CORRECTIONS

R. S. Ross* and P. Pincus: The Polyelectrolyte Brush: Poor Solvent. Volume 25, Number 8, April 13, 1992, pp 2177–2183.

We incorrectly reported in this paper that the collapse transition becomes weakly first order and second order in the infinite molecular weight limit, when the grafting surface is highly curved. The error stemmed from a flawed analysis of the equation for the spinodal which we give here

$$\phi^{(2+2/\delta)} - 3f\phi^{2/\delta} + \frac{3}{\delta}\left(\frac{2}{\delta} + 1\right)(N^{(1-\delta)}\sigma_\delta)^{2/\delta} = 0$$

where $\phi = N\sigma_\delta(a/L)^\delta$ is the mean polymer volume fraction in the curved geometries; $\delta = 2$ for a cylinder and $\delta = 3$ for a sphere. For large N the critical point shifts to zero charge and volume fractions, the collapse ratio becoming very large as correctly reported in the paper. However, the two branches of the spinodal become maximally separated with the limiting values $\phi_s = 0$ and $\phi_s = (3f)^{1/2}$, indicating that the collapse transition is more strongly first order in the curved geometries. The effect is more pronounced for spheres than cylinders and is in direct analogy with the strengthening of the collapse transition for a neutral polymer brush as the geometry is altered.

We are grateful to Ekaterina Zhulina for bringing this error to our attention.

Katsuhiko Iwasaki, Akira Hirao,* and Seiichi Nakahama*: Morphology of Blends of α,ω-Diaminopolystyrene with α,ω-Dicarboxypoly(ethylene oxide). Volume 26, Number 8, April 12, 1993, pp 2126–2131.

The scale bar was inadvertently left off the original Figure 4. The correct figure appears below.

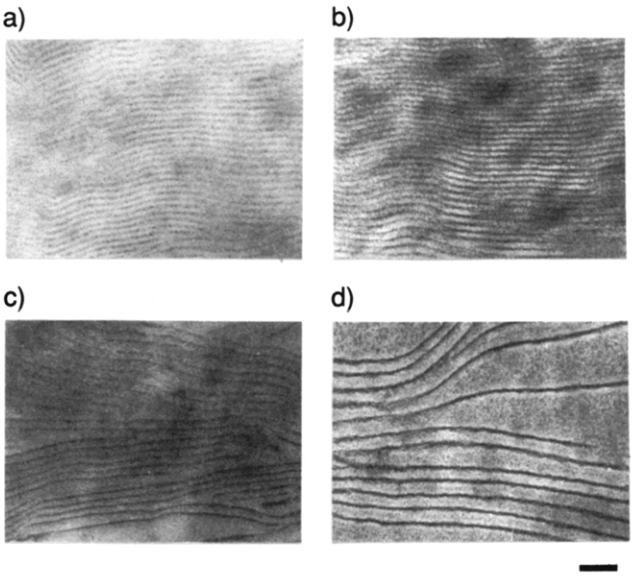

Figure 4. Transmission electron micrographs with CPEO (cross section); (a) APS-5, (b) APS-11; (c) APS-14; (d) APS-15. Scale bar indicates 100 nm.

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