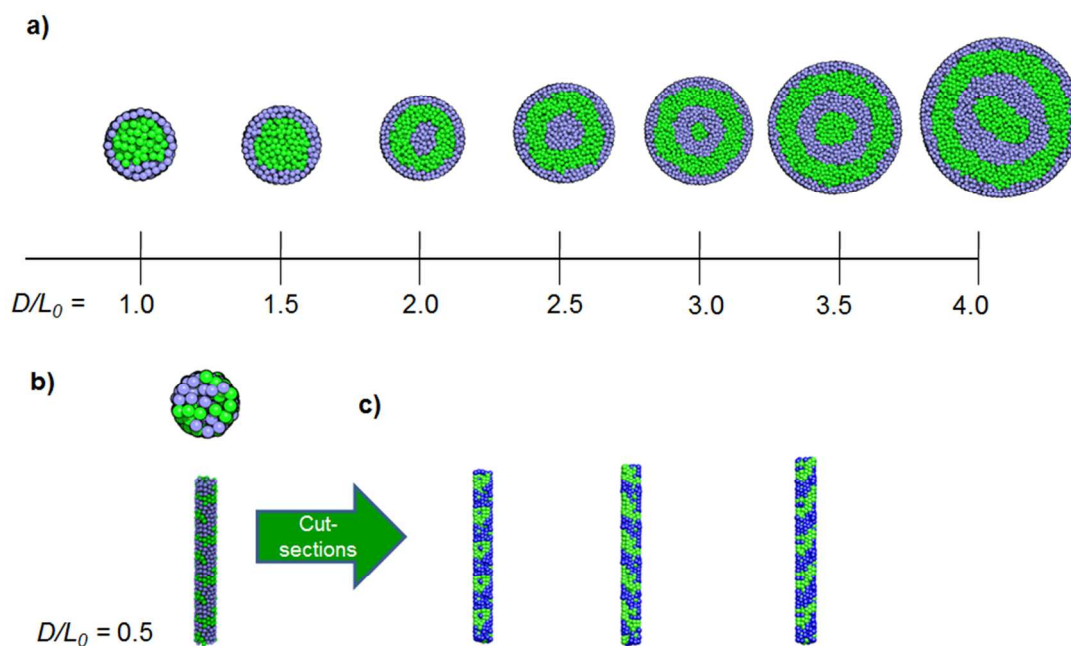
Supporting Information for Electrospinning Experiment and Coarse-Grained Molecular Dynamic Simulation on Breaking Symmetry of Cylindrically Confined Block Copolymer with Selective Nanoparticle

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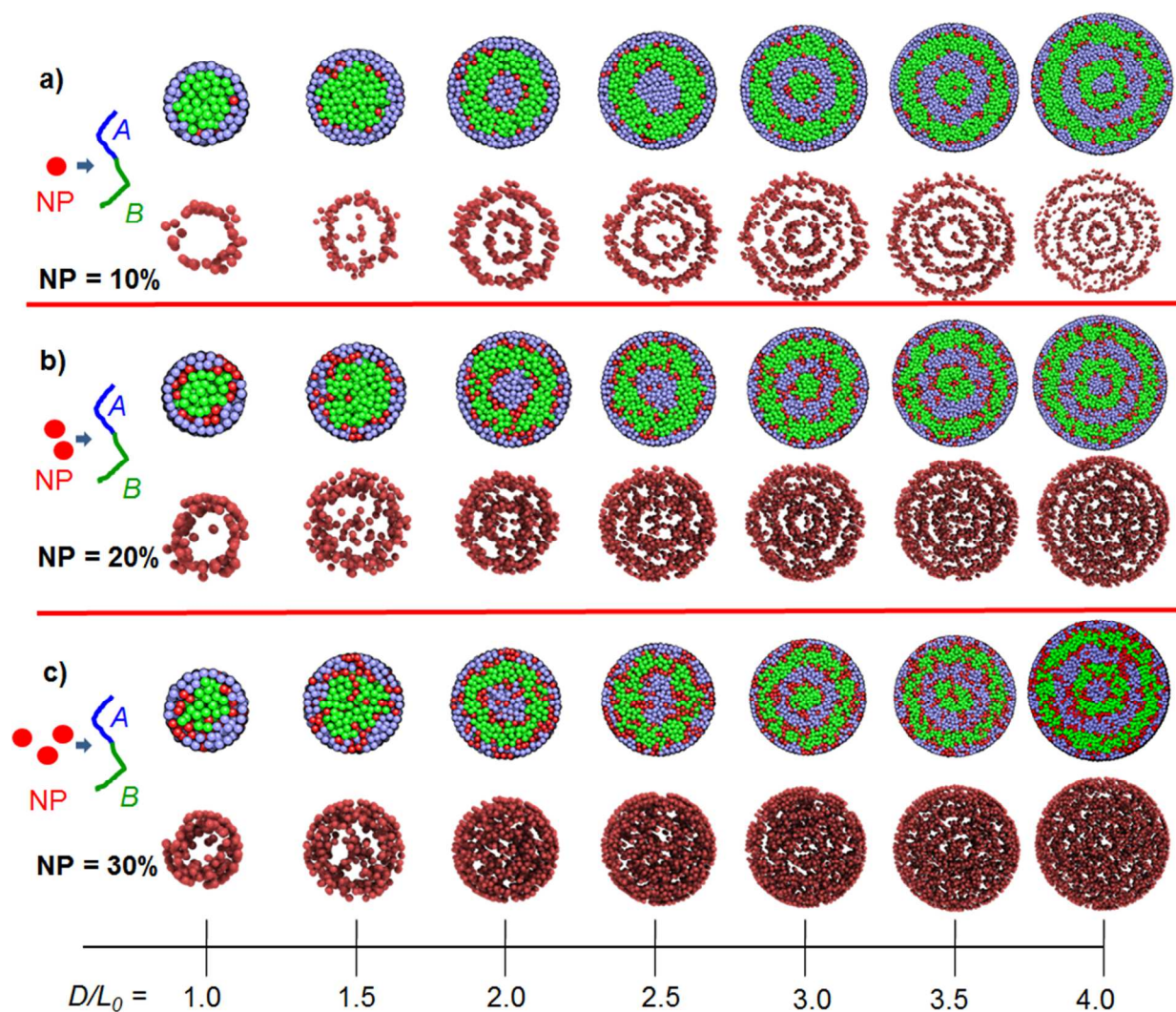
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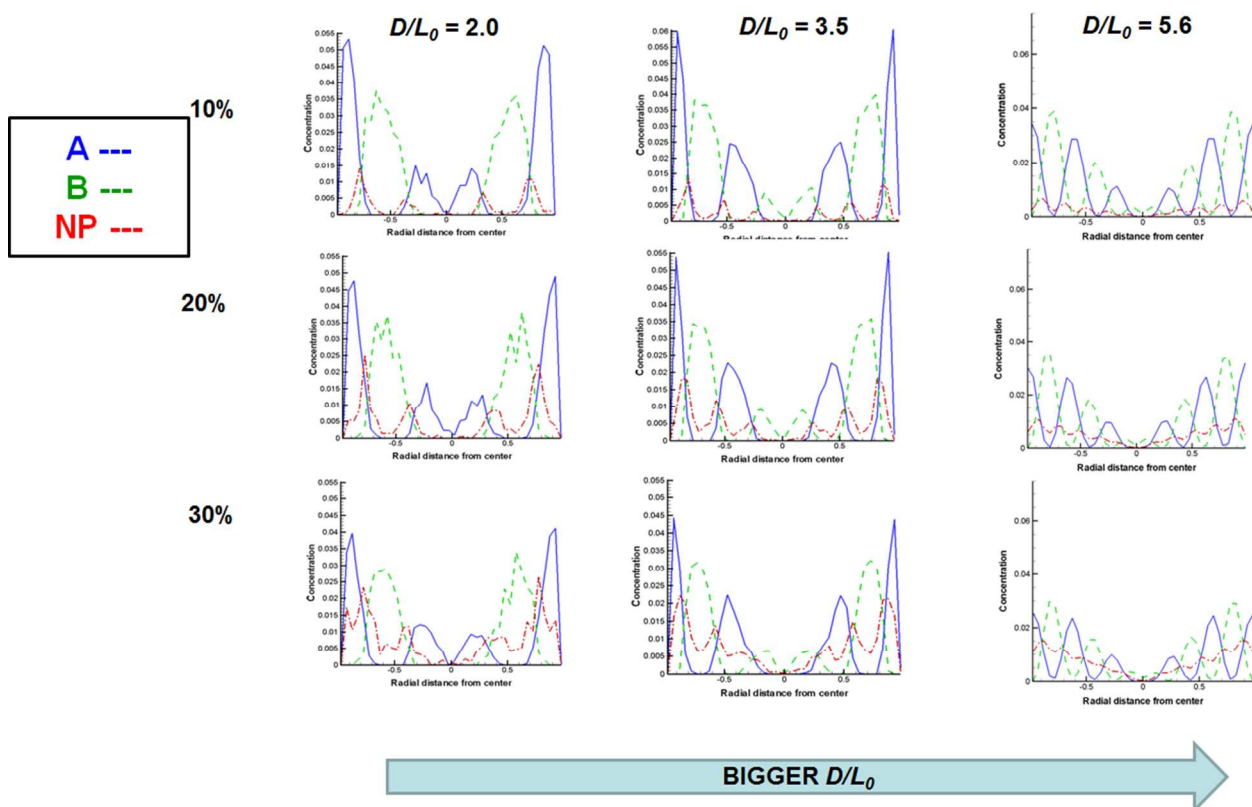
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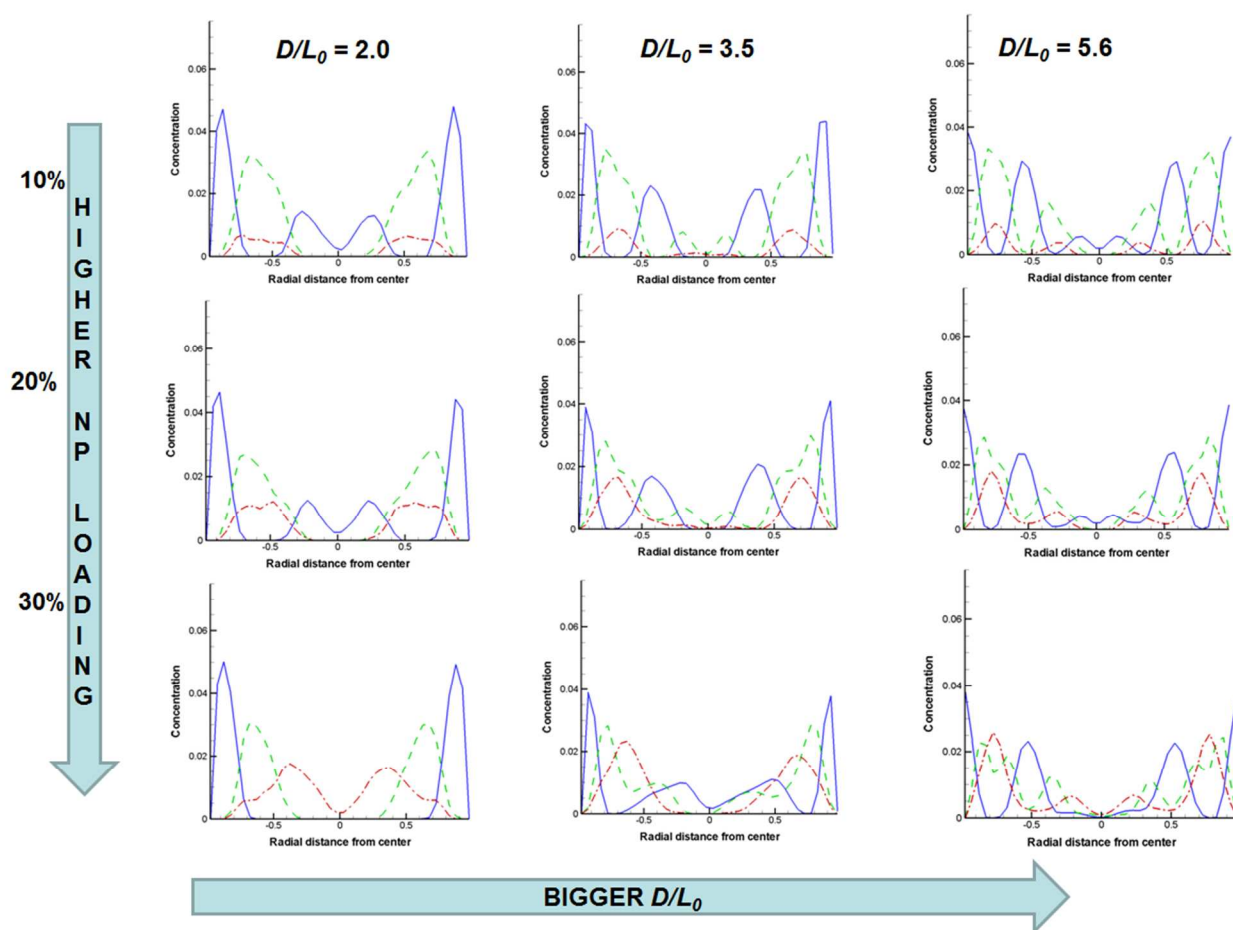
S1. The snapshots of symmetrical BCP confined in a different range of D/L_0 are shown in a). In b), the three dimensional structure at $D/L_0 = 0.5$ is shown, and c) shows the axial cross-sections of b).



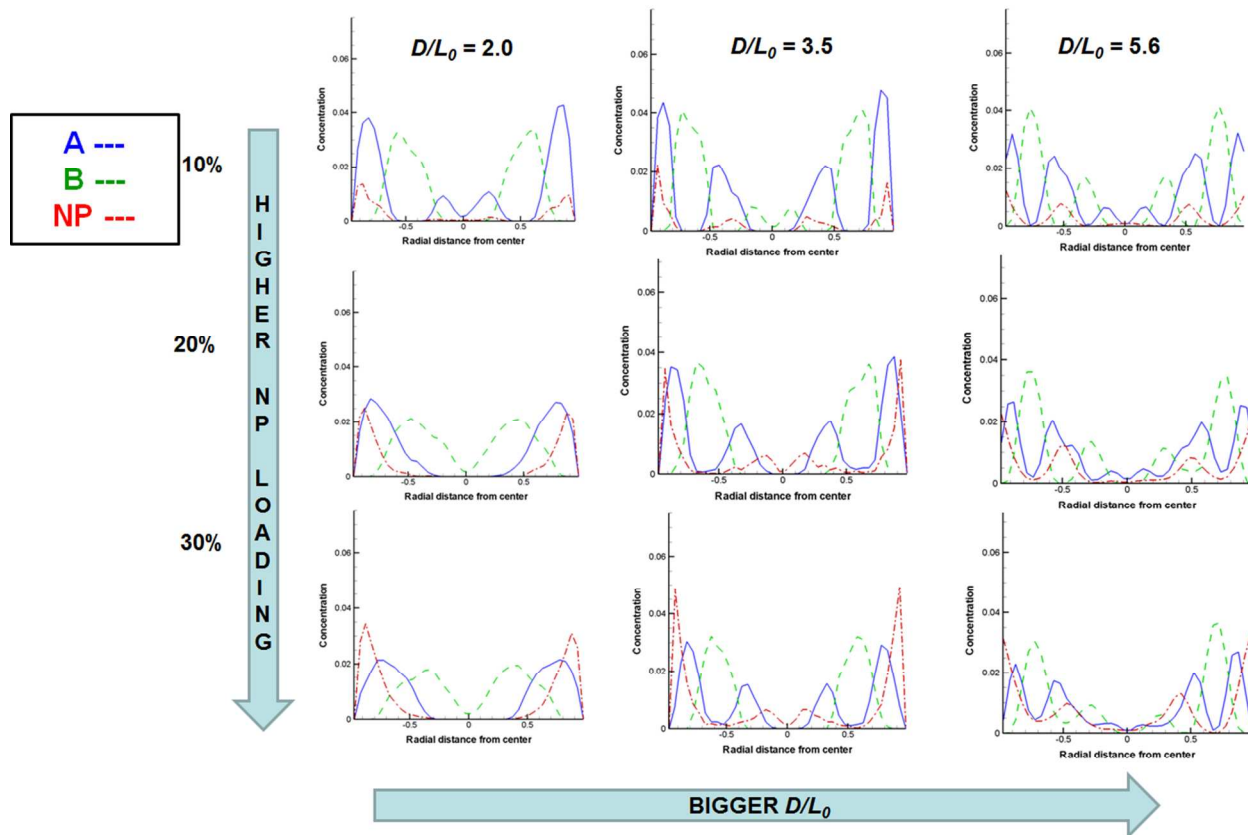
S2. Snapshots of simulation results with the inclusion of neutral NPs into symmetric BCP with concentration of a) 10%, b) 20%, and c) 30% are shown in a wide range of D/L_0 . The top rows show the full morphology seen from the top, while the bottom shows same view for NPs only.



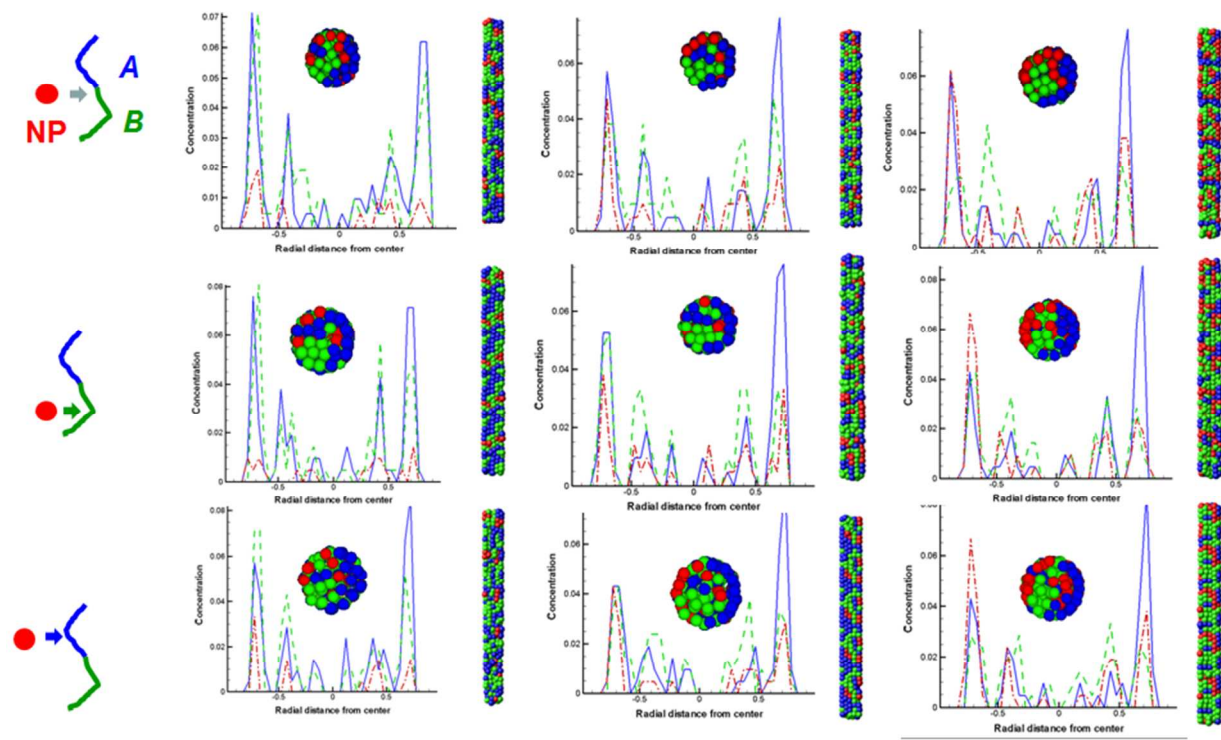
S3. Concentration Profiles of Neutral NPs in Cylindrically Confined BCP.



S4. Concentration Profiles of *B*-Attractive NPs in Cylindrically Confined BCP.



S5. Concentration Profiles of A-Attractive NPs in Cylindrically Confined BCP.



S6. Concentration Profiles of Neutral, *B*- Attractive, and *A*- Attractive NPs with $D/L_0=0.5$.

Coaxial



$Z=12.72$



$Z=9.54$

S7. Effect of the box-size on self-assembly. When $Z=9.54$, the system shows the most stable stacked disk morphology.