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BRIEF COMMUNICATIONS

The Space Group of $AgTaS_3$

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The crystal structure of $AgTaS_3$, recently described in space group $Cmc2_1$, is properly described in *Cmcm*. The revised space group evidences the centrosymmetric nature of the structure.

The crystal structure and some electrical properties of the ternary compound $AgTaS_3$ have recently been reported (*1*). The structure was described and refined, from powder diffraction data, in the noncentrosymmetric, polar space group $Cmc2_1$ (orthorhombic; $a = 3.3755(2)$ Å, $b = 14.0608(11)$ Å, $c = 7.7486$ (7) Å, $Z = 4$). There seems to be no reason why it should not be described in the centrosymmetric space group *Cmcm*. The *Cmcm* coordinates are given in Table I; they are obtained from those in Table II, Ref. (*1*), by incrementing the z's by 0.25 and, for the S(2)–S(3) pair, averaging. No atom needs to be shifted by more than 3 esd's to conform to the higher symmetry.

The revised description evidences the centrosymmetry of the atom arrangement; indeed, the Ag atom lies on a crystallographic symmetry center. No other revision of the structure description is needed.

TABLE I

COORDINATES,[a] SPACE GROUP *Cmcm*

Atom	Site	x	y	z
Ag	4(*a*)	0.0	0.0	0.5
Ta	4(*c*)	0.0	0.2621(3)	0.25
S(1)	4(*c*)	0.0	0.893(1)	0.25
S(2)	8(*f*)	0.0	0.672(6)	0.425(11)

[a] Esd's are from Table II, Ref. (*1*).

References

1. H. WADA, M. ONODA AND H. NOZAKI, *J. Solid State Chem.* **97**, 29–35 (1992).

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