Int. J. Multiphase Flow, Vol. 2, p. 363. Pergamon/Elsevier, 1975. Printed in Great Britain.

ERRATUM

McMillen T. J. and Leal L. G., 1975. The effect of deformation on the effective conductivity of a dilute suspension of drops in the limit of low particle Peclet number. *Int. J. Multiphase Flow* **2**, 105–112.

The expression reported for the function $I(m, \lambda, \tau)$ in table 1 of our recent paper was in error. The corrected expression is

$$I(m, \lambda, \tau) = \frac{(m-1)}{(3m+4)(m+2)^3 m(\lambda+1)^2} \times \{\tau([0.36m^4 + 0.84m^3 - 0.24m^2 - 0.96m]\lambda^3$$
$$+ [-0.66m^4 - 1.607m^3 + 0.807m^2 + 8.714m + 9.382]\lambda^2$$
$$+ [-2.652m^4 - 9.430m^3 - 1.108m^2 + 22.769m + 17.640]\lambda - 1.604m^4$$
$$+ 12.473m^3 + 61.970m^2 + 83.779m + 24.543)$$
$$+ [1.990m^4 - 0.659m^3 - 48.233m^2 - 21.753m - 1.341]\lambda^2$$
$$+ [1.053m^4 - 3.786m^3 - 39.684m^2 - 27.892m - 7.096]\lambda$$
$$- 4.931m^4 + 18.011m^3 + 32.118m^2 - 6.830m - 2.940\}.$$

The plots of $I(m, \lambda, \tau)$ given in figures 2a, b, c are qualitatively unchanged. However, the limiting expressions in equations [20–22] should read

$$k^*_{\text{eff}} = 1 + \Phi\left\{0.12\frac{(5\lambda+2)^2}{(\lambda+1)^2} Pe_1^{3/2} + O(\epsilon^2) + O(Pe_1^2) + O((\epsilon Pe_1)^{3/2})\right\} \tag{20}$$

$$k^*_{\text{eff}} = 1 + \phi\left\{3 + \left[1.176 + \frac{5\lambda+2}{\lambda+1}\left(0.12\left(\frac{5\lambda+2}{\lambda+1}\right) - 0.028\right)\right] Pe_1^{3/2} + \epsilon Pe_1 \frac{1}{(\lambda+1)^2}\right.$$
$$\left.\{(0.12\lambda^3 - 0.22\lambda^2 - 0.884\lambda - 0.534)\tau + (0.663\lambda^2 + 0.351\lambda - 1.644)\} + \cdots\right\}$$
$$(m \to \infty) \tag{21}$$

$$k^*_{\text{eff}} = 1 + \phi\left\{-\frac{3}{2} + \left[(-9.382\lambda^2 - 17.640\lambda - 24.543) + \frac{1}{\tau}(1.341\lambda^2\right.\right.$$
$$\left.\left.+ 7.096\lambda + 2.940)\right]\frac{\epsilon Pe_2}{32(\lambda+1)^2} + \cdots\right\} \quad (m \to \infty). \tag{22}$$

It may be noted that the $O(\epsilon Pe_1)$ correction vanishes when the conductivities of the drop and suspending fluid are equal (i.e. $m = 1$). However all other conclusions of the original paper, and specifically the conclusion that a small amount of deformation causes a fundamental change in the nature of the dominant flow contribution to k^*_{eff} are unchanged.