Electronic Supplementary Material (ESI) for Soft Matter.

Supplemental Information

In situ polymer flocculation and growth in Taylor-Couette flows

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Table of Contents

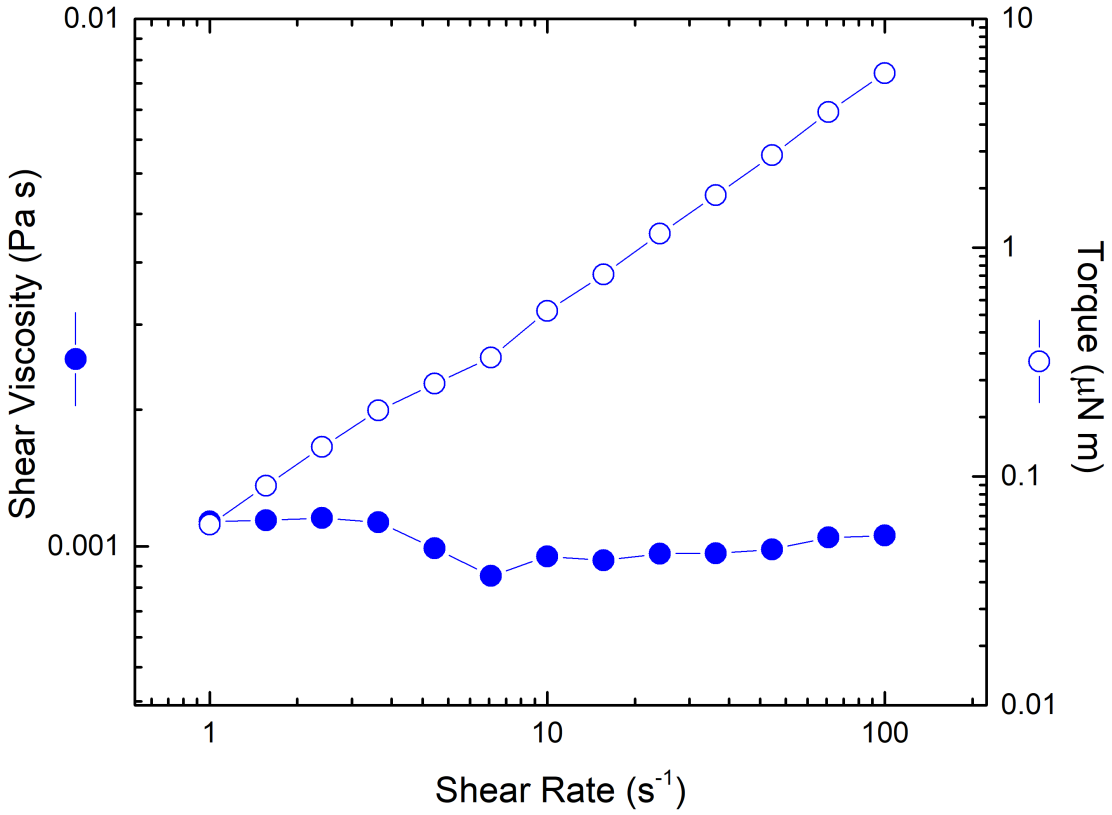

Figure S1: Steady shear viscosity and torque responsetraces of 30 mg/L bentonite in distilled water from shear rates of 1 s^{-1} to 100 s^{-1}. The temperature was kept constant at 25ºC. The experiment was performed using a cup and bob geometry to mimic the TC cell geometry.

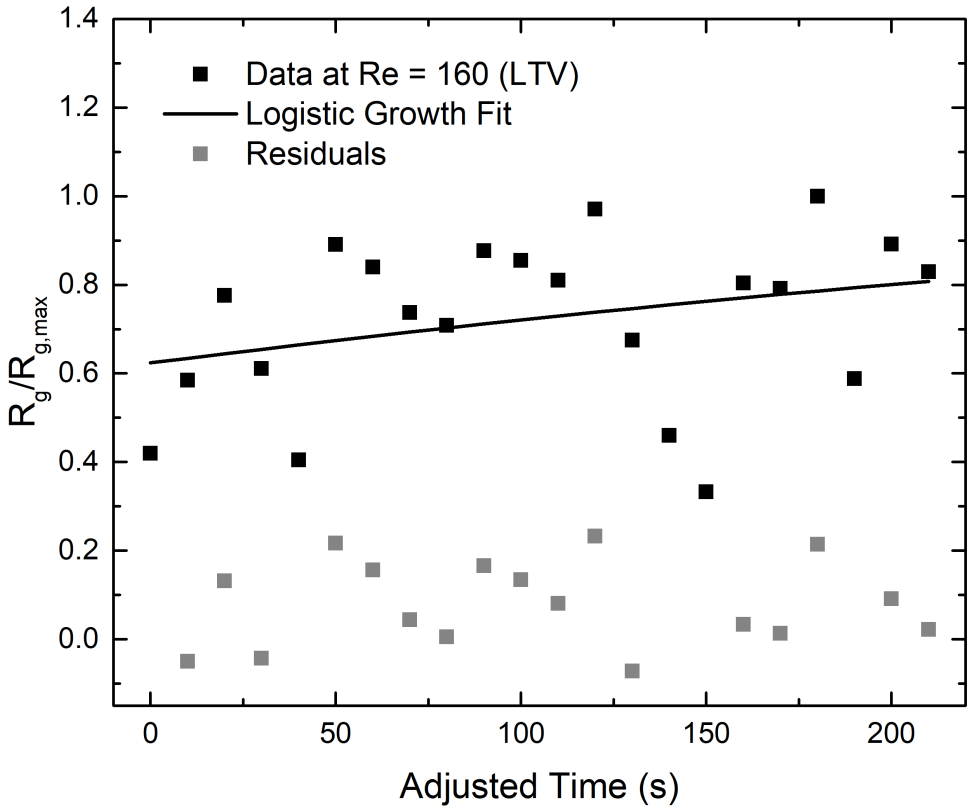

Figure S1: Logistic growth fit to floc size data at inner cylinder speed of 0.04 Hz (Re = 160, LTV) over time. The black data points represent the R_g data points collected during the experiment normalized by the maximum value of R_g in the fitting range. The black line indicates the fit. The gray data points are the residuals of the fit, which is the data point calculated by the logistic growth model subtracted from the original data at the corresponding time point.

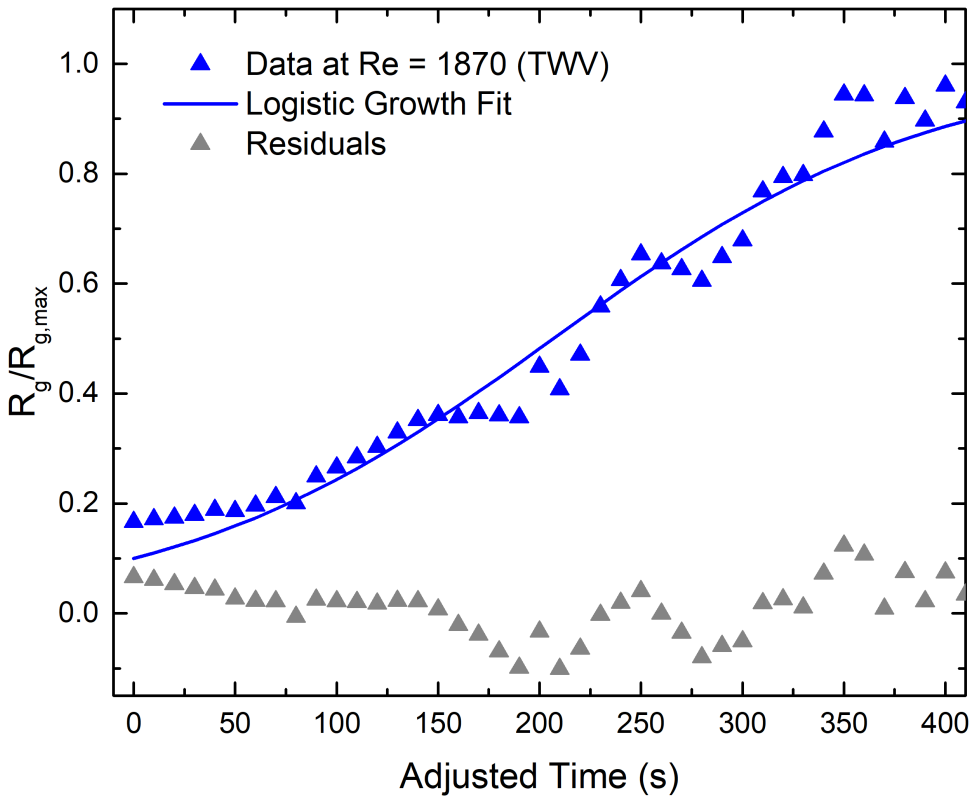

Figure S2: Logistic growth fit to floc size data at inner cylinder speed of 0.50 Hz (Re = 1870, TWV) over time. The blue data points represent the R_g data points collected during the experiment normalized by the maximum value of R_g in the fitting range. The blue line indicates the fit. The gray data points are the residuals of the fit, which is the data point calculated by the logistic growth model subtracted from the original data at the corresponding time point.

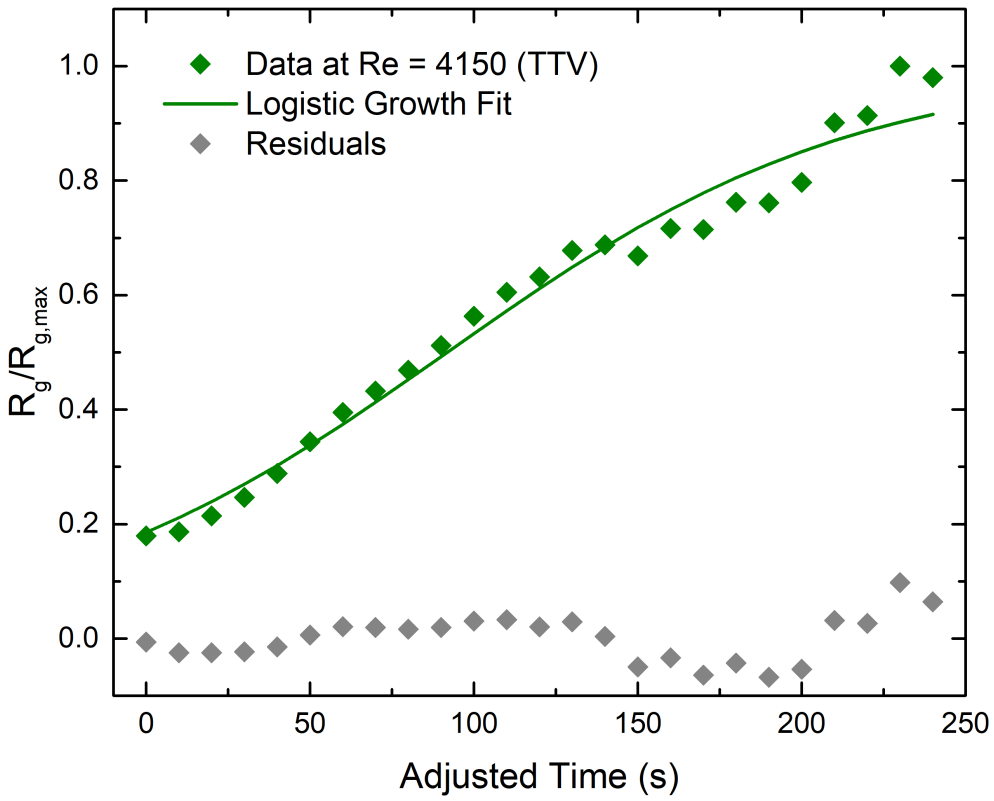

Figure S3: Logistic growth fit to floc size data at inner cylinder speed of 1.10 Hz (Re = 4150, TTV) over time. The green data points represent the R_g data points collected during the experiment normalized by the maximum value of R_g in the fitting range. The green line indicates the fit. The gray data points are the residuals of the fit, which is the data point calculated by the logistic growth model subtracted from the original data at the corresponding time point.

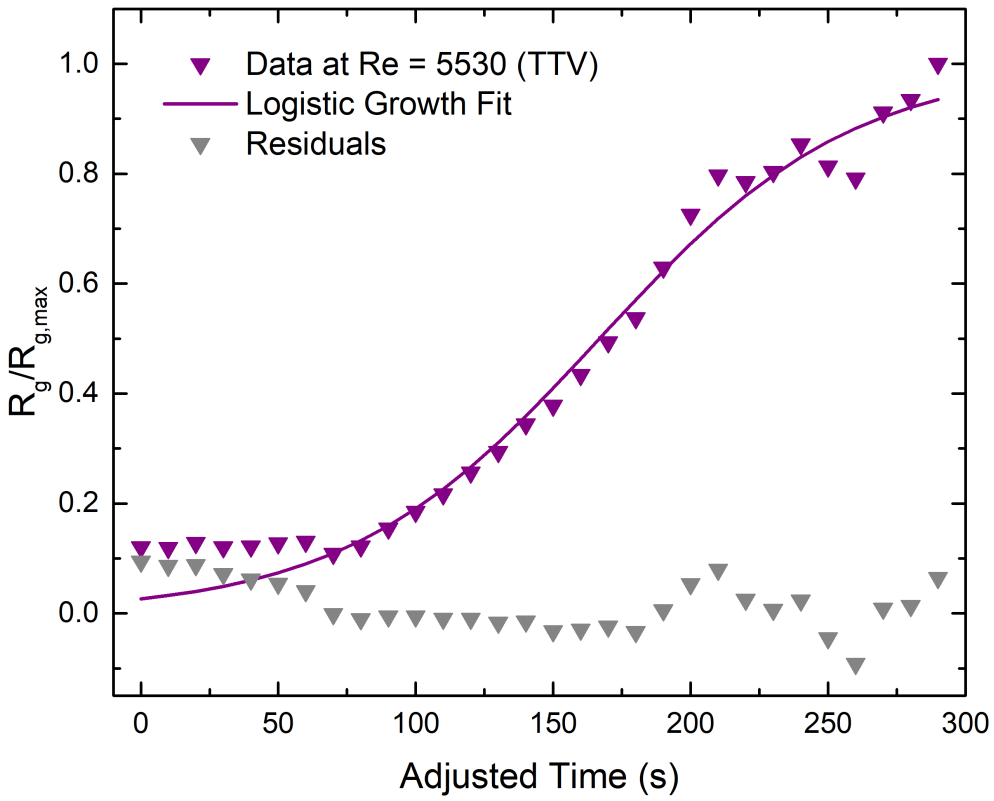

Figure S4: Logistic growth fit to floc size data at inner cylinder speed of 1.10 Hz (Re = 5530, TTV) over time. The purple data points represent the R_g data points collected during the experiment normalized by the maximum value of R_g in the fitting range. The purple line indicates the fit. The gray data points are the residuals of the fit, which is the data point calculated by the logistic growth model subtracted from the original data at the corresponding time point.