

SUPPLEMENTARY INFORMATION

Purely elastic flow instabilities in microscale cross-slot devices

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Four movies are included as supplementary information, illustrating the types of flow regimes observed experimentally:

Video S1. Movie of the steady symmetric flow – the test fluid is distilled water flowing at a Reynolds number $Re = 5.5$. The channel aspect ratio is $AR = 1.0$. File name: S1_SymmetricFlow.avi

Video S2. Movie of the steady symmetric flow – the test fluid is an aqueous solution of 190 ppm of PAA and 80 wt. % of glycerol flowing at a Weissenberg number, $Wi = 0.13$, and a Reynolds number, $Re = 3.2 \times 10^{-6}$. The channel aspect ratio is $AR = 1.0$. File name: S2_SymmetricFlow.avi

Video S3. Movie of the steady asymmetric flow – the test fluid is an aqueous solution of 200 ppm of PAA and 70 wt. % of glycerol flowing at a Weissenberg number, $Wi = 7.2$, and a Reynolds number, $Re = 7.7 \times 10^{-4}$. The channel aspect ratio is $AR = 1.0$. File name: S3_SteadyAsymmetricFlow.avi

Video S4. Movie of the time-dependent flow – the test fluid is an aqueous solution of 300 ppm of PAA and 50 wt. % of glycerol flowing at a Weissenberg number, $Wi = 44.6$, and a Reynolds number, $Re = 8.3 \times 10^{-2}$. The channel aspect ratio is $AR = 1.6$. File name: S4_TimeDependentFlow.avi