Sedimentation of Polyelectrolyte Chains in Aqueous Solutions

Zhenli Luo[†] and Guangzhao Zhang*[,†,‡,]

[†]*Hefei National Laboratory for Physical Sciences at Microscale, Department of Chemical Physics, University of Science and Technology of China, Hefei, P. R. China 230026*
[‡]*Faculty of Materials Science and Engineering, South China University of Technology, Guangzhou, P. R. China 510640*
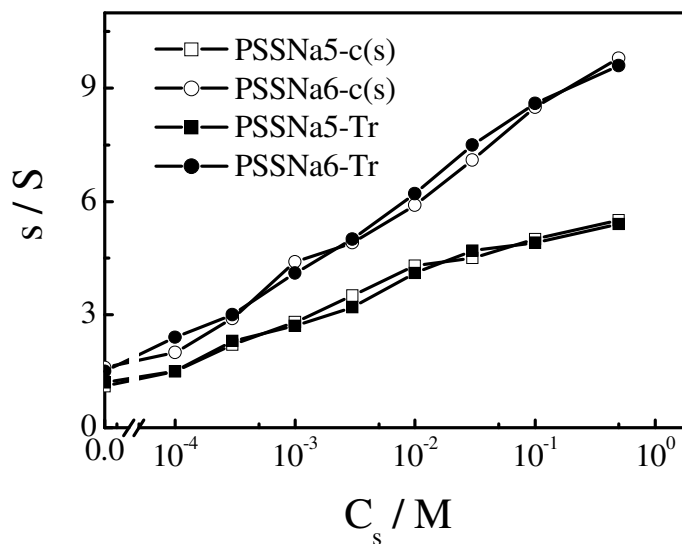
Supporting Information

Figure 1s. Sedimentation coefficients of PSSNa5 and PSSNa6 in aqueous solutions by c(s) model and Transport model. The PSSNa concentration is 0.10 mg/mL. It shows that the sedimentation coefficients determined by two models are identical.
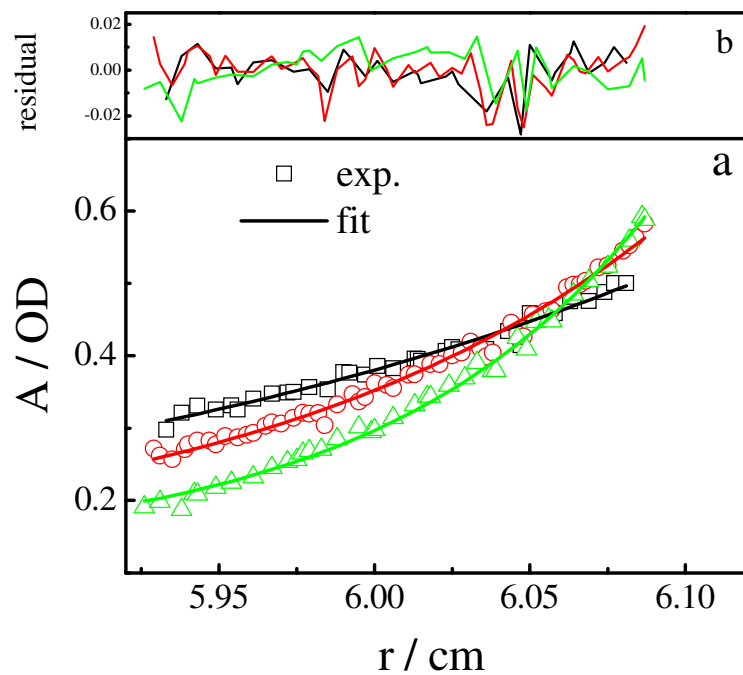
Figure 2s. Sedimentation equilibrium (SE) analysis of PSSNa3 at 12000 rpm (□), 16000 rpm (○) and 20000 rpm (△). PSSNa3 concentration (C_p) and NaCl concentration (C_s) are 0.20 mg/mL and 0.10 M, respectively. (a) The collected data (discrete points) and fit data (solid line); (b) Fit residual.
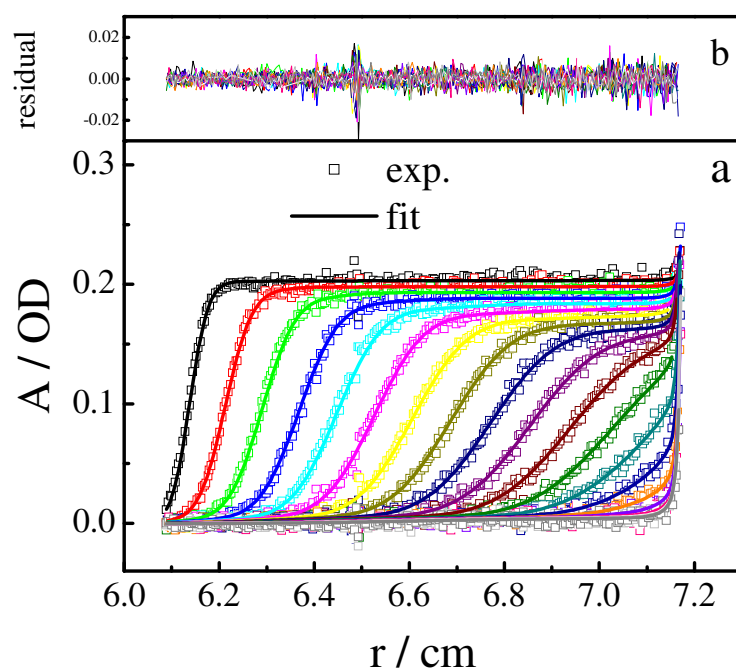
Figure 3s. Sedimentation velocity (SV) analysis of PSSNa3 (every 5th scan loaded). Data were recorded at 260 nm. PSSNa3 concentration and NaCl concentration are 0.10 mg/mL and 0.10 M, respectively. (a) The collected data (discrete points) and fit data (solid line); (b) Fit residual.
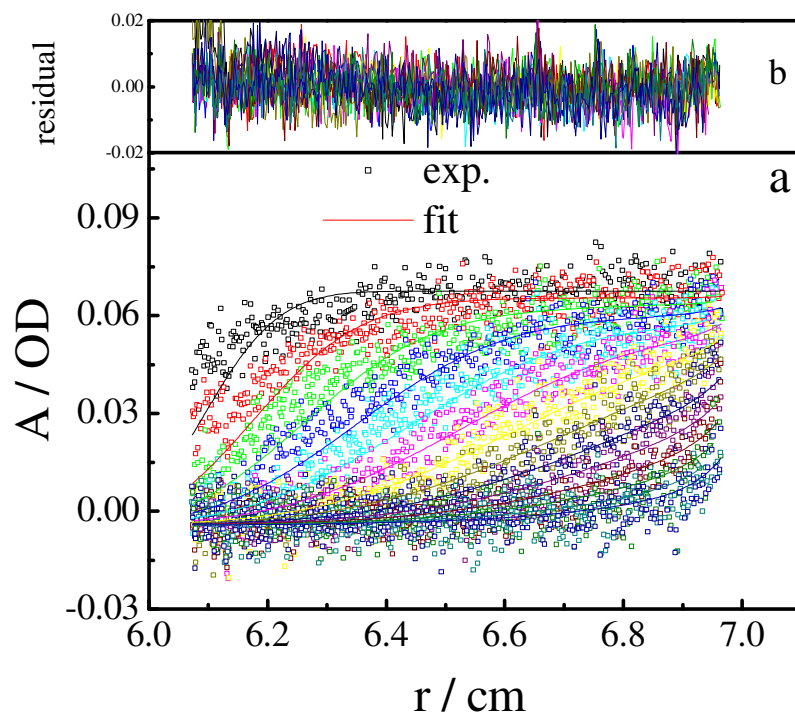
Figure 4s. Sedimentation velocity (SV) analysis of PSSNa3 in water (every 6th scan loaded). Data were recorded at 225 nm. PSSNa3 concentration is 0.0015 mg/mL. (a) The collected data (discrete points) and fit data (solid line); (b) Fit residual.
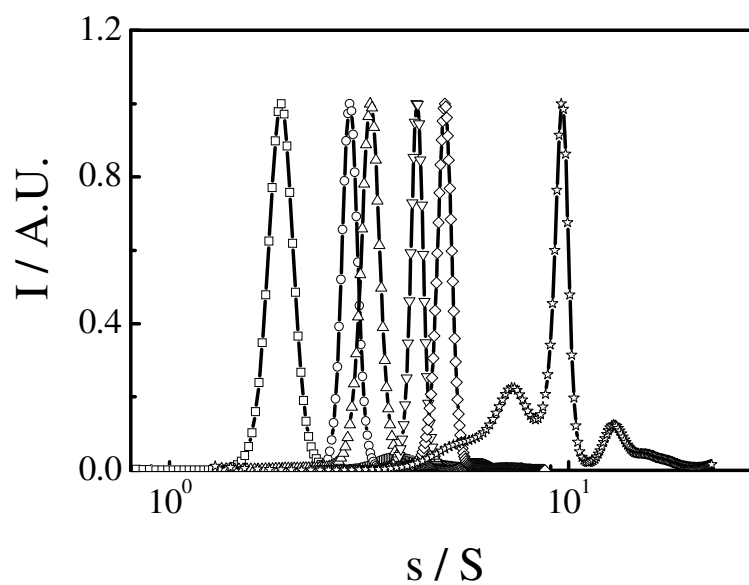
Figure 5s. Sedimentation coefficient (*s*) distributions of PSSNa1 to PSSNa6 (from left to right). PSSNa concentration (C_p) and NaCl concentration (C_s) are 0.10 mg/mL and 0.10 M, respectively.