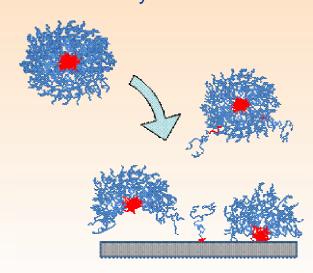
Structural and Frictional Interactions between Microphase Segregated, Multicomponent Polymer Brushes

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Understanding Self-Assembly at the Solid-Fluid Interface: Multicomponent polymeric systems that spontaneously organize, producing useful building-block structures or conferring enhanced function, are of interest for a variety of advanced technologies. In this research we are investigating the links between macromolecular design, specifically polymer architecture and composition, and self-assembled structure and dynamics in solution and at solid-fluid interfaces. Our research has revealed the importance of surface relaxation and reorganization processes and provided a quantitative basis for sorting out how different copolymer designs influence self-assembled structure and dynamics.



Self-assembly is influenced by exchange of single chains from micelles as well as surface reorganizations as the micellar ensembles unpack at the interface.

