which gives the approximate age as 387 million years.[1] The value of this ratio checks the ratio of 0.0530, found for the Beaverlodge uraninite.[2]

Thallium formate was chosen as the best heavy liquid to be used in a gravity separation. No satisfactory separation was obtained by this method. However, it was noticed that most of the finer brown portion of the ore that had been ground to 40 mesh fineness could be washed out with water by differential sedimentation. After washing, about eighty-six per cent of the brownish ore was left as a uniform black ore. A sample of this black residue was used for a second determination of the lead-uranium ratio. Practically all the lead was found in this black residue while it was only slightly enriched in uranium. The ratio in this second case, 0.0584, was slightly higher than in the original sample. This substantiates the belief that weathering is more selective to uranium than to lead.[3]

Using the acton method, the actinium-uranium ratio of this mineral was constant in accord with the seven minerals previously reported.[4]

A successful magnetic separation has been accomplished on roasted ore, and the determination of the lead-uranium ratio of the non-magnetic portion is under way at the present time.

In the future the Ac-U ratio and Pa-U ratio will be established by absolute methods.

[1] Kirsch, G., Geologie and Radioaktivität, p. 128, **1928.**

[2] Private communication from W. R. McClelland of the Canadian Bureau of Mines.

[3] Alter, C. M., and Kipp, E. M., *Science*, vol. **82,** No. 2133, pp. 464–66, Nov. 15, 1935.

[4] Bruner, F. H., and Schlundt, H., *Jour. Phy. Chem.*, vol. **38,** No. 9, pp. 1183–88, 1934

LOCALITY FOR OPALIZED SPHERULES

A. E. ALEXANDER, *Buffalo Museum of Science.*

In answer to the writer's query, Mr. R. C. Vance of Rochester, N. Y., states that the opalized spherules mentioned in the August issue of the *American Mineralogist*[1] were obtained from Mt. Tate, Etchu Province, Japan. Specimens in his possession were compared with those described and proved to be identical.

[1] Alexander, A. E., Opalized spherules from Utah?, *Am. Mineral.*, vol. **20,** pp. 602–3, 1935.