Joseph T. Piechocki, Karl Thoma (Eds.), Pharmaceutical Photostability and Stabilization Technology, Informa Healthcare (2006). 445 pp., \$ 199.95. ISBN 0-8247-5924-9

This book is Volume 163 in the renowned Drugs and the Pharmaceutical Sciences Series. It is for sure the last piece of work within the scientific oeuvre of Karl Thoma, published 4 years after he passed away. It can be regarded as homage to Karl Thoma, having been one of the first pharmaceutical scientists who was dealing intensively with photostability of drugs and drug formulations. In this context it is the aim of this volume to give the user an understanding of the scientific background of photochemical reactions, photostability testing, and formulation strategies to overcome photoinstability.

The book is divided into 19 chapters ranging from "History of Pharmaceutical Photostability Development" over "Radiometry/Photometry" to "Photodegradation and Photoprotection in Clinical Practice".

This book includes contributions from international experts and offers a lot of information on photostability. It brings together the general chemical aspects as well as the more advanced and specific things related to photostability testing, e.g. the selection of the most appropriate photon source and actinometer. Its main emphasis is on the technical aspects in the light of the respective ICH guideline. Pharmaceutical Photostability and Stabilization Technology – and here especially chapter 1 – includes a great number of references to current literature in the field and offers an opinion on future opportunities and challenges.

This book is one of only a very few dealing with this topic. Most chapters are based on data from 2001 and earlier. However, progress in the area of photostability seems to be comparably slow. Thus the given information can be regarded as up-to-date. All in all, this book can be recommended to anyone involved with new drug development, production, and control in the pharmaceutical industry.

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Endotoxins – Pyrogens, LAL Testing and Depyrogenation, Kevin L. Williams (Ed.), Informa Healthcare, New York, Oxon (2007). 419 pp. ISBN 0-8493-9372-8

Volume 167, entitled "Endotoxins", appeared now in the third edition as part of the well-known series of textbooks and monographs on "Drugs and the Pharmaceutical Sciences" by informa healthcare. In this book Kevin Williams from Eli Lilly & Co., Indianapolis, together with 6 coauthors gives a comprehensive overview about a key issue of parenteral drug development – the consideration of endotoxins as parenteral contaminants and amebocyte lysate (LAL) as a means of detection and quantification of endotoxins.

Beside the index the book embraces 18 chapters and compared to the former edition some of them have been significantly re-edited or are completely new: The first section of the book is dedicated to a reflection about the foundations of pyrogen research as well as a historical reflection of the development and regulation of parenteral dosage forms. Further chapters range from microbial diversity and lipopolysaccharide heterogeneity, risk assessment in parenteral manufacture, the development, validation and regulation of the limulus assay, the rabbit pyrogen test, depyrogenation, to specifications of goods to be depyrogenated. A very interesting chapter covers case studies of pyrogenicity and conclusions, which can be drawn from these cases.

Among the new chapters, that had been added, are an overview of computer validation in regard to kinetic testing, a discussion of PAT (process analytical technology), an outline of mechanisms involved in bacterial sepsis and bacterial shock, and a revised chapter on automation, which sets the focus on commercially available instruments including fully automated systems. Several chapters dealing with assay development, its application validation and regulation are supplemented by examples of kinetic calculations within the text and by attachments containing FDA guidelines, which are helpful especially for those with less experience in handling of parenteral drugs or devices.

This new volume of "Drugs and the Pharmaceutical Sciences" is again a very well-written book, which provides comprehensive information in an explicable and userfriendly manner. The black- and white-illustrations as well as the tables are placed in a concise manner and in a wellbalanced relationship to the text. All chapters refer to an extended literature list, which gives a widespread overview about the respective subject. Generally, they are presented to a high standard, although their sequence is sometimes not really logic. For example, the final chapter on receptors, mediators and mechanisms involved in bacterial sepsis and septic shock would have been better placed in a direct context with the chapter on fewer and the host response. But otherwise, there is not much to criticize in this book, which might serve as a useful guide to many people working in the field of parenteral drug development.

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