Despite the broad scope of the book, this is by no means a comprehensive account or an exhaustive review of recent work. The papers look forward rather than at the past; they are thought-provoking, speculative, and often controversial. Although this makes the book a poor reference, it certainly extends its useful life-span as an intellectual stimulant. Indexes are provided both by subject and author; but, since the symposium does not focus on a specific area of research in the usual sense, these will not be particularly useful to most readers. The symposium was held nearly two years ago, but the papers appear to have been brought up to date before publication.

A better starting point for an advanced course or seminar in animal physiology would be hard to find. I have seen no finer introduction to the hardships and rewards encountered in studying function in macroscopic systems.

STEVEN VOGEL

Harvard University,
Cambridge, Massachusetts

Summary and Guide

Elementary Coordination Chemistry. Mark M. Jones. Prentice-Hall, Englewood Cliffs, N.J., 1965. xvi + 473 pp. Illus. $18.60.

Coordination chemistry has undergone a spectacular development in the past 25 years. Powerful new tools and methods of measurement, new preparative techniques, and ever more sophisticated theoretical treatments of chemical bonding have joined forces to provide a truly revolutionary increase in chemical understanding.

Inorganic chemists, chemical physicists, and biochemists have all contributed to this growth of knowledge and have, in turn, been enriched by the cross-fertilization of ideas. It is difficult to imagine a field of chemistry that has not been profoundly affected by the developments in what has come to be known as coordination chemistry.

In the preface of his book, Mark Jones begins by stating that his purpose is "to provide an elementary introduction to that vast and fascinating fund of information which is covered by the term 'coordination chemistry.'" In this goal, the author has succeeded admirably. The subjects covered in the book are best surveyed by listing the 12 chapter titles: "Introduction"; "Nomenclature and types of coordinating agents"; "Some aspects of descriptive coordination chemistry"; "Typical complexes of the various elements"; "The nature of bonding in coordination compounds"; "Some general aspects of the behavior of complexes"; "Determination of the structures of coordination compounds"; "The determination of stability constants"; "Some types of coordination compounds of special interest"; "Some applications of coordination compounds"; "Some metal complexes of biological significance"; and "Thermochemistry of coordination compounds."

As a teaching device for the relative newcomer, this book is to be highly recommended. Here he will find a wealth of well organized and documented information. His curiosity is bound to be aroused by the sustained enthusiasm for the subject which pervades this book. The numerous references provide an excellent guide to the literature, and the exercises given at the end of each chapter are calculated to stimulate thinking along experimental lines.

On the other hand, so vast a fare in the space of about 450 pages inevitably leads to a feeling of frustration on the part of anyone who seeks detailed information. Thus, the coordination chemistry of the actinide elements, for example, is treated in 1½ pages of text.

In summary, the book is a distinct asset to the literature in this field, and it should serve its intended purpose as a useful introductory guide very well.

DIETER M. GRUEN

Chemistry Division,
Argonne National Laboratory

New Books

Mathematics, Physical Sciences, and Engineering

Advances in Petroleum Chemistry and Refining. vol. 10. John J. McKetta, Jr., Ed. Interscience (Wiley), New York, 1965. 587 pp. Illus. $27.50. Ten papers: "The composition of petroleum" by R. H. Hunt and M. J. O'Neal, Jr.; "Production and distribution of liquid hydrogen" by C. R. Baker and L. C. Matsch; "Hydrogen conservation in petroleum refining" by G. P. Hinds, Jr.; "Hydrocarbon gasification processes" by G. J. Van den Berg, W. R. Dammers, and L. W. ter Haar; "Modern dewaxing technology" by S. Marple, Jr., and L. J. Landry; "Naphthalene from petroleum" by H. D. Ballard, Jr.; "Nonconventional polymerization of vinyl monomers" by Norman G. Gaylord, David S. Hoffenberg, and Herman F. Mark; "Nitrogen fertilizers" by S. Strelzoff and L. H. Cook; "Nitroparaffin fuels" by R. S. Egly and E. S. Starkman; and "Engine fuel additives" by M. R. Barusch and J. H. Macpherson.

Analytic Functions of Several Complex Variables. Robert C. Gunning and Hugo Rossi. Prentice-Hall, Englewood Cliffs, N.J., 1965. 331 pp. Illus. $12.50. Prentice-Hall Series in Modern Analysis, edited by R. Creighton Buck.

Boundary Value Problems. A. G. Mackie. Hafner, New York, 1965. 266 pp. Illus. $5.50. University Mathematical Monographs, edited by D. E. Rutherford.

A Brief Trigonometry. Robert R. Christian. Blaisdell (Ginn), New York, ed. 2, 1965. 124 pp. Illus. Paper, $1.75. Pure and Applied Sciences Series, Robert E. K. Rourke and Seymour Schuster, Consulting Eds.

Calculus of Several Variables. Casper Goffman. Harper and Row, New York, 1965. 192 pp. Illus. $7. Harper's Series in Modern Mathematics, edited by I. N. Herstein and Gian-Carlo Rota.

Chemical Thermodynamics. A course of study. Frederick T. Wall. Freeman, San Francisco, ed. 2, 1965. 461 pp. Illus. $9.25.

A Collection of Problems on a Course of Mathematical Analysis. G. N. Berman. Translated from the first Russian edition (Moscow, 1947) by D. E. Brown. Ian N. Sneddon, Translation Ed. Pergamon, London; Macmillan, New York, 1965. 602 pp. Illus. $12.50.

Comparative Inorganic Chemistry. B. J. Moody. Elsevier, New York, 1965. 438 pp. Illus. $6.50.

Computer Methods in Solid Mechanics. Joseph J. Gennaro. Macmillan, New York, 1965. 304 pp. Illus. $10.95. Macmillan Series in Civil Engineering, edited by Gene M. Nordby.

Concepts in Physics. Reuben Benumof. Prentice-Hall, Englewood Cliffs, N.J., 1965. 576 pp. Illus. $13.

Design Theory and Data for Electrical Filters. J. K. Skwirzynski. Van Nostrand, Princeton, N.J., 1965. 729 pp. Illus. $29.50.

Descriptive Geometry. E. G. Pare, R. O. Loving, and I. L. Hill. Macmillan, New York, ed. 3, 1965. 393 pp. Illus. $6.50.

Diene Synthesis. A. S. Onishchenko. Translated from the Russian edition (Moscow, 1963) by L. Mandel. Israel Program for Scientific Translations, Jerusalem, 1964; Davey, New York, 1965. 701 pp. Illus. $22.75.

Difference Algebra. Richard M. Cohn. Interscience (Wiley), New York, 1965. 371 pp. $12.95. Interscience Tracts in Pure and Applied Mathematics Series, No. 17, edited by L. Bers, R. Courant, and J. J. Stoker.

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