

Supplemental material to the article “Fractal globule as a molecular machine”

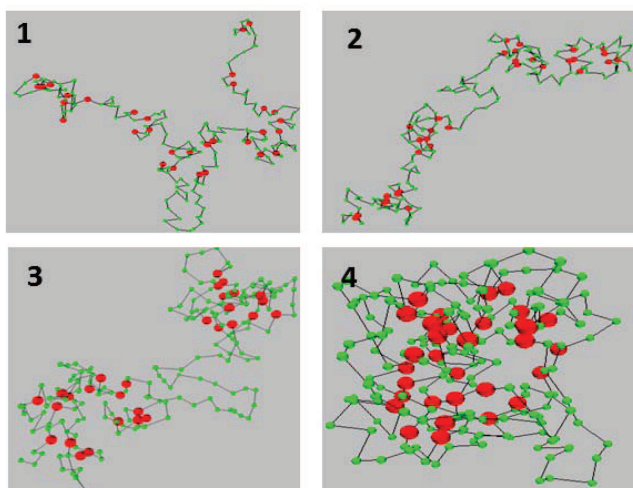


Fig. S1. Hierarchical collapse of a polymeric chain. Stages 1-4 show sequential formation of a fractal globule which smaller clusters of representative nodes (marked in red) are hierarchically imbedded in to the larger ones.

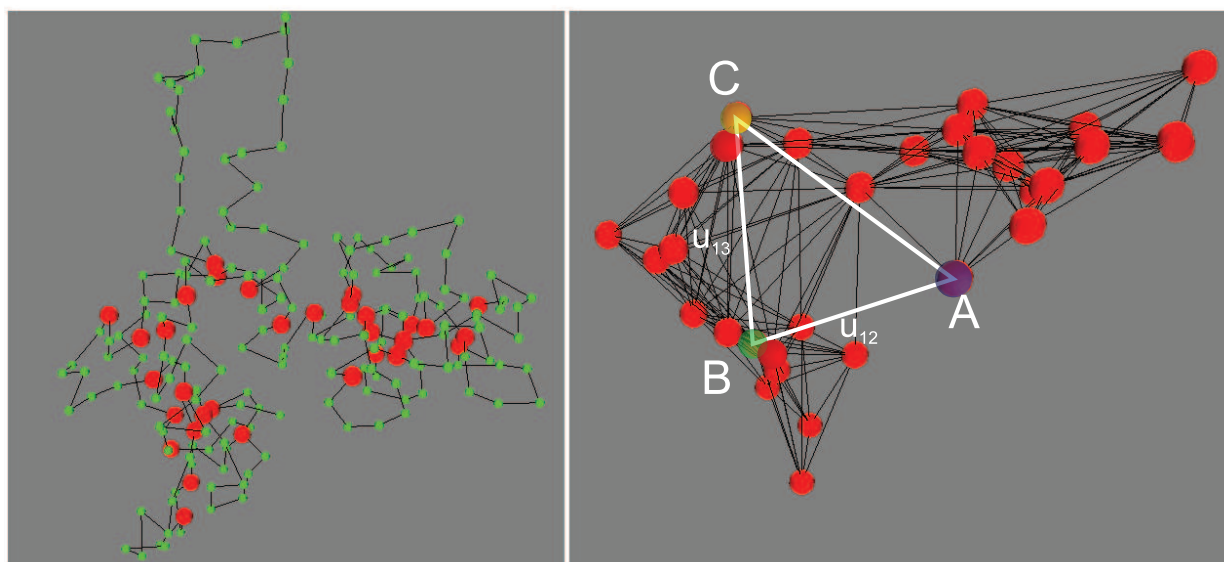


Fig. S2. (a) Typical structure obtained under the hierarchical collapse of a polymeric chain and (b) its elastic network constructed over the representative nodes of the chain. The nodes marked in blue, yellow, and green highlight a triangle specified for 3-d representation of dynamical trajectories with respect to two slowest relaxation modes $u_{1,2}$, $u_{2,3}$.