**Supplementary Information for *Acta Phys. -Chim. Sin.* 2016**, *32* (1), 365–372
doi: 10.3866/PKU.WHXB201511102

# 部分水解聚丙烯酰胺与蠕虫状胶束在微米级毛细管中的驱替粘度

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# *In-situ* Viscosity of Hydrolyzed Polyacrylamides and Surfactant Worm-Like Micelle Solutions in Microscale Capillaries

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## 1. Experimental results of surface and interface tensions

The molecular weight of commercial HPAM samples and the surface and interface tensions of HPAM solutions in 1000 mg·L$^{-1}$ at 25 ℃ were given in Table S1.

**Table S1 Surface and interface tensions of HPAM solutions at 25 ℃**

| | $\gamma$ (mN·m$^{-1}$) | $\gamma_{12}$ (mN·m$^{-1}$) | MW/Da |
|---|---|---|---|
| FP3130S (1000 mg·L$^{-1}$) | 70.7 | 45.8 | $2\times10^6$ |
| FP3330S (1000 mg·L$^{-1}$) | 71.3 | 45.5 | $8\times10^6$ |
| ST5030 (1000 mg·L$^{-1}$) | 50.8 | 30.1 | $(18\text{-}20)\times10^6$ |

MW: molecular weight

## 2. Displacement results between HPAM solutions and gas in capillary with different radii

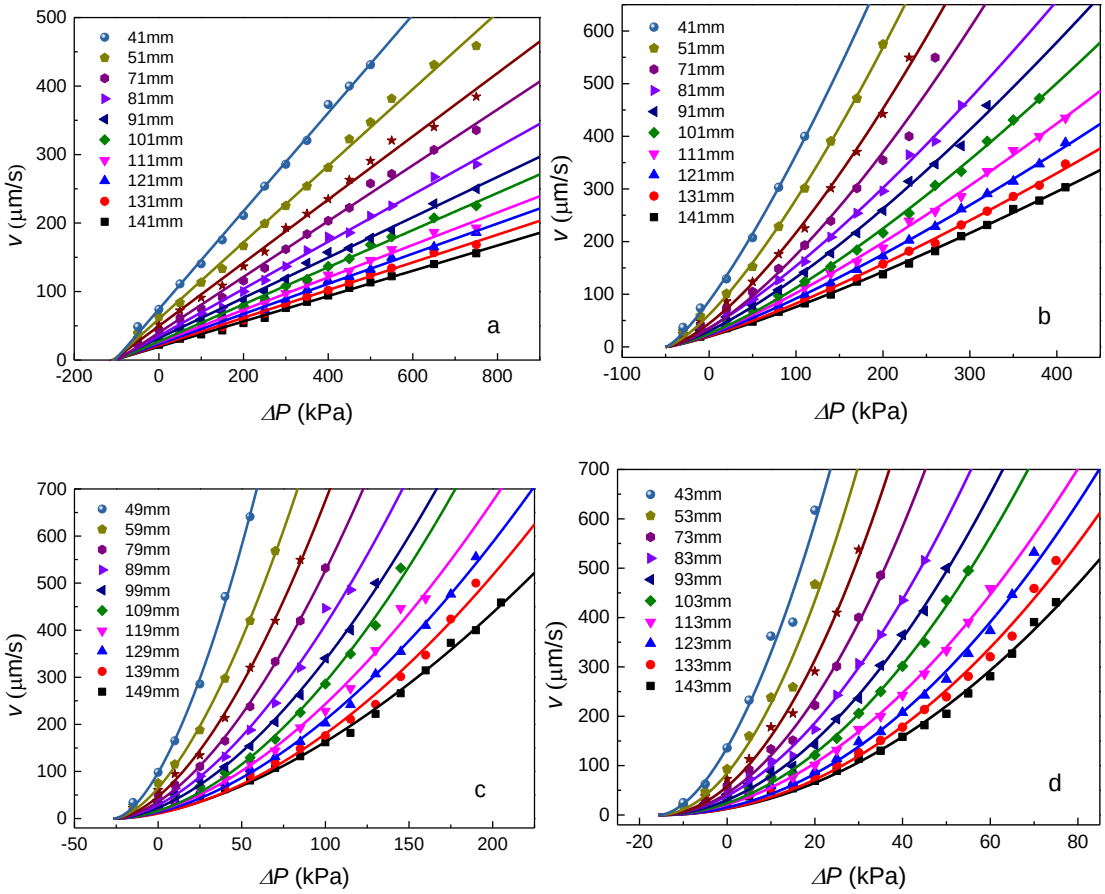


**Fig.S1 Displacement rate of FP3330S solution at 1000 mg Ł$^{-1}$with a range of length under different external pressure in capillaries with radii of (a) 1.13, (b) 2.88, (c) 5.38, (d) 9.18 μm**

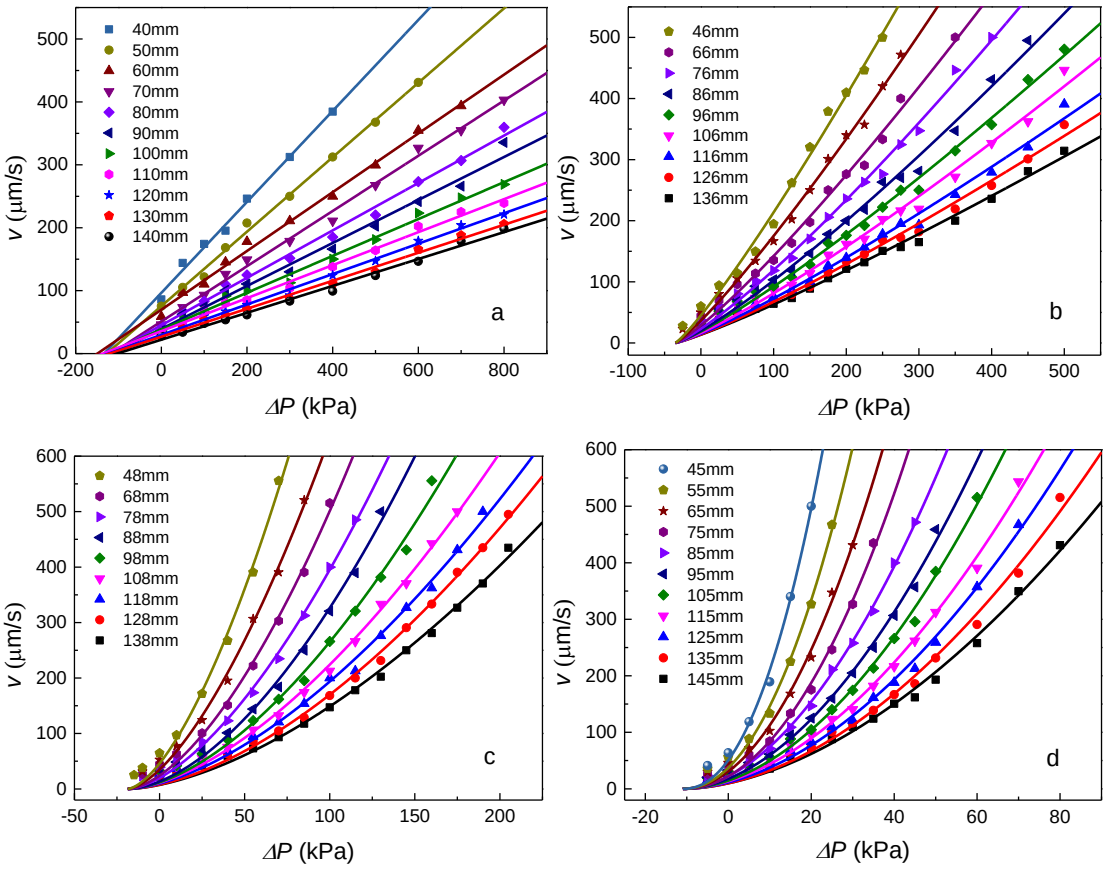


**Fig.S2 Displacement rate of ST5030 solution at 1000 mg L$^{-1}$with a range of length under different external pressure in capillaries with radii of (a) 1.13, (b) 2.88, (c) 5.38, (d) 9.18 μm**