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Flow of Polymer Solutions in Nansocale Slit Pores JAIME A. MIL-LAN, MOHAMED LARADJI, Physics Dept., University of Memphis, YONGMEI WANG, Chemistry Dept., University of Memphis — We present results from extensive and systematic molecular dynamics simulations of semi-dilute and cocentrated polymer solutions in nanoscale slit pores. We will particularly report on the effects of the polymer concentration, molecular weight and flow rate on the profiles of the velocity field, polymer concentration, and radii of gyration of the polymer chains across the slit.

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