

from the lattice constants of Jette and Foote⁽¹³⁾ converted to Angstrom units to give "a" = 2.9789 Å, "c" = 5.6167 Å, together with Avogadro's number 6.02305×10^{23} , and the chemical atomic weight 112.41 g mole⁻¹. These results are compared with the recent pulse echo measurements of Garland and Silverman⁽⁸⁾; after correspondence with Professor Garland we have multiplied the values quoted in their paper by $(1.00202)^{-6}$ to correct an error made in their conversion of the Jette and Foote lattice constants to Angstrom units.

Measured values of (ρv^2) are reproducible to 0.2 per cent as determined by repeated measurement on the same crystals. A far better test of accuracy is a comparison of constants determined independently from two different crystals. The constant C_{44} is nearly directly determined from both crystal A and crystal C; these numbers differed by 0.5 per cent, the average being quoted in Table 2. Upon taking into account other sources of uncertainty not assessed by such a test an accuracy figure of 1.0 per cent may be set on the values quoted in Table 2. In this light the comparison of the data from the two laboratories is good.