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Book Review

Thin layer chromatography: Quantitative environmental and clinical applications, edited by J.C. Touchstone and D. Rogers, Wiley, New York, Chichester, Brisbane, Toronto, 1980, XIX + 561 pp., price £21.50, ISBN 0-471-07958-8.

This book contains 36 papers which were presented at the symposium "Clinical and Environmental Applications of Quantitative Thin-Layer Chromatography" held in Philadelphia on January 15–17, 1979. Judging by the contents it is possible to conclude that the editors selected the authors of some of the communications on purpose so that the volume, contrary to other symposium proceedings, represents a concise whole. The contents of the book can be classified into three parts: 1. History and techniques of thin-layer chromatography (TLC); 2. Toxicological and environmental analysis; and 3. Biomedical applications.

In the first part, which consists of seven papers, fundamental chapters about TLC techniques are presented in the review form. Recent advances in the techniques are respected. Most of the papers are on a high level; the chapter about quantitative densitometry is, unfortunately, less perfect though it should have been given more attention at least because of the book's title. The chapter about history includes some new facts and discloses some as yet neglected papers from the "prehistory" of TLC. It is rather inappropriate to decrease the contribution of Egon Stahl in this field. The general impression of this part is that of a very personal approach.

The second part, which is by far the largest and is worthy of high esteem, summarizes papers devoted to toxicological and environmental analysis. Attention is paid mainly to aflatoxins and other mycotoxins. From the series of excellent reviews and original papers, I would at least like to mention the chapter by S. Nesheim on aflatoxins which also presents a wealth of references (197 quotations). Of the papers several chapters about nitrosamines, polycyclic hydrocarbons and others can be mentioned.

In the area of biomedical applications the attention is focused on lipid analysis, some catecholamine metabolites, prostaglandins and cholesterol. Several papers deal with drug monitoring (e.g., the introduction paper by Fenimore and Davis).

As I have mentioned at the beginning, this book is written on a very high level in spite of the fact that the volume represents symposium proceedings. This is underlined by the definite structure of the book and the volume can certainly bring valuable information to most workers involved in environmental and biomedical TLC. This, however, does not mean that the book is not lacking in some areas that are important for both mastering TLC and further development of the method. Thus, for example, though it is said in the introduction that it is necessary to combine theory and practice there is not a single chapter devoted to theory. Similarly, in the chapter about quantitative chromatography nothing is said about the theoretical background. Another interesting chapter that would probably be welcomed is a comparison of TLC and highperformance liquid chromatography, a topic frequently discussed, today. Perhaps, these problems will be the subject of another symposium and of another volume in this series. The editors can be congratulated for their editing of this monograph which is meticulously arranged and printed. The repetition of two lines in the Preface and the Overview (p. XIV) is one of the few mistakes that one can find in the book.

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