

studied in the past to the great advantage of the electrical industry. We doubt whether the last two chapters on analytic functions and the convergence of Fourier's series are suitable as part of the mathematical training of electrical engineers, however valuable they may appear to the mathematician. They seem to be out of place in a book on differential equations. We would have overlooked this if the author had given in their place a brief account of elliptic integrals, Kelvin's ber and bei functions, and graphical methods of performing integrations and finding Fourier coefficients. We hope that these subjects are studied by electrical students at some period of their curriculum.

*Inorganic Colloid Chemistry.* By Prof. H. B. Weiser. Vol. 1: *The Colloidal Elements*. Pp. xi+389. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1933.) 28s. net.

PROF. WEISER has the intention of making a critical survey of the colloidal behaviour of elements and their inorganic compounds, with particular reference to the rôle they have played in the development of the theories and applications of colloid science. In the past, perhaps undue attention has been given to organic colloids, which enter so frequently into the study of biology and into chemical technology, but the inorganic colloidal behaviour is equally important. The use of metal sols in medicine and the phenomena of froth flotation of minerals are two aspects of inorganic colloid science which occur to one, and there are many others. The present volume deals with the elements.

The experimental side is the one which is emphasised throughout, although there are very clear and concise sections on such matters as precipitation, cataphoresis, colour, coagulation and protection. The treatment is admirably clear and practical, and the literature has been exhaustively covered to within a recent period. The elements are considered in the order metals and non-metals, the periodic order being followed. Detailed author and subject indexes are provided. This is an authoritative work which cannot fail to be useful both in research and industrial laboratories, whilst students will find it a very clear introduction to general colloid science.

*Second Year College Chemistry.* By Prof. William H. Chapin. Third edition, revised. Pp. xiii+374. (New York: John Wiley and Sons, Inc.; London: Chapman and Hall, Ltd., 1933.) 18s. 6d. net.

THE third edition of this book is modified by the extension of the chapter on indicators, the earlier and freer use of the pH system, the simplification and extension of the chapter on chemical E.M.F. and the recasting of the chapter on solubility product so that much less emphasis is placed on the so-called non-ionised part. Some modification

in the order of chapters has also been made. These changes all improve the book, which, both in the order and manner in which the subjects are treated, and the suggestive character of the numerous questions and exercises, is one which students beginning physical chemistry will find both intelligible and interesting.

The author has evidently made full use of original sources (many of which are given in references) and the result is a sound course of elementary general and physical chemistry, which avoids superficial treatment yet is not overloaded with detail. In future editions the author might usefully incorporate a little more detail on the modern theory of strong electrolytes, which is desirable even in an elementary work.

*The Physiography of Burma.* By Dr. H. L. Chhibber. Pp. xi+148. (Calcutta, Bombay, Madras and London: Longmans, Green and Co., Ltd., 1933.) 3.8 rupees; 5s. 6d.

DURING the last dozen years or so, very great advances have been made in our knowledge of the geological structure and history of Burma. One of the most active workers in this field has been Dr. Chhibber, now a member of the Geological Survey of India and formerly a lecturer in the University of Rangoon. A little book on the physical geology of the country from his pen is therefore welcome as an authoritative summary of progress in a region that has hitherto been little known except by a few Government or oil-field geologists. All the special features which make Burma a land of peculiar fascination are adequately dealt with, from its mountains and river systems to its mud volcanoes and limestone caves. Each chapter has an excellent bibliography; there is a satisfactorily detailed index; and the forty illustrations, including sketch maps and photographs, are clear and effective. Dr. Chhibber is to be congratulated not only on his own extensive contributions but also on the skill with which he has compiled material from a variety of out-of-the-way sources into a thoroughly readable and stimulating book.

*Dix leçons d'astronomie.* Par Ernest Esolangon. Pp. iv+110+21 plates. (Paris: Gauthier-Villars et Cie, 1933.) 25 francs.

IN this delightful little book, the Director of the Paris Observatory offers to the general reader a broad canvas on which are depicted the outlines of the recent important achievements of astronomy. As might be expected from the author's professional eminence, the book is up to date. A too brief account of the work of Lemaître and Eddington on the expansion of the universe is relegated to an appendix; this section might, with advantage, have been given somewhat greater prominence. A large number of well-reproduced photographs of celestial objects enhance the value of the book to the general reader.