For a rigid rod we obtain from equation (27) in ref. 4 for $[\eta]$

$$[\eta]=\frac{N_A\zeta l^2\sigma}{6M\eta_s}\left[1+\frac{7\zeta}{40\pi\eta_s\sigma l}\sum_i\sum_{j\neq i}\frac{i.j}{|i-j|}\right]^{-1} \quad (19)$$

By comparing equations (15) and (19) (and substitution), it is easy to demonstrate that for $\ln N \gg 1$, D_r and $[\eta]$ are related by

$$\frac{kT}{D_r}=k_1\frac{M}{N_A}\eta_s[\eta] \quad (20)$$

where $k_1=28/5$.

It can be seen that the coefficient k_1 differs somewhat from $k_1=5$, which is obtained by using Kirkwood–Auer's theory[6]. In the case of pre-averaging of the hydrodynamic interaction[4,7], $k_1=4$.

After substitution from equation (20) into equation (12) we obtain

$$\frac{[\eta]}{[\eta]}=\frac{4\pi}{45kT}\cdot\frac{(n_s^2+2)^2}{n_s}k_2\,\Delta\gamma \quad (21)$$

where $k_2=7/5$. If the Shimada–Yamakawa theory is used, equation (21) with $k_2=5/4$ is valid. By preaveraging the Oseen tensor, generally, we obtain $k_2=1$. We can see that in the case of a rigid rod and with the unpreaveraged Oseen tensor we obtain, unlike the Gaussian coil[8], $[\eta]/[\eta]$, which is higher than for the free draining case.

If it does not hold that $1 \ll \ln N$, k_1 and k_2 are generally functions of N (or L) and depend on the hydrodynamic model of the rod (assembly of frictional centres or a cylinder).

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Errata

Charge transfer complex between maleic anhydride and pyridine 1981, Vol. 22, pages 129–131.
J. A. Chamizo, G. Mendoza-Diaz and J. L. Gázquez
Page 129, line 9, column 2 reads 'These results together with the values of the LEMO and HOMO predict that Pyacts like an acceptor and MAH acts acts like a donor of charge (see *Table 1*):

But should infact read: 'These results together with the values of the LEMO and HOMO predict that Py acts like a donor and MAH acts like an acceptor of charge (see *Table 1*):

Observation of disclinations and optical anisotropy in a mesomorphic copolyester 1981, Vol. 22, pages 437–446
M. R. Mackley, F. Pinaud and G. Siekmann
Figures 19, 20, 21 and 22, the correct dimensions for the length markers should be in nanometers (nm) and not in micrometers (μm).

Polarized infra-red studies of sulphochlorinated polyethylene and products of its hydrolysis 1981, Vol. 22, pages 640–646
B. Bikson, J. Jagur-Grodzinski and D. Vofsi
Page 640, column 2, paragraph 2, line 4 is incorrect. Paragraph should therefore read: *Sulphochlorination and chlorination procedures*

'Various polyethylene films were sulphochlorinated by bringing them in contact with carbon tetrachloride solution saturated with a gaseous mixture of sulpher dioxde–chlorine as described elsewhere[1,2]. The chlorination was performed under analogous conditions in carbon tetrachloride solution saturated with chlorine gas at 15°C. Methyl ethyl ketone hydroperoxide was used as initiator, and was added continuously at a rate of 0.24 g/h perl CCl_4.'