ish investigators in Radioactivity, this branch will be given special attention.

The names of the following scientists appear on the title-page as consulting staff: Sv. Arrhenius, Stockholm; W. H. Bragg, Adelaide; A. S. Eve, Montreal; O. Hahn, Berlin; W. H. Julius, Utrecht; A. Werner, Zurich; G. Bruni, Padua; Mde. Curie, Paris; C. E. Guilleaume, Paris; J. H. van't Hoff, Berlin; W. Marckwald, Berlin; W. Wien, Würzburg. The second issue shows the following additions to the associated list: B. B. Boltwood, New Haven; E. Goldstein, Berlin; John Joly, Dublin; St. Meyer, Vienna; A. Reychler, Brussels; J. W. Brühl, Heidelberg. We hope that the staff will be further strengthened by the co-operation of other English men of science who are to-day making such conspicuous contributions in Electronics and Radioactivity.

The first number of ION opens with a tribute to the founder of radioactivity, M. Henri Becquerel, by F. Soddy. The same author also has a paper on the charge carried by the α-particle. The other papers in the first issue are: Uranium and geology, by John Joly; the measurement of energy in the world of electrons, by H. W. Julius; Actinium C, a new quickly decaying product of actinium, by O. Hahn and Lise Meitner. Sixty-two pages are taken up by these contributions. Then follow twenty pages of reports by the authors of papers published elsewhere and notices of new books.

The journal pages are 7 x 11 inches. Clear type and a good quality of paper are used. Hasty proof-reading is evident. H. SCHLUNDT.

Analyse und Konstitutionsermittelung organischer Verbindungen. DR. HANS MEYER, o. ö. Professor der Chemie an der Deutschen Technischen Hochschule zu Prag. Zweite, vermehrte und umgearbeitete Auflage. Mit 1003 Seiten und 235 in den Text gedruckten Figuren. Berlin: Verlag von Julius Springer. 1909. Preis, 31 M.

The investigator in the field of organic chemistry who prepares a new compound must often recognize the necessity of going beyond the usual data obtained by ultimate analysis, and the theory of the reaction of formation, and seek to prove the structure by showing the presence of characteristic groups in the molecule of the new substance. This need is recognized and well met by the author of this work, who has here brought together a large number of methods for this purpose.

The subject matter is treated in three parts. The first deals with the methods of purification, elementary analysis, and molecular weight determination.

The second part, which covers 65 pages, and is not found in the older edition, contains the methods for determining the fundament of the molecule with chapters on oxidation, reduction, and alkali fusion, as means to this end.

Part three, which makes up the bulk of the book, treats of qualitative and quantitative methods of determining characteristic atomic groups. It is here that the research worker will find hundreds of methods described, accompanied by ample references to the original literature, and well indexed, which will enable him to quickly utilize what might cost much time and labor to find scattered through the journal literature.

The work has been thoroughly revised, some 300 pages have been added containing much new and valuable material, while some errors and matter of lesser value have been eliminated. The typographical work is well done. Altogether the book is one which will be found of great value in the research laboratory of the organic chemist, and especially so to the younger workers in this field. RICHARD S. CURTISS.

Kurzes Lehrbuch der organischen Chemie. By PROF. DR. A. BERNTHSEN. Tenth Edition. Prepared in collaboration with PROF. DR. ERNST MOHR. Braunschweig: Vieweg & Sohn. 1909. pp. xx + 640. Price, bound, 13 Mk.

The new edition of this well-known and admirable text-book is welcome. The material of former editions has been carefully revised and brought up to date. No important changes have been made in the general plan and scope of the book, or in the arrangement of its subject matter.

MARSTON TAYLOR BOGERT.

The Nature of Enzyme Action. By W. M. BAYLISS, D.Sc., F.R.S., Assistant Professor of Physiology, University College, London. London, New York, Bombay, and Calcutta: Longmans, Green & Co. 1908. pp. 90. Price, $1.00 net.

This is one of the "Monographs on Biochemistry," edited by R. H. Aders Plimmer and F. G. Hopkins, which are intended to present in an up-to-date and authoritative way a detailed account of certain subdivisions of the science. Professor Bayliss's own work on enzymes entitles him to speak from experience; and this monograph indicates clearly the first-hand acquaintance of the author with his subject. Enzymes are tentatively defined as "the catalysts produced by living organisms," and the author proceeds to consider to what extent the assumption is justified. The discussion is confined largely to general types of reaction, specific enzymes being referred to only by way of illustration. The nature of catalysis in general is reviewed succinctly, but in a suggestive style characteristic throughout. Distinctive properties of enzymes are associated with their colloidal character and elucidated by analogies with other organic and inorganic colloids. "Certain deviations from the behavior of most inorganic catalysts are found to depend upon the colloidal nature of enzymes, so that the reactions take place in a heterogeneous medium and the various phenomena depending upon surface action come markedly into play." Professor Bayliss advocates the view that there is a combination between enzyme and substrate, "adsorption-