Book Reviews

Cytotoxic Estrogens in Hormone Receptive Tumors. Edited by J. Raus, H. Martens, and G. Leclercq. Academic Press, New York. 1980. xii + 285 pp. 15.5 × 23.5 cm. $34.50.

A group of 68 prominent investigators involved in the design, synthesis, and evaluation of cytotoxic agents which might function via an estrogen receptor mediated process for the treatment of hormone-receptive tumors, viz., human mammary cancer, convened in Diepenbeek, Belgium, in September 1979 for a workshop on "The Use of Estrogens as Carriers of Cytotoxic Agents in Hormone Receptive Tumors". This volume details the reports and discussions of this workshop.

The proceedings in this volume are arranged into three sessions comprising three or four lectures and a panel discussion. Session One, "Structure–Activity Relationships of Estrogens and Antiestrogens", includes reports from J. A. Katzenellenbogen, F. J. Zeelen, J. P. Raynaud, and G. Van Binst. Session Two, "Synthesis of Cytotoxic Estrogens", includes reports from R. T. Blickenstaff, H. Hamacher, and R. B. Hochberg. Session Three, "Biological and Antineoplastic Effects", is subdivided into two parts, "Screening Methods" and "Clinical Studies". Included in this session are reports from J. L. Witliff, G. Leclercq, K. Griffiths, J. E. Van Lier, A. A. Sandberg, B. Forsgren, and R. Catane.

It is evident from this volume that the current assault on hormone-receptive tumors is being orchestrated by the considerable talents embodied in a number of widely varied disciplines. The strategies found outlined herein will very likely appeal to a most diverse group of participants in this particular battle.

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Chromatographic Science Series. Volume 14. Introduction to Analytical Gas Chromatography. History, Principles, and Practice. By John A. Perry. Marcel Dekker, New York. 1981. xviii + 426 pp. 17.5 × 25 cm. $29.75.

In general, John Perry has put together a most readable, enjoyable, and quite useful text dealing with the basic concepts and ideas of gas chromatography. It is certainly one of the better GC books that has appeared in recent years, and it is highly recommended for those just entering the field, as well as for those more experience analysts who would like to review both fundamental and advanced concepts in GC. As the title implies, this particular GC book emphasizes some history, more practice, and a great deal of principles. It makes no attempt to compile a large number of practical GC separations but rather approaches the practice of GC via fundamental theory and principles. It discusses general approaches to problem solving rather than more specific, individual problems that can be solved by the application of practical GC. In general, the book should prove quite useful to those actively involved in GC research/applications, as well as to those who are about to embark on such endeavours.

The text is broken down into about 14 separate but actually interconnected chapters, about half of which are almost totally devoted to GC principles. Thus, one finds chapters devoted to sample introduction, resolution via separability and plate number, the stationary phase, the Jones–van Deemter equation (2 chapters), etc. Much of the remainder of the text deals with more practical areas, such as column supports, detectors, GC columns, column temperature, derivatization in GC, GC–MS, qualitative analysis, and, finally, quantitative analysis. There is a very nice, although brief, discussion of GC–mass spectrometry. However, the in-depth possibilities of GC–MS, especially for trace analysis, are only hinted at and not dealt with sufficiently. The chapter on GC detectors is also somewhat lacking, in that it covers only the flame ionization, thermal conductivity, thermionic emission, and electron capture detectors. In view of the very large number of commercially available GC detectors today, it is rather surprising that only about three or four of these are covered in depth. Basic GC instrumentation is covered insufficiently; in fact, there is very little, if any, discussion, diagrams, and photos of any total GC system or instrumentation. There is little discussion of the latest GC instruments, major manufacturers and their current models, microprocessor control in GC instruments, and operations. Automated sample injection, automated gas flow rate monitoring, and related automated GC instrumental operations are almost totally omitted from discussion. There is an excellent section on automated data acquisition, data handling, data manipulations, and, finally, data presentation. It is difficult today to really practice high quality GC if one is not aware of the most recent advances in instrumentation design, instrumental operation, and overall operational performance.

The coverage of the literature is quite good in most chapters, although this reviewer feels that there is an overabundance of somewhat "older" references in many places. Almost every chapter has a separate section entitled "recent developments", which attempts to cover the very latest advances in each of these areas. These particular sections deal with the literature for the past few years, but it is felt that they could have been longer and more detailed. In summary, I would recommend this particular GC text to anyone just beginning a study or research in the GC field. It is somewhat less useful to experienced GC practitioners, unless they feel the need or desire to review what they may have already learned. Quite obviously, there is no text in GC which can be everything to everyone, but since this is an introductory text, it does the job that it has set out to do quite admirably. Also, the price is right.

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Handbook of Vitamins, Minerals, and Hormones. Second Edition. Edited by Roman J. Kutsky. Van Nostrand Reinhold, New York. 1981. xvi + 492 pp. 16 × 23.5 cm. $24.50.

This updated, expanded version of Dr. Kutsky's "Handbook of Vitamins and Hormones" is an all-inclusive compendium on vitamins and hormones—and now on minerals as well. Instead of searching in scattered compendia, research papers, and reviews, the reader can find in one source all the information needed on these substances' contents and human requirements for them.

New data about these controlling agents—much of it generated by recent research in tissue culture, physiology, and biochemistry—make clear the need for a practical updated handbook on these substances. The data are presented from four distinct perspectives—medical and biological, chemical and metabolic, nutritional, and general. This format makes it especially easy for the reader to zero in on the information that specifically relates to a particular field.

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