# Book Reviews

***Encyclopedia of vocational guidance.*** (Vols. 1 & 2.) Oscar J. Kaplan. (Ed.) New York: Philosophical Library, 1948. Pp. xxi + 1422. $18.50.

The editor of this most significant two-volume work modestly states in the preface that "this book is encyclopedia in a relative sense; it does not pretend to cover in great detail all phases of the guidance field." Though the statement is literally correct, the compilation is a monumental contribution to applied science. The material presented is concise, clear, pragmatic, and sufficiently comprehensive to serve well those who are concerned with the practical phases of vocational guidance and who might well be confused by theoretical discussions of some of the unsettled areas of psychological science. Dr. Kaplan has assembled an imposing array of contributors, some 287 in number, representing many disciplines such as education, economics, psychology, psychiatry, medicine, and statistical science. The more useful aptitude test procedures are well presented, and the reference material includes sufficient data anent sources so that the articles can be used as the starting point for further studies. Particularly interesting to those in the social sciences are the contributions describing the postwar status of vocational guidance in the Netherlands, Portugal, Switzerland, Australia, and New Zealand.

The significant shifts in age distribution in our population structure and the growing problem of vocational placement of the aging and those with various handicaps from traumatic (war) injuries or chronic progressive diseases of later maturity make vocational guidance of immediate and urgent concern to millions of individuals. For professional counselors and personnel administrators, medical clinicians, ministers, nurses, educators, insurance administrators, the military forces, public health officials, veterans administration personnel, and even legislators, the work is very nearly a *must*. The multiple-discipline approach is a significant step forward in the application of science to social planning.

The volumes are attractively bound but are unnecessarily bulky because of the poor quality of the paper; future printings deserve a much better grade of material. The typography is good. The alphabetical encyclopedia arrangement of the contributions avoids the necessity of an index.

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***Modern colloids: an introduction to the physical chemistry of large molecules and small particles.*** Robert B. Dean. New York-Toronto-London: D. Van Nostrand, 1948. Pp. xi + 303. (Illustrated.) $3.75.

This latest addition to the literature on colloid chemistry in textbook form starts with a definition of what colloid science is, a discussion of types of colloids, and a list of sources for published information. The following chapters cover methods for determining size and shape of colloidal particles, liquid surfaces and their characteristics, adsorption phenomena and their application in science and industry, and high polymers, their synthesis, and properties. Special chapters are devoted to plastics, resins and rubber, carbohydrates and proteins, emulsions and foams, hydrous oxides and silicates, and also to colloidal ions and their electrokinetics and to lyophobic colloids or suspensoids.

The author deserves credit for writing a book to stimulate the interest in colloid chemistry in such diversified fields as chemistry, biology, medicine, and agriculture. The reviewer, a colloid chemist himself, feels, however, that the book covers far too much for an introduction to colloid chemistry and that its organization is more apt to confuse the reader than to enlighten him. In addition, it will give the reader who is not familiar with what modern colloid chemistry already stands for an entirely wrong impression. To offer some proof for this opinion, the following examples might suffice:

The physics and chemistry of surfaces is not just an intimate part of colloid science, but colloid science itself. The statement that nearly all of the properties of lyophobic colloids are due to the presence of impurities is contrary to well-established facts.

A more elaborate discussion of ultramicroscopes, their construction, and application would be far more appropriate than writing a eulogy of the electron microscope, which also has its limitations, particularly when studying lyophilic colloids. Ultramicroscopy by incident light and its applications in research pertaining to lyogels is not mentioned. That solutions of proteins and other high polymers show no Faraday-Tyndall effect is contrary to fact. In the chapter on liquid surfaces, the drop weight, drop number, and pendant drop methods are not mentioned. The statement that a rigid gel must have its solid component extending continuously through the system and that a thixotropic gel sets only when the particles associate is contrary to experimental evidence. Finally, the discussion of rubber latex is incomplete because it disregards the most basic colloidal phenomena.

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# Scientific Book Register

BORING, EDWIN GARRIGUES, LANGFELD, HERBERT SIDNEY, and WELD, HARRY PORTER. (Eds.) *Foundations of psychology.* New York: John Wiley; London: Chapman & Hall, 1948. Pp. xv + 632. (Illustrated.) $4.00.

MCLACHLAN, N. W. *Modern operational calculus with applications in technical mathematics.* Cambridge, Engl.: at the Univ. Press; New York: Macmillan, 1948. Pp. xiv + 218. (Illustrated.) $5.00.

SUITS, C. G., HARRISON, GEORGE R., and JORDAN, LOUIS. (Eds.) *Applied physics: electronics, optics, metallurgy.* Boston: Atlantic-Little, Brown, 1948. Pp. xiii + 456. (Illustrated.) $6.00.