JOURNAL OF CATALYSIS 3, 301 (1964)

Correction

Pore Distributions from Desorption Isotherms

R. R. Weiler has kindly written to me that Eqs. (6) and (7) of my previous paper (*1*) are incorrect. Particularly, the third term in brackets of Eq. (6) should read

$$4 \frac{dt}{dV_a} \int_{V_R}^{V_0} \frac{1}{R - t'} \cdot \frac{dt}{dV_a} \int_{V_R}^{V_0} \frac{dV_a}{R - t'}\, dV_a \quad (1)$$

Equation (7) is similarly changed and may be expressed as

$$dV = \frac{R^2}{(R - t)^2} G_m h\, dn \qquad (2)$$

where

$$G_m = 1 - 2 \frac{dt}{dn} \int_0^{n'} \frac{G_{m-1}}{R - t}\, dn, \qquad (3)$$

and m has integer values 1, 2, 3 . . . , and $G_0 = 1$. As m increases, the values of G_m converge on a constant value. It usually is unnecessary to extend the calculation beyond $m = 2$ or 3, as shown by data in Table 1, which correspond to every sixth value shown in Table 2 of the previous paper, (*1*) starting at the fourth entry.

The limiting value of G_m is only approximately correct, because values of t corresponding to the upper limit of the integrals in Eq. (3) were not used. The correct values of G are obtained by Eq. (10) as shown in Table 1. The values of G obtained from Eq. 10 are not sensitive to the approximate values of G used. Pore distribution curves of ref. *1* are not changed significantly by the use of Eqs. (2) and (3) of this note.

TABLE 1
VALUES OF CONSTANT G FOR COMPOSITE ISOTHERMS[a]

From Eq. (3) of this paper			From Eq. (10) of ref. *1*		
G_1	G_2	G_3	G_4	G from ref. *1*	G from G_2
0.980	0.981	0.981	0.981	0.979	0.980
0.913	0.916	0.916	0.916	0.913	0.913
0.778	0.799	0.798	0.798	0.788	0.788
0.775	0.806	0.803	0.803	0.791	0.790
0.416	0.547	0.526	0.529	0.494	0.485

[a] See Table 2 of previous paper (*1*).

REFERENCE

1. R. B. Anderson, "Pore Distributions from Desorption Isotherms," *J. Catalysis* **3,** 50 (1964).

R. B. ANDERSON

Bureau of Mines
Pittsburgh Coal Research Center
U.S. Department of the Interior
Pittsburgh, Pennsylvania
Received April 28, 1964