

Supplementary material:

This file serves as supplementary material for “A flow visualization and superposition rheology study of shear-banding wormlike micelle solutions” by H. Mohammadigoushki and S.J. Muller.

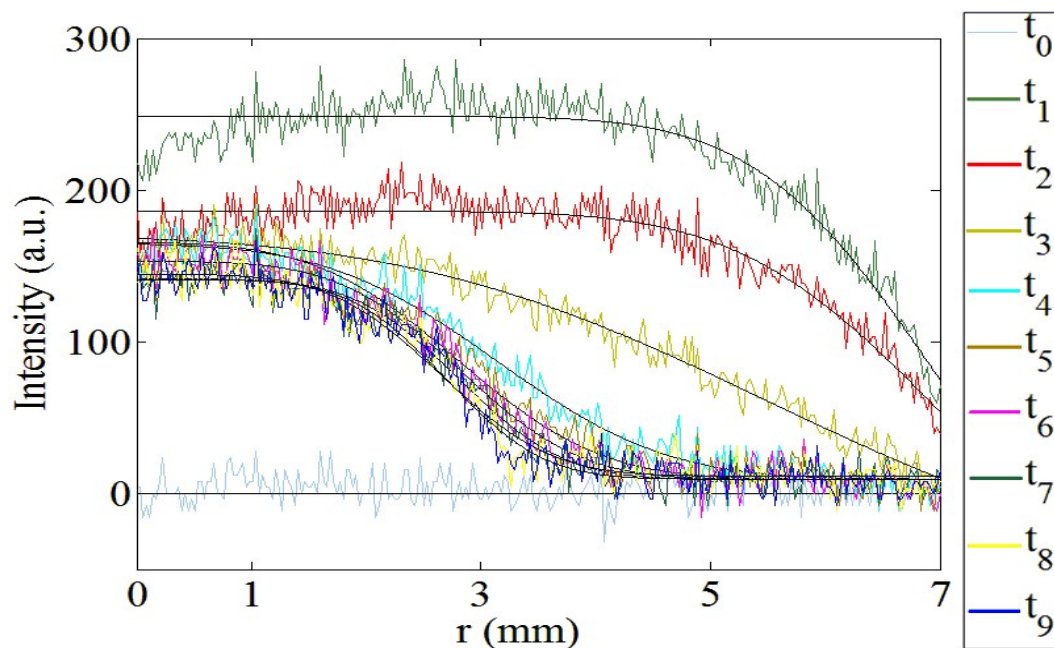


Fig S.1. Intensity variation versus radial position at several time points after start up of steady shear. Times t_0 to t_9 correspond to 0 s, 0.1s, 2 s, 3 s, 5s, 7.5s, 9s, 15s, 20s, and 25s. Lines show

best fitted curve with $y = \frac{a}{b + \exp\left(\frac{-(r - r_i)}{w}\right)}$. Where, r_i is the location of inflection point and w represents the thickness of boundary between dark and bright phases.

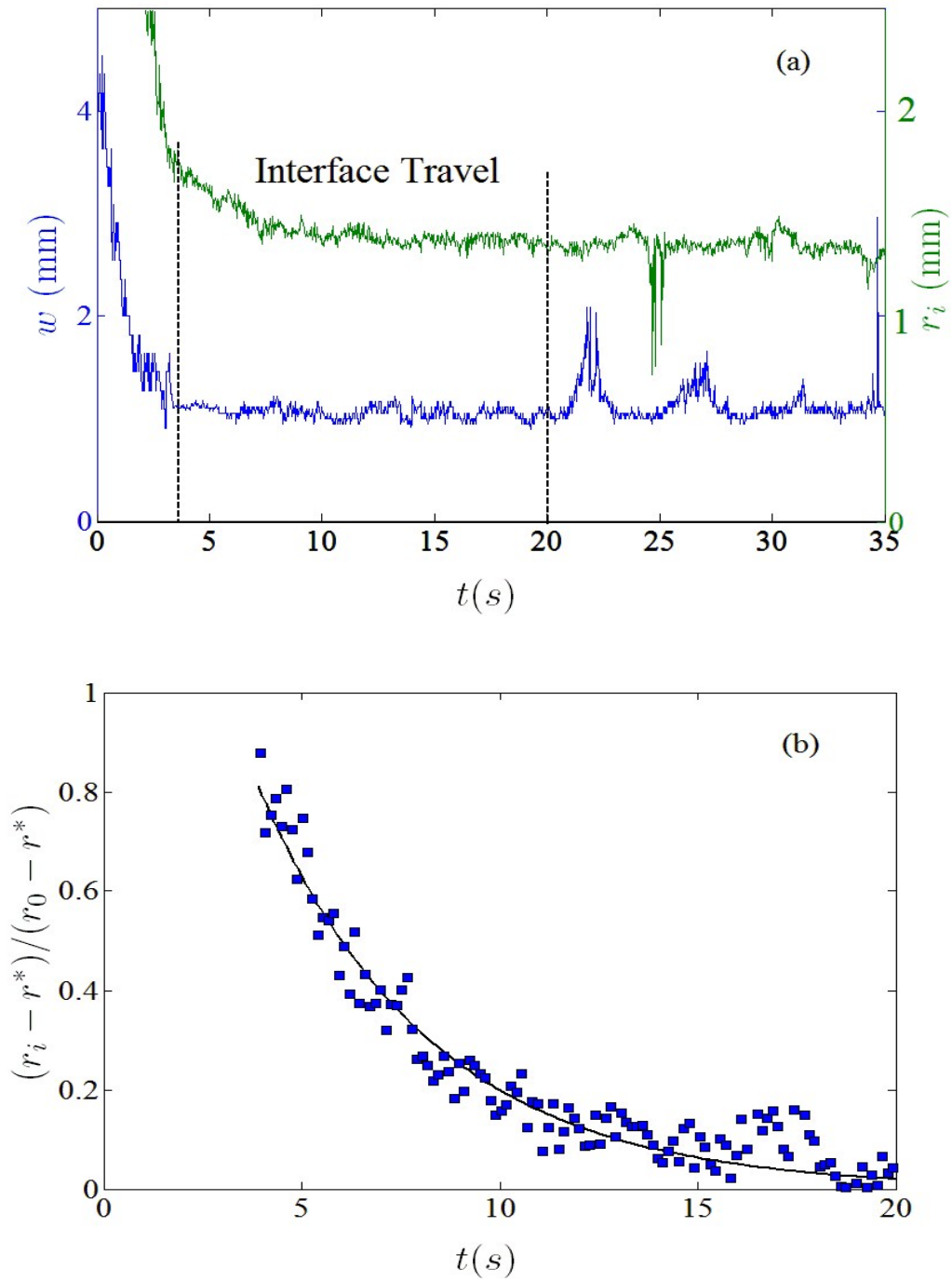


Fig S.2. (a) Radial position of the interface on the left and thickness of the interface on the right axis over time. (b) Radial position of the interface during the interface travel stage over time for $T = 25$ C, $Wi = 3.1$.

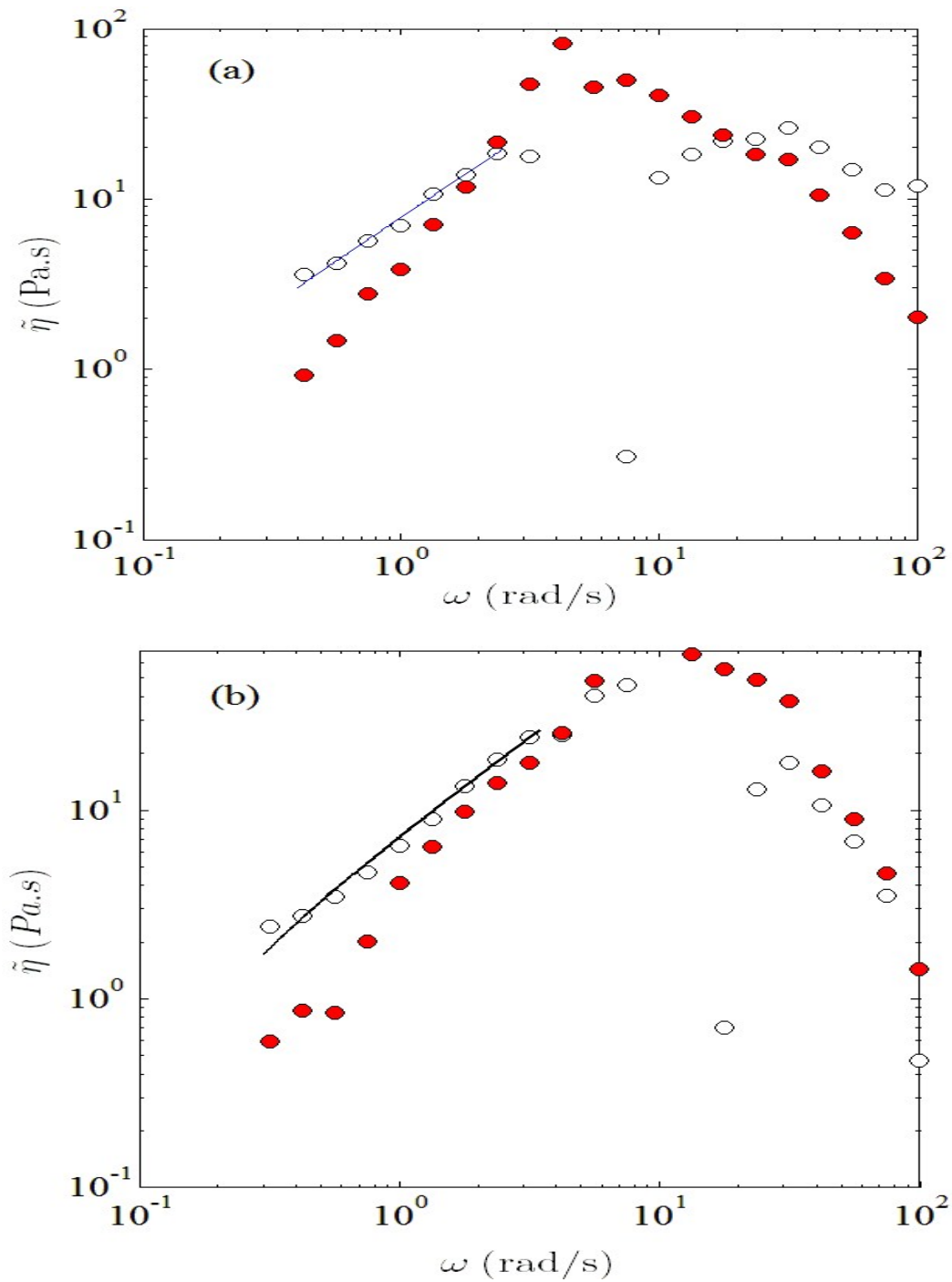


Fig S.3. Superposition rheology for CTAB-NaNO₃ at different conditions. Imaginary $\tilde{\eta}''$ (○), and real viscosity $\tilde{\eta}'$ (●) versus frequency on log-log coordinate. (a) - $d = 1.25$ mm, $T = 25$ C, and (b) - $d = 0.5$ mm, $T = 30$ C.

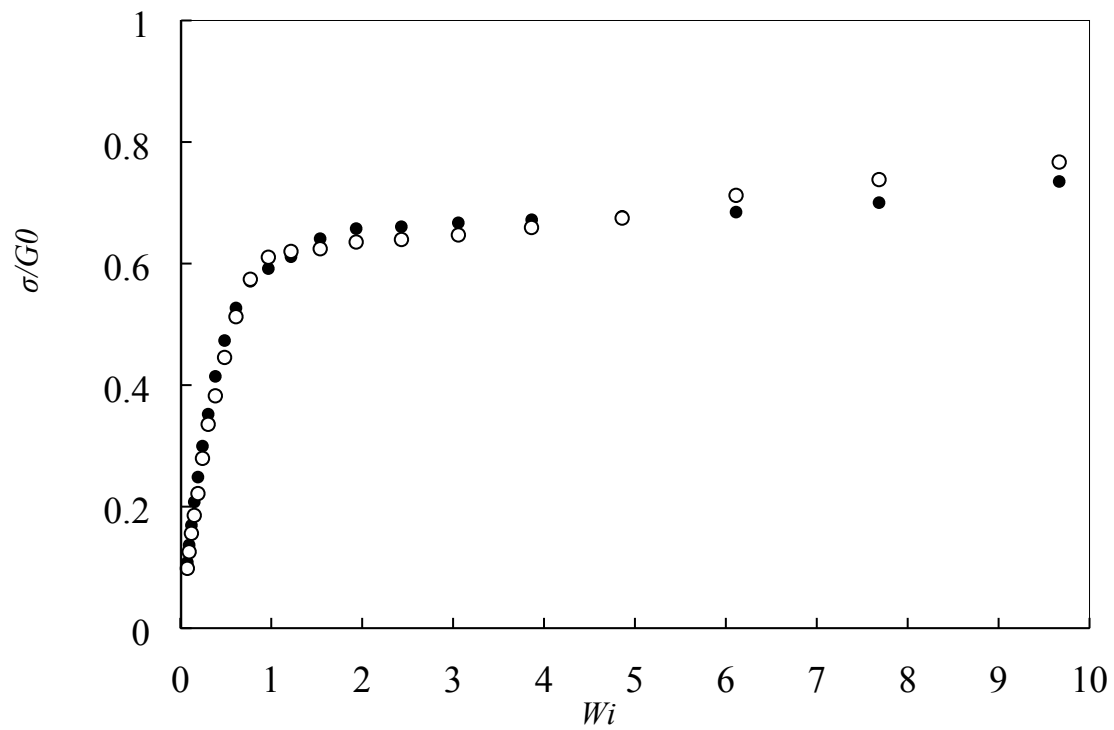


Fig S.4. Shear stress versus Weissenberg number for CPCI-NaSal. (●)- $d = 0.5$ mm, (○)- $d = 1.25$ mm.