

SHORT COMMUNICATIONS

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Acta Cryst. (1976). **B32**, 1619

Atomic structures of three new rhombohedral polytypes of lead iodide: corrigendum. By MAHESH CHAND and G. C. TRIGUNAYAT, *Department of Physics and Astrophysics, University of Delhi, Delhi-7, India*

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It has been pointed out that a polytype structure described by Mahesh Chand & Trigunayat [*Acta Cryst.* (1975), **B31**, 1222–1223] had already been reported by Mitchell [*Z. Kristallogr.* (1959), **111**, 372–384].

It has been brought to our notice by Agrawal (1975) that one of the rhombohedral structures, namely $12R_2$, described by us (Mahesh Chand & Trigunayat, 1975), had been reported earlier by Mitchell (1959). On scrutiny, we have found that the two structures, $(13)_3$ and $(31)_3a$, reported by us and Mitchell respectively, really represent the same polytype. While we regret this oversight on our part, we should add that earlier we failed to detect the similarity between the two structures for the following reasons:

(a) Mitchell chose to designate the two possible 12-layered polytypes as $(313131)a$ and $(313131)b$, respectively, instead of $(13)_3$ and $(31)_3$, which is the usual way of expressing polytype structures in Zhdanov notation.

(b) The *ABC* sequences for the same polytype were ar-

ranged in a different manner by us, thus rendering it *prima facie* difficult to detect their resemblance.

Now that this oversight has been noticed, it follows that while the modification $(13)_3$ of the PbI_2 polytype $12R$ has been found to occur widely, the other modification $(31)_3$ remains to be discovered. This interesting discrepancy is well worth investigating from a theoretical point of view.

References

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A note on the structure of dipotassium silver triiodide. By CLARA BRINK SHOEMAKER, *Department of Chemistry, Oregon State University, Corvallis, OR 97331, U.S.A.*

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The recent structure determination of K_2AgI_3 [Thackeray & Coetzer, *Acta Cryst.* (1975), **B31**, 2339–2340] is actually a redetermination and refinement of the structure determined 25 years ago [Brink & Stenfert Kroese, *Acta Cryst.* (1952), **5**, 433–436].

Thackeray & Coetzer (1975) in their paper on K_2AgI_3 do not mention that this structure was first determined by Brink & Stenfert Kroese (1952), as cited in *Structure Reports* (1951, 1952) and by Wyckoff (1963). Grey & Steinfink (1971) have found that Ba_2MnS_3 and Ba_2MnSe_3 belong to the same structure type.

The refinement of Thackeray & Coetzer does not change the essential features of the structure as determined before. Their Figs. 1 and 2 and Table 2 show that both K^+ ions are not inside *square* prisms as stated in the text, but inside *triangular* prisms (9 edges, 6 corners). Each K^+ ion has, moreover, one additional I^- neighbour outside a rectangular face of each prism. A recent description of the structure and of its relation to other structures has been given by Shoemaker (1973).

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