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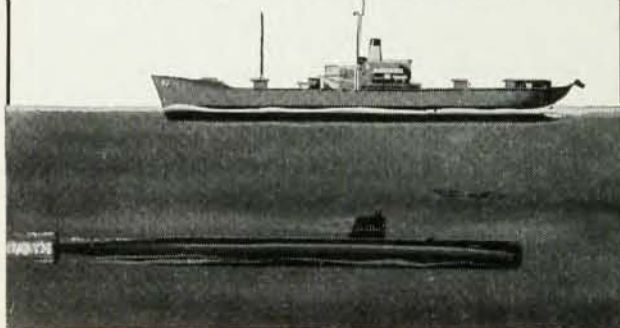
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physics, and engineering. He undoubtedly has the ability to make the material sound, logical, and inviting. What has happened to the old mechanisms of control?

Precipitation from Homogeneous Solution. By Louis Gordon, Murrell L. Salutsky, Hobart H. Willard. 187 pp. John Wiley & Sons, Inc., New York, 1959. \$7.50. *Reviewed by Stuart Rice, Institute for the Study of Metals, The University of Chicago.*

A homogeneous precipitation is, by definition, one which is accomplished by generation of the precipitant reagent in situ. This brief book gives an account of investigations in the field together with analytical procedures and directions for a number of classes of compounds—hydroxides and basic salts, phosphates, oxalates, sulfates, and sulfides. Some aspects of fractional precipitation and coprecipitation are also considered. The book will undoubtedly be of assistance in solving particular analytical problems but for most it is far too specialized a monograph to merit individual ownership.

Modern High School Physics: A Recommended Course of Study. By David Vitrogon. 88 pp. (Science Manpower Project Monographs) Bureau of Publications, Teachers College, Columbia U., New York, 1959. Paperbound \$1.50. *Reviewed by Ira M. Freeman, Rutgers University.*

THE Science Manpower Project of Teachers College, Columbia University, is an industry-supported group whose efforts are said to be directed toward the improvement of science education in the schools. The booklet under review, addressed to physics teachers in the senior high schools, outlines a course of study that "emphasizes the need to incorporate materials which have been made available by recent advances in knowledge, and to give special attention to the comprehension of basic theories and principles". The author goes on to point out that the purpose of his monograph is to "encourage the physics teacher to examine the course he is now teaching, and to assist him in the modernization of this offering".

This is a most laudable aim, and Mr. Vitrogon's work shows a considerable amount of ingenuity and originality. It was inevitable that the pioneering work of the Physical Science Study Committee would be followed by other attempts to modernize and revivify the traditional high-school physics course. The present book represents one effort in this direction; and while it purports to be only an outline and does not go on to develop its own text, laboratory, and adjunct materials it should stimulate many teachers who do not subscribe entirely to the PSSC treatment to work out treatments of their own. The resulting diversity would be all to the good, and might save us from seeing every laboratory bench in the land covered with ripple tanks in close array.

Modern High School Physics divides the subject into eleven units, bearing the following titles: Foundation of Mechanics, Wave Motion, The Fluid State, Heat—Energy in Motion, The Nature and Propagation of Light, Electricity and Magnetism, Alternating Current Phenomena, Electronics, Nuclear Energy, Relativity and Recent Advances in Physics.

The most useful part of the book is the general discussion at the beginning of each unit. The outline that follows in each unit is, in this reviewer's opinion, too brief to be of much use. Here the teacher should use his own ingenuity in the selection of actual topics. But if he has caught something of the spirit of Mr. Vitrogon's introductory discussions, his outline is apt to be a cut or two above existing ones in being comparatively free of descriptions of such hallowed items as refrigerators, streamlined trains, and portable x-ray machines.

There are places in the text where more precision of statement would have been welcome: Statics is termed the "conditions under which a body is in a state of equilibrium" (p. 19); one item listed under "Categories of Subject Matter" carries the title "Heat as energy in motion (radiation)" (p. 14); "disordered electromagnetic waves represent a form of heat which belongs to empty space" (p. 40); and an ion is somewhat unconventionally defined as "a fundamental physical particle with an electric charge" (p. 56).

In spite of the fact that the text often suggests a popular rather than a penetrating understanding of physical phenomena, the booklet is a step in the right direction; and it is to be hoped that it will encourage others to explore new ways of presenting the subject to the great majority of high-school physics students.

The Earth: Its Origin, History and Physical Constitution (4th Revised Edition). By Sir Harold Jeffreys. 420 pp. Cambridge U. Press, New York, 1959. \$13.50. Reviewed by S. F. Singer, University of Maryland.

FIRST published in 1924, this venerable book is now in its fourth edition. No major changes have been made compared to the third edition. As the author points out, the field of geophysics has become so vast that no single person can really be an expert in all aspects of it. This statement is unfortunately evident in the book by the absence of any discussion of the subject of terrestrial magnetism. However, all the topics which are discussed can claim Jeffreys as one of the leading authorities and originators.

The publication of this edition comes at a time of renewed interest in the properties of the earth and of other planets. Here the plan of the author has been to apply planetary theories not just to the earth but indeed to extend them to other planets, which is of course very commendable. This feature of the book is not reflected in its title nor in its table of contents. Since a simple measurement, such as the density of the surface rock of the moon or of Mars or Venus,

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