

The physics and chemics of biology are extremely simplified, but that is necessary for hosts of students who have never studied physics or chemistry even in high school. The fundamental aspects of the structure, function and life history of organisms constitute major threads for the presentation. The classification of organisms and the major groups of the two kingdoms are given adequate and discriminative space and treatment. The brevity of treatment of such broad topics as variation, evolution, genetics, environmental relations will disappoint specialists in those phases. But the same reaction will follow the examination of the book by special workers in other lines of research. We simply must let ourselves down to the level of the audience which presents itself for instruction in *general* biology. Eight out of every ten of that group have never taken any other course in science. Less than that number will ever take additional courses in the more specialized sciences. The authors of this book seem to have caught the significance of this situation and have tried to select their material and to treat it so as to fit the audience. It is apparently with a keen understanding of the limitations of their audience that the authors assumed this important task. A constant emphasis upon the essential and the usable features of general biology clearly reflects this point of view.

There are several unfortunate blunders and lesser errors in the book. We need not enumerate them here. These may all be corrected in a second printing. We do not favor the inclusion of lists of "selected references," as is generally done after each chapter in the book. Mighty few students even look *at* them, much less look them *up*. In fact little time is available for this extra work. The value of such inclusions is to the teacher only. Few teachers ever use such values. The etymology and definition of many terms and words are given, as a rule, where they are first used. A formal glossary is omitted. Our experience teaches us, however, that numerous students use and benefit from a carefully prepared glossary. The book is well manufactured. The typography is well selected for the student and teacher. Many of the plain figures are new, generally well done and of great value. The colored plates are certainly welcome.

On the whole this book is admirable for a two-semester course. It should go a long way to aid teachers and administrators to solve the difficult problems associated with the presentation of so general a topic

in the curriculum of higher education. We are using it with success.

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### SEDIMENTARY PETROGRAPHY

*Manual of Sedimentary Petrography.* W. C. KRUMBEIN and F. J. PETTIJOHN. 549 + xiv pp., 265 figs. D. Appleton-Century Company, New York, London, 1938. Price, \$6.50.

UNTIL recently, petrographers have neglected the study of the sedimentary rocks, as they were considered uninteresting and it was believed that their study would lead to few results of general interest. However, in the last two decades interest in these rocks has grown rapidly and now sedimentary petrography is an active and well-developed science. It is actively contributing to the precise correlation of strata; to our knowledge of diastrophism, the location and character of old land masses, the source of the materials of the sediments, the former climatic conditions and many other problems.

The excellent book under review shows how far the new science has developed; in some respects its methods are already more quantitative than are those used in the study of the igneous rocks. As stated in the introduction, "The purpose of the book is to present theories and methods of examining sediments, from the field sampling to the final graphic and statistical analysis."

The first part by Krumbein discusses the collection and preparation of samples, the principles, methods and graphic presentation of mechanical analyses, statistical methods as applied to the data of sedimentary rocks and orientation analyses of sediments. The second part by Pettijohn treats of the shape and surface textures of grains; preparation of samples for mineral analyses, such as disaggregation and clarification of grains; separation methods by heavy liquids, the electromagnet and other methods; optical methods; mineral description and determinative tables; mineral frequencies; chemical methods; and the mass properties of sediments, such as color, density and porosity. The final chapter deals with equipment, reference books, etc.

The book is clearly written and well organized; it covers its field admirably and includes the latest developments in a rapidly progressing science. It should become a widely used text and reference book.

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## SOCIETIES AND MEETINGS

### SPECIAL RESEARCH CONFERENCES ON CHEMISTRY

THREE research conferences on chemistry have been organized by Dr. Neil E. Gordon, secretary of the

Section on Chemistry, which will be held at Gibson Island, Maryland, between July 10 and July 28, under the auspices of the American Association for the Advancement of Science. These conferences follow a