Dynamic modelling of multi-phase latex particle morphology

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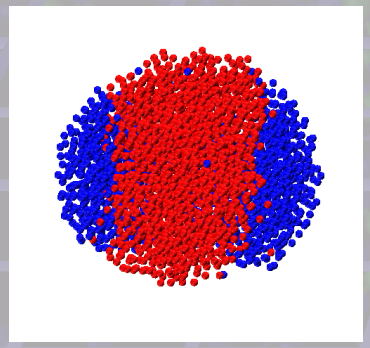
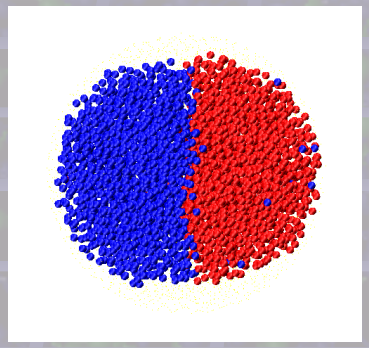
Objective: Developing novel, computationally feasible, dynamic models for prediction of equilibrium morphologies as well as the process of developing morphologies based on the experimental observations

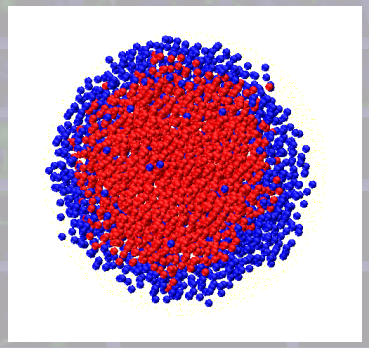
Applications: multiphase waterborne systems (e.g. polymer-polymer (alkyd-acyllic, polyurethane-acrylic, etc) , polymer-polymer-inorganic hybrids (silica, clay, etc)).

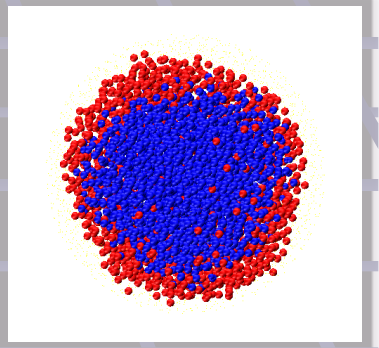
Morphologies of two-phase polymer observed experimentally and reproduced computationally

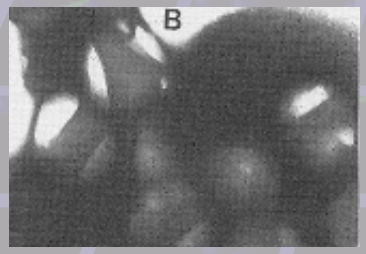
Sandwich	Hemi-spheres	Core-shell	Inverted core-shell

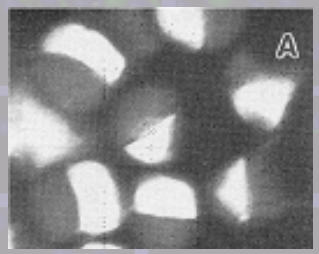


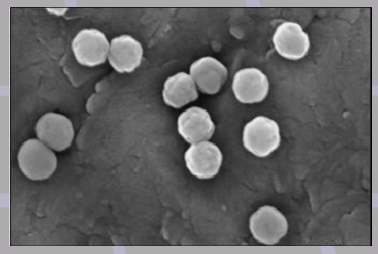












Yi-Cherng Chen, et al., Pure&App/. Chem.,64 (1992), No. 11, 1691-1696

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