
A New Treatise on Sedimentary Petrography

The field of sedimentary petrography has undergone notable expansion in recent years, in scope of study and wealth of technique as well as in extent of practice, and for some time there has been need for a thoroughgoing treatise on the subject. The present volume meets this need. It does so especially for methods of mechanical analysis and other treatment of purely physical attributes of sediments, the area in which much of recent progress has centered and for which adequate coverage has not been attempted in any general work hitherto published.

The book is in two parts, the first, by Krumbein, on mechanical analysis and allied subjects, and the second, by Pettijohn, on microscopic, chemical, and other methods. The parts are about equal in length, a proportion to be welcomed by the student especially interested in the mechanical constitution of sediments. On the whole the material is clearly presented and well illustrated, and an outstanding feature of the work is its thoroughness in scope; no important aspect of sedimentary petrography is neglected. It is restricted, however, to method and underlying theory, and no venture is made into the realm of interpretation—doubtless a wise limitation, considering the present status of knowledge respecting the significance of physical features of sediments.

If any major aspect of the book is to be adversely criticised, it is the over-thoroughness with which the mathematical and statistical treatments of analytical data are presented. Much of the first half of the work is devoted to these subjects and some of the discussion is more elaborate than necessary for a book of this sort. The authors are justified in emphasizing these important subjects, but they might have done so at lesser length. For example, in the description of an effective and simple method of graphic differentiation for the determination of frequency distribution curves, mathematical proof is given in full, whereas reference to the easily accessible article in which it has already been published would have sufficed. However, if there is to be error in the matter of completeness, it is far better on the side of amplitude than otherwise.

Especially desirable is the treatment of methods for dealing with sedimentary rocks, which commonly present great difficulty to the laboratory worker, either in disaggregation or in thin-section study; no complete and satisfactory discussion of this subject has hitherto been available in any form.

On the whole this is an excellent book, indispensable to the student of sediments and sedimentary rocks.—*Edmund M. Spieker.*

Manual of Sedimentary Petrography, by W. C. Krumbein and F. J. Pettijohn. New York, D. Appleton-Century Co., 1939. \$6.00.