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Thermal Rupture Of Linear Polymer Chains Under Tensile Stress[1] ABHIJIT GHOSH, WON BO LEE, Dept. of Chemical & Biomolecular Engineering, Sogang University — The thermal rupture of a linear alternating copolymer fixed at one end and pulled by a constant force at the other end has been studied using molecular dynamics simulation. The dependence of the first breakage time distribution on the mass ratio of the constituent beads has been studied. The Arrhenian nature of the scission process has been confirmed and an estimate of the effective energy barrier has been made.

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