In a recent paper (Morris, 1962) the writer gave values for the unit cell of osarizawaite, Pb(CuAl)$_3$(SO$_4$)$_2$(OH)$_6$, from Western Australia as $a=7.05$ Å and $c=17.025$ Å.

Y. Taguchi (pers. comm.) has pointed out that the value for $c$ is more probably 17.25 Å and that d-spacings calculated from this figure are in better agreement with the observed values, and in addition the pseudo-isometric nature of osarizawaite is made more apparent.

In support of this statement he argues that in the series between beaverite, Pb(CuFe)$_3$(SO$_4$)$_2$(OH)$_6$, and osarizawaite, the increase in the aluminium content is accompanied by an expansion of the $c$ axis, a contraction of the $a$ axis, and a decrease in density and mean refractive index, a trend borne out by the values reported for the series jarosite-alunite.

In view of this, Taguchi believes that it is unlikely that the virtually pure aluminium end member from Western Australia could have a value for the $c$ axis smaller than that of the iron-rich Japanese osarizawaite (17.23 Å) when the other physical properties are consistent with the trend.

The writer agrees that Taguchi's value is the more probable one. The amended values for the unit cell of the West Australian osarizawaite, with original values in parentheses, are, $a=7.05$ Å (7.05); $c=17.25$ Å (17.025); $c/a=2.447$ (2.415); $a_{rh}=7.045$ Å (6.984); $\alpha=60^\circ$ 3′ (60°38′); calculated density 4.114 (4.167).

**References**


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