

Abstract

In this work, I have studied the statistical properties of polymer in passive and active scenarios. For an ideal chain, I have reviewed the results for a freely jointed chain. For such chain, I have also performed numerical simulations using Langevin Dynamics. There I have Incorporated bending energy and simulated a worm like chain. For such a chain, the introduction of an active propulsion force on each monomer unit, re-normalises the stiffness of the chain which i investigated by looking at distribution of end-to-end distance.