previous volumes, the relationships between drug levels, therapeutic response, and special disease states are discussed.

The following monographs are contained in this volume:

Chapter I, "The Renal Excretion of Drugs" (W. R. Hewitt and J. B. Hook), provides a comprehensive review of the important physiological processes whereby drugs are processed by the kidney. This excellent review contains 202 references.

Chapter II, "Pharmacokinetics and Metabolism of Diuretics" (R. M. J. Ings and L. A. Stevens), containing 436 references, has been devoted to the following classes of diuretics: carbonic anhydrase inhibitors, thiazides, loop and uricosuric agents, potassium-sparing agents, mercurials, and osmotic diuretics.

Chapter III, "Metabolism and Pharmacokinetics of Antihyperlipidaemic Agents" (M. N. Cayen), describes the absorption, distribution, metabolism, and excretion of the following therapeutic agents: clofibrate and congeners, nicotinic acid, and absorbable and nonabsorbable lipid-lowering agents. The review also contains discussions concerning drug interaction and the effects of this class of compounds on the liver. A total of 314 references have been cited.

Chapter IV, "Aliphatic Nitriles: Metabolism and Toxicity" (A. E. Ahmed and N. M. Trieff), contains 257 references. This chapter summarizes the metabolism, toxicity, and environmental impact of aliphatic saturated, unsaturated, and substituted nitriles.

Chapter V, "The Metabolism and Activation of Benzo[*a*]pyrene" (C. S. Cooper, P. L. Grover, and P. Sims), is an outstanding monograph in which the authors have compiled and reviewed the information in 447 references concerning the metabolism and activation of benzo[*a*]pyrene. The reaction of its metabolites with DNA and their involvement with mutagenesis are discussed.

Chapter VI, "Relationship Between Metabolism and Toxicity of Xenobiotics in Avian Species" (A. R. Buckpitt and M. R. Boyd), provides valuable insights into the use of the avian species to predict specific metabolites of a toxicant and its relationship to target tissue toxicity (82 references).

Reviewed by Lawrence A. Pachla
Warner-Lambert/Parke-Davis
Pharmaceutical Research Division
Pharmacokinetics/Drug Metabolism
Ann Arbor, MI 48105

Pharmaceutical Quality Control. By Dr. WILLIAM F. HEAD, JR. Exposition Press, Inc., 325 Rabro Drive, Smithtown, NY 11787-0817. 1983. 90 pp. 15.5 × 23.5 cm. Price $8.00.

In 90 pages Dr. Head covers an enormous amount of information about the manufacture and control of pharmaceutical products. When you start to read such a short book on such a vast subject, there is considerable doubt that it is possible to do the subject justice.

In order to cover the subject of pharmaceutical quality control, which Dr. Head does reasonably well, he is forced to use a great many generalizations. The style in which the book is written could have the uninformed reader believing that the approach stated in the multitude of situations discussed is the only accepted way to perform the task being discussed. This is certainly far from the actual situation in the pharmaceutical industry. For example, there are several references to the use of stickers to identify the status of incoming, in-process, and finished products. The use of stickers is just one of several ways pharmaceutical companies identify the status of materials. Today more and more companies use computerized systems for inventory control and find these systems equally effective as the sticker system at a considerably reduced cost. This is not to say that the sticker system is no longer used or acceptable; there are probably many companies still using this system effectively.

This brings us to the critical issue of the audience for whom the book is written. The author singles out students of analytical and pharmaceutical chemistry, who have relatively little idea of the objectives of how to manage or work within a quality control organization. This is a limited audience. But, on careful examination it represents the initial work experience of many of the people who manage the quality control organizations of a large number of pharmaceutical companies. By reading this book, you will not learn what a quality control manager in the pharmaceutical industry does, you will not learn quality control statistics, nor will you learn the various skills of the quality engineer as they apply to the pharmaceutical industry. However, you will get a good view of many of the basic situations the quality control professional in the pharmaceutical industry frequently faces and how some companies handle these tasks.

Reviewed by L. Pasteelnick
Director of Quality Assurance
Parke-Davis div.
Warner-Lambert Company
Morris Plains, NJ 07950