graphic analyses and to Mr. R. N. Whitten of the Australian Atomic Energy Commission for the isotope determination.

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The determination of feldspars by flame photometry

Fraser and Downie[1] have described two procedures for determining the 'diagnostic elements'—potassium, sodium, and calcium, in feldspar samples. Their flame-photometric method involves the direct determination of potassium and calcium (and hence of orthoclase and anorthite), and calculation of albite by difference. Their spectrographic method, which they consider the more rapid, involves the visual estimation of intensities of a dozen different spectrum lines, followed by use of a 'determinative chart'. Both methods require the use of previously analysed samples of microcline, albite, and labradorite as standards.

Readers of Mineralogical Magazine may be interested in knowing of a less complicated solution to this relatively simple problem. The proposed method[2] involves flame-photometric determination of the three diagnostic elements. In order to overcome inter-element effects (mainly that of aluminium on calcium), standard solutions are prepared by blending synthetic solutions whose compositions correspond to the end members of the plagioclase and alkali feldspar series. The effects of residual small differences in composition between samples and standards are eliminated by the addition of magnesium as a 'releasing agent'. The method has also been applied, with encouraging results, to the

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[1] W. E. Fraser and G. Downie, Mineralogical Magazine, 1964, vol. 33, p. 790.

[2] Sydney Abbey, Canadian Mineralogist, 1965, vol. 8, p. 347.

determination of potassium, sodium, and calcium in rock samples, in some of which the relative proportions of these elements and of aluminium are far removed from what they are in feldspars.

The writer is interested in comments from any who may have occasion to try either of the schemes described above.

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SYDNEY ABBEY

[*Manuscript received 11 November 1966*]

Erratum

WE wish to point out an error in our paper 'Archimedean polyhedra as the basis of tetrahedrally-coordinated frameworks' (Min. Mag., 1964, vol. 33, pp. 1008–1014). The postulated structure H(H–S) is not unique, but identical with sodalite. Hence, H(H–S) $\equiv$ S(H–H). The H(H–S) cell is actually two sodalite cell translations along each of the cubic axes, and for this reason there are listed 96 tetrahedra or eight sodalite units for that structure. For easy visualization, H(H–S) is derived from faujasite by removing the hexagonal prisms. The voids then become truncated octahedra and the entire structure is made by packing truncated octahedra so that no cavities remain, except the space within each polyhedral unit, as in sodalite.

We wish to thank Dr. Walter M. Meier, Inst. Kristall., Eidgen. techn. Hochschule, Zürich, who informed us of this identity.

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[*Manuscript received 24 November 1966*]