York, NY 10003, 1968. 16 × 23.5 cm. x + 496 pp. Price 115s \$21.00.

Emulsion Science is divided into five sections or chapters as follows: (1) Principles of Emulsion Formation, by E. S. R. Gopal; (2) The Theory of Stability of Emulsions, by J. A. Kitchener and P. R. Mussellwhite; (3) General Properties of Emulsions and their Constituents, by Philip Sherman; (4) Rheology of Emulsions, by Philip Sherman; (5) Electrical Properties of Emulsions, by Tetsuya Hanai.

The author-editor has done an excellent job in correlating and unifying the contributions of the other authors. The text is well organized and comprehensive with good continuity and a minimum of overlap. The first three sections are primarily descriptive, but sufficiently quantitative to give adequate depth to the subjects covered. While some differences in style and organization may be expected, only a minimum is actually encountered. For example, demulsification is discussed in Section 1 while Section 2 is devoted entirely to emulsion stability. Section 1 includes a discussion on choice of emulsifying agents while Section 3 includes a detailed discussion of the HLB system. Careful attention has been given to minimizing repetition in such instances.

The first three sections cover about 217 pages of the text, while the latter two sections are more theoretical and quantitative, occupying about 260 pages of the text. The section on rheology is rather unique in its approach to rheological properties. Much of the discussion is based on structural effects within the emulsion, not merely on measurement data.

Each section of the text is well documented and contains sufficient breadth and depth to maintain the interest of a broad cross-section of readers.

> Reviewed by Robert V. Petersen College of Pharmacy The University of Utah Salt Lake City, Utah

Drugs Affecting the Central Nervous System. Vol. 2 of the Medicinal Research Series. Edited by ALFRED BURGER. Marcel Dekker, Inc., 95 Madison Ave., New York, NY 10016, 1968. xv + 437 pp. 16 \times 24 cm. Price \$19.75.

This second volume of a series continues the structural approach to drugs affecting the central nervous system. Eight chapters cover the general topics of narcosis, morphine-like analgesics, antidepressants, psychotomimetic agents, 1,4-benzodiazepine derivatives, centrally acting muscle relaxants, and substituted phenothiazines. The chapter on psychotomimetic agents by Albert Hofmann is of considerable interest. It covers not only his personal discovery of the effects of LSD, but is an excellent review of the naturally occurring psychomimetic drugs. As would be expected, the relationship between chemical structure and clinical action, value, or use is not a major contribution of this

volume. There is evidence that the familiar nonagreements as to the meaning of words such as tranquilizer, relaxant, antidepressant are present between the various authors. This, however, should not detract from the main value of the series: the presentation in one place of large numbers of chemically related compounds with many of their comparative pharmacologic effects. The chapter on morphine-like analgesics is outstanding. The chemical anatomy of the many compounds is clearly described. There is a precise definition of the meaning of "morphine-like action." There is no attempt made to describe the morphine-like compounds clinically. This volume, like the first, is recommended for all serious students of pharmacology and pharmaceutical chemistry.

> Reviewed by R. P. Ahlquist Medical College of Georgia Augusta, Ga.

Characterisation and Manipulation of Powders. The Pharmaceutical Press, 17 Bloomsbury Square, London, W.C.1., England, 1967. viii + 180 pp. 14 × 22 cm. Price 50s. (1s. 6d. p/p).

This book is a copy of the handbook prepared for a one-week postgraduate course in Powder Technology. The course was organized by the Pharmaceutical Society of Great Britain and directed by Professor E. Shotten of the School of Pharmacy, University of London in April 1966. The book contains outlines of the lectures given by ten recognized authorities in the field of powder technology, plus 37 experiments and three demonstrations. The experiments and demonstrations were written by thirteen scientists, most of whom are well-known in the pharmaceutical field.

The book is intended to be a practical manual for industrial pharmacists and others who are interested in the characterization and manipulation of powders. The lectures and experiments cover a broad area including particle size analysis, surface area measurement, particle cohesion, size reduction, mixing, granulation, fluidization, classification, crystallization, *elc.* Unfortunately, as noted in its Introduction, this book does lack balance, polish, and accurate syntax. The reader will find some of the experiments confusing, especially those describing operation of apparatus which is not named or described. There is also a lack of continuity which is not helped by placing the lecture outlines in the back of the book. The brevity of the course and size of the book also results in the omission of much important technology.

Despite these shortcomings, this book does provide an assemblage of information which should be useful to teachers and other workers in this field.

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