physical properties. If the properties are not described with sufficient accuracy and completeness to permit systematic classification, the name serves no useful purpose whatsoever.

Furthermore, in the description of new minerals, authors should demonstrate the crystallographic and chemical relationships of any new species to other minerals. Adherence to this practice will not only aid in the recognition of the particular mineral species when discovered at another locality with isomorphic variants, but will aid in the formulation of more significant geological and geochemical principles.

Unrecognizable, unidentifiable, or unknown mineral substances are frequently encountered by skilled mineralogists and petrographers. This fact does not reflect on the intelligence or capability of the mineralogist or petrographer; he should frankly state that the mineral was not identifiable by the methods employed or during the time available. Nothing is gained by adding another poorly defined term to the literature. Prefixing of "micro" makes the situation worse rather than better. Well-authenticated mineral names beginning with "micro" already exist, including microcline, microlite, and microsommite. The nomenclature of mineralogy is sufficiently complex without unnecessary additions to the "conspiracy in jargon."

UNIT CELL AND SPACE GROUP OF PIRSSONITE

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The unit cell and space group of pirssonite have been determined from a series of Buerger precession photographs taken from a broken fragment obtained by crushing a crystal from Searles Lake, California. These crystals from the type locality were described by J. H. Pratt[1] as orthorhombic hemimorphic; his data are checked by the x-ray study. The results of this study are tabulated below. Zero, first and second levels were photographed normal to both the a and b axes. The patterns with their characteristic extinctions provided an unequivocal determination of the space group. Calibration of the camera with a quartz crystal indicates that the values for the cell edges are accurate to 0.02 per cent. They are calculated from the wavelength (CuK_α) recently reported by Bragg in absolute Angstrom units.

Mineral: pirssonite, $CaCO_3 \cdot Na_2CO_3 \cdot 2H_2O$.
Locality: Searles Lake, California.
Crystal class: orthorhombic hemimorphic, $C_{2v} = 2mm$.

[1] Pratt, J. H., *Am. Jour. Sci.*, ser. 4, **2**, 126 (1896).

Cell dimensions:
$a_0 = 11.32$ A. U.
$b_0 = 20.06$
$c_0 = 6.00$

$a:b:c$
X-ray	0.5643:1:0.2991
Pratt	0.5662:1:0.3019

Lattice and space group: face-centered, $C_{2v}^{19} = Fdd2$; 8 molecules $CaCO_3 \cdot Na_2CO_3 \cdot 2H_2O$ per cell.

Density: calculated, 2.367; measured (Pratt), 2.352.

This work was carried out as part of a program to complete crystallographic data for the 7th edition of Dana's *System of Mineralogy*. The second volume of this work is now in preparation at the Department of Mineralogy, Harvard University, under the direction of Professor Clifford Frondel, who kindly loaned the material for these measurements. Acknowledgments go to Professor A. von Hippel of the Laboratory for Insulation research, Massachusetts Institute of Technology, who provided the x-ray diffraction facilities.

NOTE ON SCHIRMERITE

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By making use of A. Harcourt's well-known tables[1] for the identification of ore minerals by means of x-ray powder photograms the author occasionally identified a mineral as *schirmerite*, $PbAg_4Bi_4S_9$. This was unexpected as a spectro-chemical analysis had not shown any presence of bismuth and only traces of silver and lead. The agreement between the d-values and the intensities from the table and from the x-ray pattern was perfect. A closer inspection showed, however, that the d-values fit an isometric structure with a cube length of 10.36 kX. All the 27 lines, except one ($d = 2.82$ kX) having an intensity of only 0.2, can be indexed according to the criteria of the space-group $T_d^3 - I\bar{4}3m$. So it must be concluded that the specimen used by Harcourt was a member of the tetrahedrite group. It may be pointed out that the specimen used by him was not obtained from the original schirmerite locality.

[1] Harcourt, G. Alan, *Am. Mineral.*, **27**, 63 (1942).

The Annual Meeting of the Society for Experimental Stress Analysis will be held at The Roosevelt Hotel, Pittsburgh, Pennsylvania, on May 27, 28, 29, 1948. Inquiries may be addressed to the Society for Experimental Stress Analysis, P. O. Box 168, Cambridge 39, Massachusetts.