

## REVIEWS

**The Vinca Alkaloids: Botany, Chemistry, and Pharmacology.**

Edited by WILLIAM I. TAYLOR and NORMAN R. FARN-SWORTH. Dekker, New York, NY 10016, 1973. 357 pp. 16 × 24 cm. Price \$32.75.

The dedication to Jozef Mokry is most appropriate. I knew him for but a short while during which time it was my privilege to become his friend. His untimely death in 1966 ended the brilliant career of a dedicated scientist. He was indeed a gentleman and a gentle man.

The editors have done an excellent job in selecting an outstanding group of contributors to review all pertinent aspects of this genus. The taxonomy is lucidly presented and should settle once and for all the *Vinca-Catharanthus* controversy. The volume includes material presented at the 1964 symposium on the subject, sponsored by the American Society of Pharmacognosy, and follows the developments for the next 6-7 years, the latest cited reference being 1971.

This volume was apparently a long time in the making, and as a result the accomplishments of the early '70's are not included. While this may detract somewhat from its value, it is thorough for the years covered. This reviewer has never been enamored with the photo-offset process of printing, especially at the price of \$32.75. However, I still consider this volume to be a worthy addition to the library of the serious alkaloid researcher.

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**Methods of Analysis of Anti-Epileptic Drugs.**

Edited by J. W. A. MEIJER, H. MEINARDI, C. GARDNER-THORPE, and E. VAN DER KLEIJN. American Elsevier Co., Inc., 52 Vanderbilt Ave., New York, NY 10017, 1973. xvi + 258 pp. 17 × 25 cm. Price \$26.50.

This book reports on the proceedings of the Workshop on the Determination of Anti-Epileptic Drugs in Body Fluids held at Noordwijkerhout, The Netherlands, April 1972. The book is divided into four parts and each part contains from four to eight papers. There are reference and discussion sections at the end of each paper. There are a total of 23 papers given in the volume. At the end of each of the four main sections there is a more complete discussion on the papers given.

Part I gives the rationale for the need to determine blood levels of antiepileptic drugs to determine dosage schedules properly. The section also gives some pharmacokinetic concepts as they relate to epilepsy. The other three sections give detailed reports on spectrophotometric, fluorometric, thin-layer, and gas chromatographic analyses of antiepileptic drugs. The problems of derivatization, interference by metabolites, and the effect of multiple-drug therapy on analytical procedures are frequent topics of discussion in the book. A very wide and complete list of antiepileptic drugs is discussed and detailed. Analytical procedures for all drugs commonly used, whether alone or in multiple-drug therapy, are given. Gas chromatography is by far the preferred analytical technique.

The book contains a list of the chemical and proprietary names of the common antiepileptic drugs which would be useful to both the clinician and analyst alike.

There is a section summarizing the various analytical procedures as to drugs analyzed, extraction procedures, gas chromatographic conditions, retention times, and average blood levels found in patients. There is also a cumulative bibliography section and a subject index.

Anyone who has an interest in the drug therapy of epileptics or the analysis of blood levels of antiepileptic drugs will find this book to be very useful. The book is an excellent summary of the current state of the analysis of antiepileptic drugs and details the problems that still exist in the field.

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**Temporal Aspects of Therapeutics.**

Edited by J. URQUHART and F. E. YATES. Plenum Press, Div. of Plenum Publishing Corp., 227 West 17th St., New York, NY 10011, 1973. 213 pp. 16.8 × 25.7 cm. Price \$14.50.

This book, the second volume of a series, represents the proceedings of a conference held October 18-20, 1972 and sponsored by the innovative Alza Corporation of Palo Alto, Calif. It speaks to biochemists, pharmacologists, and endocrinologists about the need for more polyparameter quantitative experiments and their interpretation by multivariate analysis. While simple versions of such experiments are becoming common in the area of pharmacokinetics, they are rarely conducted and published by the above specialists. Such experiments allow for the construction of dynamic mathematical models from which extrapolations can be made relevant to normal/abnormal life processes, the interaction of drugs and life processes, and the interaction of multidrug and multilife processes. Insights achieved from such extrapolations demand further polyparameter experiments, etc. This volume focuses on only one such dynamic parameter, time, and proceeds from basics up to the design of effective drug delivery systems. Listing of chapter headings (authors) indicates the logical progression of the material presented: The Biological Time Scale (H. J. Morowitz), Temporal and Hierarchical Organization in Biosystems (F. E. Yates and A. S. Iberall), Time and Timelessness in Biological Clocks (A. T. Winfree), Sequential Assembly of Virus Particles (D. Kaiser), Temporal Aspects of Macromolecular Synthesis in Eukaryotic Cells (E. B. Thompson), Hormonal Control of the Menstrual Cycle and Ovulation in the Rhesus Monkey (E. Knobil), Pharmacokinetic Aspects of Controlled Drug Delivery Systems (G. Levy), Cell Proliferation Characteristics and Cancer Chemotherapy (S. Perry), Chronopharmacology in the Treatment of Hypertension with Diuretics (W. J. Meyer, III, C. S. Delea, and F. C. Bartter), Testosterone Polydimethylsiloxane Implants and Contraception in Male Rabbits (L. L. Ewing, C. Desjardins, and L. G. Stratton), and Progress Towards an Implantable Glucose Sensor and an Artificial Beta Cell (J. S. Soeldner, K. W. Chang, S. Aisenberg, and J. M. Hiebert). Each presentation is accompanied by abundant references and is followed by a roundtable discussion by the participants. These discussions are often more illuminating than the corresponding presentations. This volume is an excellent scientific book and is highly recommended. Its language is both academic and technical. It will not appeal to those individuals operating pragmatically in the traditional random mode. A practicing physician at the conference made the following remark at the end of the first paper and was not heard from again, "For God's sake, please try to make things as simple as possible."

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