

course, quite obvious to the "participant" who knows the theoretical jargon and is familiar with the experimental facts.

Toulmin's main thesis is that the philosopher has generally tended to oversimplify science, to view it as a logical process of generalization, induction, or deduction, while it is really a more complicated undertaking, not to be summarized in any simple formula. This point of view will probably be more popular among scientists than philosophers, but the book should be valuable to both.

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Physik der Festen Körper. Volume 8, Part I, 228 pp.; Volume 9, Part II, 235 pp. Edited by Georg Joos. Dieterich'sche Verlagsbuchhandlung, Wiesbaden, Germany, 1947, 1948. DM 10.00 each.

Following the Second World War the military governments of the British, French, and U. S. Zones of Germany, by means of their respective FIAT's (Field Information Agency, Technical), supervised the preparation in German by German scientists of the *FIAT Review of German Science*. A check at the Brookhaven library indicates that at least eighty-four consecutive volumes were issued. The stated purpose was to "assist in informing international science of research done in Germany through the war years . . . (by presenting) . . . a complete and concise account of the investigations and advances of a fundamental scientific nature made by German scientists in the fields of biology, chemistry, mathematics, medicine, physics and sciences of the earth during the period May 1939 to May 1946." Thus, volumes 1-7 deal with pure and applied mathematics; volumes 8-19 with physics, electronics, geophysics; volume 20, astronomy; etc.

The original limited editions were transmitted by the respective FIAT's to their governments for distribution but the manuscripts were turned over to a committee of German scientists for the purpose of printing other than the strictly limited edition for general distribution.

The present two paperbound volumes constitute reprintings for Germany of volumes 8 and 9 of the FIAT series. The subject matter of the two volumes is subdivided under six general headings: structure, mechanical properties, and thermodynamics of solids are treated by eighteen authors in Part I; magnetic properties, electrical properties, and optics by twelve authors in Part II. The reviews are concise and replete with references to the original papers. A short foreword by Sommerfeld in Part I draws attention to some of the more important advances and Part II closes with good author and subject indices and a useful check list of the principal German books in the field of solids published in the 1939-46 period under review.

It lies in the nature of the case that these summaries do not include similar or related work outside of Germany during the review period. That most of the material can no longer be considered as new must

be attributed in large part to the success of the original FIAT effort. Nevertheless, these volumes will continue to provide excellent reference channels to the German work in this field during the war period.

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Moderne Messmethoden der Physik. Part I, Mechanik-Akustik. By Franz X. Eder. 340 pp. Deutscher Verlag Der Wissenschaften, Berlin, Germany, 1952. DM 13.30.

The present volume, covering mechanics and acoustics, is the first of a projected four part compendium on modern methods of measurement in physics. The succeeding volumes will be: II, *Thermodynamics*; III, *Electrophysics*; and IV, *Optics and Atomic Physics*. It is the author's intention to provide a comprehensive summary of the physics underlying presently available methods of measurement, particularly recognizing the increasing use of electrical procedures, to serve as a text for university students in physics and as a reference work for research physicists, engineers, and others in neighboring fields who may be called upon to evaluate and select a suitable measuring method for a given problem. The foreword concedes the general similarity in purpose and level to the well-known "Kohlrausch" book on experimental physics.

Fourteen sections are devoted to mechanics dealing with fundamentals (sensitivity of eye and ear, errors and precision), lengths and angles, time, mass, volume, density, high and low pressures, velocity, force, mechanical vibrations including a brief treatment of servo systems, elasticity and hardness, production and properties of single crystals, viscosity, and surface tension.

The seven sections under acoustics treat basic concepts, transducers, sound sources, microphones, field quantities, propagation constants, and wave form analysis.

There are almost 400 references to original papers in the mechanics part and over 150 in acoustics. The table of contents seems to be a more useful guide for finding material in the text than the rather brief two page subject index. The book should not only be useful as a physics reference for students, teachers, and researchers, but would serve well as material for classes in scientific German and for those who wish to increase their command of German terminology in physics on their own.

The title page of this volume indicates that it is Volume I of a larger series *University Texts in Physics* under the general editorship of Franz X. Eder and Robert Rompe.

R. A. B.

Design For a Brain. By W. Ross Ashby. 260 pp. John Wiley and Sons, Inc., New York, 1952. \$6.00.

W. Ross Ashby's *Design for a Brain* is a clearly-written, informative, stimulating—sometimes even exciting—book whose major fault consists in its mislead-