

## BOOK REVIEWS

Praveen Tyle (Editor), *Specialized Drug Delivery Systems Manufacturing and Production Technology*, Marcel Dekker, New York, NY, 473 pp., \$ 125.00.

Pharmaceutical technology has undergone a significant transition in the past several decades with increasing attention being given to the development of specialized drug delivery systems. The information available on these delivery systems is mainly in the research literature based on small scale laboratory fabrication procedures. The aim of the present volume is to fill the gap between laboratory scale procedures and full scale commercial production and marketing of specialized pharmaceutical systems.

The book is divided into two parts: Part I - Basic Considerations - contains an introduction to specialized drug delivery systems, a chapter on organizing the transfer of pharmaceuticals from research to production and a lengthy chapter on U.S. Food and Drug Agency (FDA) regulations for the production of specialized drug delivery systems. Chapter 1 provides a brief overview of drug delivery system design and objectives. Chapter 2 is brief and provides advice as to how to transfer technology from research to production. Chapter 3 on FDA regulations is the longest chapter in this volume constituting approximately one-third of the length of this book. It appears to be comprehensive in covering FDA regulations and, while undoubtedly of interest to the production specialist, may also be of interest to the novice and serve as an introduction to the complexity of Federal regulation in the health care industry.

Part II covers specific applications. Individual chapters are devoted to microencapsulation, nanoparticles, liposomes, dispersed drug delivery systems, hydrogels, multi-layer matrix systems for transdermal drug delivery, soft gels

and aerosol products. These chapters provide valuable information if one is interested in the production of one of the covered specialized delivery systems. Though undoubtedly of greater interest to industrial scientists in the drug delivery field, they may also be of use to researchers in providing them with some insight into the complex issues of scale-up and production of specialized drug delivery systems.

This volume is undoubtedly of the greatest use for the industrial scientist concerned with the scale-up and production of one of the covered drug delivery systems. It may also be of use to the scientist and researcher as supplemental reading providing some perspective on the complexity of the production and regulatory environment of the drug delivery systems field.

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R.C. Scott, R.H. Guy and J. Hadgraft (Editors), *Prediction of Percutaneous Penetration. Methods, Measurements, and Modelling*, IBC Technical Services Ltd., London, 1990, pp., £75.00.

This volume collects the presentations and posters from the symposium of this title held in April, 1989, and contains a diverse collection of studies mostly by the European scientific community including the cosmetic and pharmaceutical industry. The work should provide a useful reference for ongoing work in percutaneous absorption rather than serve as a text for novices or deal with fundamentals of skin transport.

The collected sessions emphasize *in vitro*, *in vivo*, animal, and formulations methodology. Many of these methods have been collected be-