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Corrigenda

'Stokes flow past a particle of arbitrary shape: a numerical method of solution',

by G. K. YOUNGREN AND A. ACRIVOS, *J. Fluid Mech.* vol. 69, 1975, p. 377.

Equations (2.14*a*) and (2.14*b*) need correction. The factor $1+R'^2$ in equations (2.14*a*) (in two places) and (2.14*b*) (in two places) should be raised to the power $\frac{1}{2}$. In (2.14*a*) the last term within square brackets should be preceded by a minus sign. It should have been said that

$$r_{xy}^2 = (x_1-y_1)^2+\{R(x_1)-R(y_1)\}^2.$$

Also, the discussion in appendix A regarding the existence of a unique solution to (2.9) is incorrect because, as can easily be verified (Ladyzhenskaya 1963, p. 59), (A 1) has the single eigensolution $\phi_i(\mathbf{y}) = n_i(\mathbf{y})$. Therefore, with U_i given, the surface-stress force f_i can be determined from (2.9) only up to an additive term λn_i, with λ being a constant scalar, which is the surface-stress force that results when $U_i = U_i^{(e)}$, the latter being the single eigensolution of

$$U_i^{(e)}(\mathbf{x})+\frac{3}{4\pi}\iint_{S_p}\frac{(x_i-y_i)(x_j-y_j)(x_k-y_k)\,n_i(\mathbf{y})\,U_k^{(e)}(\mathbf{y})}{r_{xy}^5}\,dS_y = 0.$$

It is a simple matter to show, however, that for particles of a given shape, the addition of a term λn_i to f_i will have no effect on the velocity and pressure fields, as given by (2.6) and (2.7), and hence λ can be set equal to zero without loss of generality.

'Structural development of gas–liquid mixture flows',

by R. A. HERRINGE AND M. R. DAVIS, *J. Fluid Mech.* vol. 73, 1976, p. 97.

Equations (15) and (20) of this paper should read

$$n_d = \tfrac{1}{4}\pi D^2 n = \rho_5(D)\,dD\,N_d \tag{15}$$

and

$$\rho_6(D) = \frac{N\pi D^3}{6q_g}\rho(D) = \frac{2N_d}{3q_g}D\rho_5(D). \tag{20}$$

'Interaction of free and forced convection in horizontal tubes in the transition regime', *J. Fluid Mech.* vol. 57, 1973, p. 269.

The authorship of this paper should be changed from H. R. Nagendra as the sole author to H. R. Nagendra and M. A. El-Hawary as co-authors. Dr El-Hawary had originally set up the experiment, developed the measuring technique, and obtained and analysed part of the results presented in the paper. Dr Nagendra was appointed to continue the experimental programme after Dr El-Hawary had left the University of British Columbia in Canada, where this work was initiated and completed. At the time the paper was submitted for publication by Dr Nagendra, the full name and address of Dr El-Hawary were unknown to him. Dr El-Hawary is presently an assistant professor at the Faculty of Engineering, Ain-Shams University, Abbasia, Cairo, Egypt.