vation and testing. Administrative devices—including grouping, acceleration, and enrichment—are described, and examples of each are given.

Educators will probably be most interested in the three chapters that describe curriculum and methods for teaching the gifted; programs in mathematics, in language, arts, and social studies, and in science are included. Discussion of vocational guidance and of the role of parents rounds off the educational topics.

Sprinkled throughout the book are chapters dealing with the psychological aspects of giftedness. Freehill differentiates among the terms *genius, talent,* and *giftedness,* although he makes little attempt to define gifted children, except by example. Intelligence is analyzed, and its growth and development are considered. Problems of learning and teaching such as motivation, transfer, evaluation, and structuring are discussed. In the final chapter the author discusses the development of emotions and character. In view of his interest in the psychology of gifted children, it is surprising that Freehill devotes only a few pages to the discussion of underachievement.

The book is a good one for in-service educational courses for teachers as well as for graduate teacher education courses in the education of the gifted.

ROBERT F. DEHAAN
Hope College, Holland, Michigan

Polymer Chemistry

Preparative Methods of Polymer Chemistry. Wayne R. Sorenson and Tod W. Campbell. Interscience, New York, 1961. viii + 337 pp. Illus. $10.50.

Preparative Methods of Polymer Chemistry deals with the details of polymerization of a very wide variety of important polymers and gives practical and detailed procedures for the synthesis and for the handling of these polymers. The preparations are the sort that could be accomplished in any well-equipped organic laboratory. In many cases the authors checked out the syntheses.

I feel that this will be a most useful book to a great number of chemists and that it fills a very definite need.

ARTHUR TOBOLSKY
Department of Chemistry,
Princeton University

Atomic Constants

The Fundamental Atomic Constants. J. H. Sanders. Oxford University Press, New York, 1961. 88 pp. Illus. $1.60.

One of the types of information hardest to find in a concise and readable form is recent experiments on fundamental constants in physics. Although many of the handbooks which are published from time to time give the latest values of fundamental physical constants, the values are usually presented in lists or tables; thus, it is impossible to come to any valid conclusion regarding the relative merits of various experimental values. It is, therefore, very good to find a small book devoting its pages exclusively to the problem of measurements of *e, h, m, N,* and *c.*

A teacher lecturing in modern physics always likes to have on hand information about the various ways in which the fundamental constants are measured and about their interrelations. Sanders' book is written in a way that makes the job of the physics teacher very easy and gives him enough background information so that he can present a consistent picture of experimental methods in determining acceptable values for the fundamental constants. In this the author has done a real service: he has discussed the newest methods in considerable detail, compared them with the older methods, and still kept his whole contribution to less than 100 pages. I am sure it would have been much easier to write a much longer treatise, but Sanders has accomplished the difficult job of presenting this material in a clear and brief fashion. It is certainly a book I would recommend not only to the teachers of physics but also to graduate and undergraduate students who need a source of ready reference to the precision of the constants which they must use.

The book is divided essentially into three parts: The early measurements of these constants, considerable detail on measurements of the velocity of light, and finally recent precise measurements and derivations of the best values. This arrangement is well thought out for the useful role which this small book will enjoy.

For the research scientist, the author has produced a very carefully indexed bibliography, so that the details on any particular measurement can be followed through the literature without difficulty. This is an essential part, since the book is a short review and since the detailed methods of treating the experimental data and of making the appropriate corrections have not been included. On the other hand, these details, which are of interest primarily to those trying to arrive at their own conclusions as to the best values can be located easily in the appropriate sources.

This small book is a welcome addition to the trend of producing monographs on specific subjects, designed to reduce the labor in finding one's way through the ever-increasing jungle of periodical literature.

SANBORN C. BROWN
Department of Physics,
Massachusetts Institute of Technology

Bacterial Genes and Viruses

Papers on Bacterial Genetics. Edward A. Adelberg. Little, Brown, Boston, Mass., 1960. xlvi + 400 pp. Illus. Paper, $4.50.

Papers on Bacterial Viruses. Gunther S. Stent. Little, Brown, Boston, Mass., 1960. xxx + 365 pp. Illus. Paper, $4.50.

Milestones in Microbiology. Translated and edited by Thomas D. Brock. Prentice-Hall, Englewood Cliffs, N.J., 1961. xii + 275 pp. Paper, $3.95.

Joshua Lederberg's compilation entitled *Papers in Microbial Genetics, Bacteria and Bacterial Viruses* (1951) appeared on the eve of great discoveries which materially increased our understanding of the fields covered. Edward Adelberg and Gunther Stent, two University of California scientists, have now selected additional papers and present them in two volumes. Adelberg's collection includes 27 articles; Stent's 25. Each volume begins with an editorial review and a bibliography: bacterial genetics, 177 titles; bacterial viruses, 164. The introductions themselves are valuable orienting, critical, and comprehensive reviews. "No apologies need be offered for a selection which must be largely arbitrary." Originally designed to aid students, the collections will prove of value to investigators and professors. All articles selected are presented in English and all tables, graphs, illustrations, and article bibliographies are included.

Different is the selection of historically important papers included in *Milestones in Microbiology* by Thomas D. Brock (Indiana University). Here,