

CORRECTIONS

Jun Ling and Thio E. Hogen-Esch*: Mechanism of Phosphor Ylide-Mediated Living Polymerizations of MMA. Nature of Side Reactions in the Formation of Initiators . Volume 39, Number 26, December 26, 2006, pp 9665–9667.

Equation 4 in the last paragraph (p 9667) is wrong. The equation and preceding sentence should be replaced with the following:

As demonstrated, the concentration of the active ionic species is very small with respect to that of the inactive ylide so that the concentration of the ylide is identical to that of living PMMA. In this case an expression can be derived for the case where the polymer is reacting with proton donors (Scheme 3). Assuming steady-state conditions of the ionic species, an expression can be derived for the apparent rate constant k_{app} defined by $-d[\text{ylide}]/dt = k_{app}[\text{ylide}][\text{HX}]$. If the collapse of the ionic species to the ylide occurring with rate constant, k_{-1} , is large enough to compete with the protonation of the ionic species (HX), the apparent rate constant, k_{app} , is given by

$$k_{app} = k_1 k_2 / (k_{-1} + k_2 [\text{HX}]) \quad (4)$$

For the special case where $k_2 [\text{HX}] \gg k_{-1}$, k_{app} equals $k_1 / [\text{HX}]$. Further studies on these and related issues are in progress.

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Rodrigo E. Teixeira, Ajey K. Dambal, David H. Richter, Eric S. G. Shaqfeh,* and Steven Chu: The Individualistic Dynamics of Entangled DNA in Solution. Volume 40, Number 7, April 3, 2007, pp 2461–2476.

Caption of Figure 2: Instead of “Shear viscosity, η , as a function of steady shear rate for several λ -DNA concentrations. Lines with slopes of ...”, it should read “Shear viscosity, η , as a function of steady shear rate for several λ -DNA concentrations: 10 c^* (black circles), 16 c^* (white circles), 23 c^* (black triangles), and 31 c^* (white triangles). Lines with slopes of...”.

Caption of Figure 3: Instead of “...scaling for the decay in the 35 c^* loss modulus...”, it should read “...in the 31 c^* ...”.

Caption of Figure 4: The entire caption should read as follows: Shear stress as a function of steady shear rate for several λ -DNA concentrations: 10 c^* (black circles), 16 c^* (white circles), 23 c^* (black triangles), and 31 c^* (white triangles). Terminal scaling of 1.0, at high shear rates, is shown.

Caption of Figure 5: The entire caption should read as follows: The transient response in viscosity following a sudden inception of shear flow to entangled λ -DNA solutions initially at equilibrium. Four concentrations are shown: 10 c^* (upper left), 16 c^* (upper right), 23 c^* (lower left), and 31 c^* (lower right). Different curves represent different shear rates (indicated in the graphs).

Caption of Figure 6: The entire caption should read as follows: Nonlinear modulus, $G(t)$, is shown for several stress relaxations after a step shear of 13 strains at $\dot{\gamma} > 1000 \text{ s}^{-1}$. The four λ -DNA concentrations are shown: 10 c^* (black circles), 16 c^* (white triangles), 23 c^* (black squares), and 31 c^* (white diamonds).

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