CORRECTIONS

Kenji Urayama,* Yuko Okuno, and Shinzo Kohjiya: Volume Transition of Liquid Crystalline Gels in Isotropic Solvents. Volume 36, Number 16, August 12, 2003, pp 6229−6234.

Equations 4, 8, and 10 should have appeared as

$$\frac{f_{el}}{k_B T} = \frac{3}{2n}\left\{\left[\frac{\phi}{(1+2S)(1-S)^2}\right]^{1/3} + \frac{\phi}{3}\ln(1+2S)(1-S)^2 - \phi\right\} \quad (4)$$

$$\eta = n_m \nu \phi_m S - \frac{3n_m S}{n\phi_m(1+2S)(1-S)}\left\{\left[\frac{\phi}{(1+2S)(1-S)^2}\right]^{1/3} - \phi\right\} \quad (8)$$

$$\frac{1}{n}\left[\frac{\phi}{(1+2S)(1-S)^2}\right]^{1/3} + \ln(1-\phi) + \phi + \chi\phi^2 + \frac{1}{2}\nu S^2 \phi_m{}^2 = 0 \quad (10)$$

The factor ϕ in the second term on the right in eq 4 was missing in the original paper, which affects eqs 8 and 10. The third term ($-\phi$) in eq 4 is formally added in order that f_{el} vanishes in the reference state ($\phi = 1$ and $S = 0$). The presence of the third term has no influence in the theoretical results. Figure 6 comparing experimental data with predictions of the theory is not noticeably affected by the correction provided that the n_m, χ/ν, and p values are suitably rescaled. Hence, the qualitative predictions and conclusions given in the original paper remain unchanged. Figure 6 and the figure legend should appear as shown below.

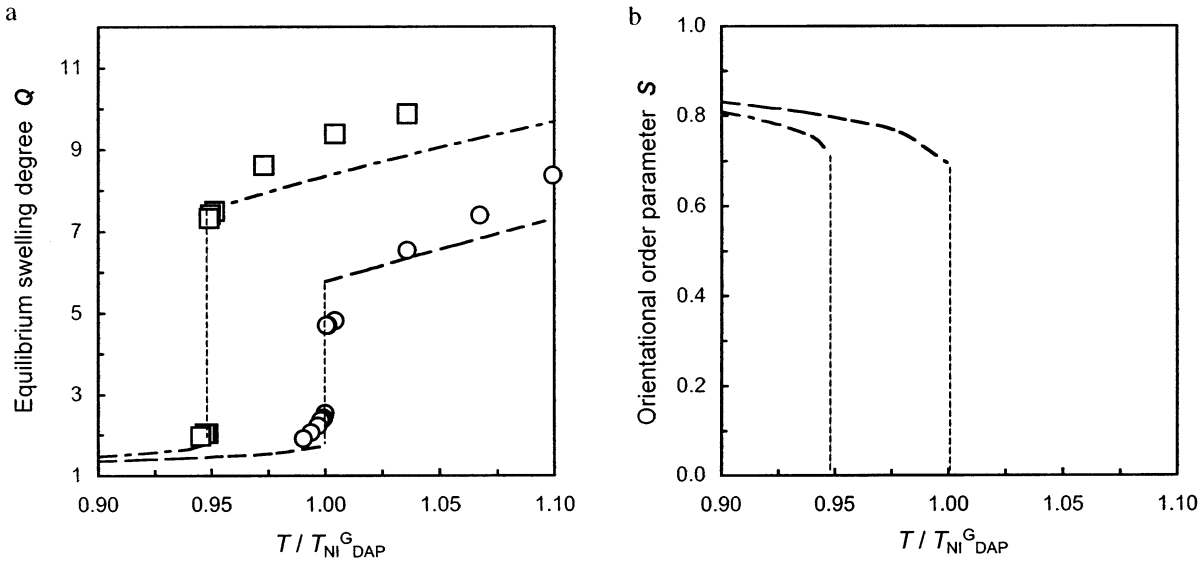

Figure 6. (a) Comparison of the swelling-temperature data for LCN-90/10 in DBP and DAP under cooling process with the prediction of the mean field theory. The absolute temperature (T) in the figure is reduced by the nematic−isotropic transition temperature in DAP ($T_{NI}{}^{G} = 320.9$ K). The broken line and the dotted broken line represent the fitted theoretical swelling curves for the data in DAP and DBP, respectively. The identical parameter set related to gel structure is used for the data-fit in DAP and DBP: $n = 300$, $n_m = 6.55$, $p = 0.08$. The fitted parameter concerning the isotropic mixing ($\chi = \chi_1/T$) is altered as $\chi_{DBP}/\chi_{DAP} = 0.853$: $\chi_1/\nu = 0.313$ for DAP; $\chi_1/\nu = 0.267$ for DBP. (b) The theoretical orientational order parameters as a function of the reduced temperature calculated with the same parameter values as (a).

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