

Modeling protein interactions with polymer coatings

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In this talk, I will give an overview of our recent efforts to model and understand the dominating driving forces in protein adsorption to polymer coatings.

Particular focus will be given to coarse-grained computer simulation results on charged protein-polyelectrolyte brush interactions as well as statistical mechanics approaches to the equilibrium and kinetic adsorption of multi-component protein systems to core-shell microgels.