

place of primary importance. This particular volume, dealing with analytical techniques in the study of chemical petrology, chemical weathering, ore solutions, and related subjects, fits perfectly into its niche within the series. More than 45 metallic and semi-metallic elements may be determined quantitatively through analysis of their atomic absorption spectra; in addition, application of the technique is relatively simple, sensitive, reliable, and involves no great initial cost. This means that a useful and practical tool has been developed. The objective of this small book has been to pull together the widely scattered literature of this very recent application within the geological sciences and thus to make the use of the tool more widespread and meaningful to research geologists and petrologists.

Exactly what is "atomic absorption spectroscopy"? When substances are dispersed as an atomic vapor, they possess the property of absorbing characteristic radiations identical to that which the same substance can emit. Excellent instrumentation has provided good spectral resolution with a high degree of element specificity. The authors infer that most of the problems which arise in the use of the techniques do so during

preparation of the samples; operation of the instrumentation itself is quite simple. Therefore the latter half of the book deals with methods and applications. However, because the development of new applications and the effort to obtain maximum benefit from known applications requires some knowledge of theory and instrumentation, the first half is dedicated to these phases of the subject. The authors admit that treatment of the theories involved, as well as the instrumentation used, has been greatly simplified from that common for physicists but do claim that their explanations provide a geologist with sufficient understanding of the basic principles. This last may be true, but, to this reviewer at least, it seems that the theory may be a little too simplified for use in the development of new applications. This is a minor criticism, for surely any geologist working in this field would be led to further theoretical studies on his own in the technical publications dealing with spectroscopy.

The book is highly recommended for a text for one entering this field of analysis and as a most useful reference for the absorption characteristics of those metals now being studied in this manner.

PALEONTOLOGICAL NOTE

DISCOASTER DRUGGI *nom. nov. pro* DISCOASTER EXTENSUS

Bramlette & Wilcoxon, 1967, *non* Hay, 1967

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Discoaster extensus Bramlette & Wilcoxon, 1967, *Tulane Stud. Geol.*, v. 5, p. 110, pl. 8, figs. 2-8 (November 20, 1967) is a homonym of *Discoaster extensus* Hay in Hay, Mohler, Roth, Schmidt & Boud-

reaux, 1967, *Trans. Gulf Coast Assoc. Geol. Soc.*, v. 17, p. 451, pl. 3, figs. 10, 12; pl. 4, figs. 1, 2 (October 25, 1967). *Discoaster druggi* is here proposed as a replacement name for *D. extensus* Bramlette & Wilcoxon.

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