

THE AMERICAN MINERALOGIST, VOL. 54, MARCH-APRIL, 1969

VARIATION OF THE REFRACTIVE INDEX OF DIAMOND WITH HYDROSTATIC PRESSURE TO 7 KILOBARS: ADDENDUM

E. D. D. SCHMIDT, J. L. KIRK AND K. VEDAM, *Materials Research Laboratory, Pennsylvania State University, University Park, Pennsylvania 16802.*

With reference to our recent publication (Schmidt, Kirk and Vedam, 1968), our attention has been drawn to the work of Waxler and Wier (1965) who have also carried out measurements in dn/dP on diamond up to a maximum pressure of 1 kbar. Unfortunately, this paper also suffers from a computational error and hence their stated value of $\rho(dn/d\rho)$ for diamond in Table 2 of their paper is incorrect. However, if their experimental data given in Table 1 of their paper are used along with the recent values of the elastic constants of diamond by McSkimmin and Bond (1957) the value of $\rho dn/d\rho$ obtained is in excellent agreement with our own results. Waxler and Wier used the elastic constants data of Adams and Williamson (1923).

REFERENCES

- ADAMS, L. H., AND E. D. WILLIAMSON (1923) *J. Franklin Inst.*, **195**, 475.
 MCSKIMMIM, H. J., AND W. L. BOND (1957) *Phys. Rev.*, **105**, 116.
 SCHMIDT, E. D. D., J. L. KIRK AND K. VEDAM (1968) *Amer. Mineral.*, **53**, 1404.
 WAXLER, R. M., AND C. E. WEIR (1965) *J. Res. Nat. Bur. Stand.* **69A**, 325.

THE AMERICAN MINERALOGIST, VOL. 54, MARCH-APRIL, 1969

ALBITE, VARIETY CLEAVELANDITE, AND THE SIGNS OF ITS OPTIC DIRECTIONS: ADDENDUM

D. JEROME FISHER, *Department of Geology, Arizona State University, Tempe, Arizona 85281.*

Under the above title the writer (Fisher, 1968) recently detailed certain optical properties of the Chesterfield, Massachusetts cleavelandite (U. S. National Museum No. 82, 274) for which a microprobe study showed not exceeding 0.1 percent of each of Ca and K. Eugene H. Roseboom, Jr. and David B. Stewart of the U. S. Geological Survey have since kindly determined the unit-cell dimensions of this material by X-ray powder diffraction (Wright and Stewart, 1968) with the following results: $a = 8.142 \pm 0.003$, $b = 12.780 \pm 0.003$, $c = 7.161 \pm 0.001$, $\alpha = 94^\circ 14.7' \pm 1.4$, $\beta = 116^\circ 36.4' \pm 1.2$, $\gamma = 87^\circ 40.7' \pm 1.3$, $V = 664.35A^3 \pm 0.20$.

These values may be compared with earlier ones on low albites (Kastner and Waldbaum, 1968, p. 1592).

Corrections to be noted in Fisher's paper are as follows:

p. 1571—Table 1, column 3, for *name* read *plane*.

p. 1571—Table 1, column 2, albite-Ala, for [001] read [100].

p. 1573—Table 3 was unclear, and should have been printed as follows:

TABLE 3. U-STAGE READINGS ON UNITS R AND V OF FIGURE 1

	A_1	A_2	A_4	Sign ^a	$2V_z$	A_1	A_2	Sign
Composition plane	136	4 l^a						
Unit R	64	16½ r	320	(-)	80	151½	10 l	(+)
Unit V	30	17 r	50	(-)	76	120	2 r	(+)

* The sign shows whether addition or subtraction parallel A_4 ; l and r mean reading on the left or right arc.

p. 1574—For *Fig. 1. Photomicrograph* read *Figs. 1 and 2. Photomicrographs*

p. 1575—Fig. 2, delete caption.

p. 1576—Fig. 3, caption 4th line, for (c) read $[c]$.

REFERENCES

- FISHER, D. J. (1968) Albite, variety cleavelandite, and the signs of its optic directions. *Amer. Mineral.*, **53**, 1568–1578.
- KASTNER, M., AND D. R. WALDBAUM (1968) Authigenic albite from Rhodes. *Amer. Mineral.* **53**, 1579–1602.
- WRIGHT, T. L. AND D. B. STEWART (1968) X-ray and optical study of alkali feldspar. I. Determination of composition and structural state from refined unit cell parameters and $2V$. *Amer. Mineral.*, **53**, 38–87.