

CORRIGENDUM

‘Gas diffusion from ascending gas bubbles’,

by PAUL H. LEBLOND, *J. Fluid Mech.* vol. 35, 1969, p. 711.

As was pointed out to me by T. R. Hennessy of the University of Cape Town, the expressions F_c and F_d appearing at the bottom of p. 715 should be divided by 4π , and the factor $r^{\frac{3}{2}}$ removed from the latter. The coefficients β_c and β_d on p. 716 should then be divided by 4π . Equations (9a) and (10a) are unchanged but (9b) and (10b) become

$$\frac{dr}{dP} = - \left[\beta_d(P - \gamma) - \frac{2\alpha g r^3}{9\nu} \right] / \frac{2\sigma}{r^2} \left[\beta_d(P - \gamma) - \frac{2\alpha g}{9\nu} \frac{3P}{2\sigma} r^4 \right], \quad (9b)$$

$$r_a(P) = \left[\frac{9\nu\beta_d}{2\alpha g} (P - \gamma) \right]^{\frac{1}{3}}, \quad r_b(P) = \left(\frac{2\sigma}{3P} \right)^{\frac{1}{3}} [r_a(P)]^{\frac{2}{3}}, \quad (10b)$$

and the ratio r_b/r_a for a dirty bubble is now $(2\sigma/3Pr_a)^{\frac{1}{3}}$. The values of table 1 should be modified as follows: for a clean system, r_a should be multiplied by 0.364, r_b by 0.485; for the contaminated system, $r_a = 0.428$ (r_a of table 1) $^{\frac{2}{3}}$, $r_b = 0.528$ (r_b of table 1) $^{\frac{2}{3}}$. The other results of the paper are unchanged.