The anisotropy κ, defined as the difference between the polarizabilities of the atom in the direction of **H** and at right angles to it divided by three times the mean polarizability, is given by

$$\kappa = \frac{(\eta_{11:11} - \eta_{11:22})H^2}{3\bar{\alpha}} + O(H^4)$$
$$= \frac{40}{81}\frac{a^3}{mc^2}H^2 + \ldots = 0{\cdot}90 \times 10^{-19}H^2 + \ldots. \qquad (12)$$

The strongest easily obtained magnetic fields are of the order of 10^4 gauss, so that, from (11), a change of 1 part in 2×10^{10} in $\bar{\alpha}$ can be produced.

At the present time, measurements of the Cotton–Mouton constant would seem to offer the best hope of observing the effects of the η tensor of spherical systems (see Buckingham and Pople (1)).

REFERENCES

(1) Buckingham, A. D. and Pople, J. A. *Proc. Phys. Soc.* (in the Press).
(2) Coulson, C. A. *Proc. Roy. Soc. Edinb.* A, **61** (1941), 20.
(3) van Vleck, J. H. *Electric and Magnetic Susceptibilities* (Oxford, 1932), p. 122.

Physical Chemistry Laboratory
Oxford

Department of Theoretical Chemistry
Cambridge

CORRIGENDA

to the paper

PROPERTIES OF RANDOM FUNCTIONS*

By D. S. PALMER

Received 1 October 1956

On page 674, equation (5) and the expression for H in the line above it are in error and should be deleted. The correct expressions are more complicated and will not be given.

On page 679, line 5 from the bottom should read

$$M_{22}^2 - M_{23}^2 = \tfrac{1}{144}t^{10}PP'(P''^2 - PP^{\mathrm{iv}})(P''P^{\mathrm{vi}} - P^{\mathrm{iv}2}) + \ldots;$$

and the equation in the bottom line should read

$$v_1(t) = \frac{t}{8PP''}(P''^2 - PP^{\mathrm{iv}}).$$

Marconi's Wireless Telegraph Co. Ltd.

* Vol. 52 (1956), pp. 672–86.