

*Densitometry in Thin Layer Chromatography: Practice and Applications*

Edited by J. C. Touchstone and J. Sherma

John Wiley and Sons; Brisbane, Chichester, New York, Toronto, 1979

xvi + 748 pages. \$39.55, £21.00

Densitometry is becoming an increasingly important aid in quantitative thin-layer chromatography (TLC), which is itself becoming more widely practised. This book (a 'first-of-its-kind work', according to the blurb) is therefore timely, and generally succeeds in providing an introduction to the techniques of densitometry reinforced by practical examples from widely varying analytical systems.

The first 130 pages consist of a brief historical introduction, two well-written chapters on the theory of densitometry and densitometers, a chapter on materials and methods, and another on instrumentation (which includes a survey of currently available instruments). This section, given that it is written for those who already have experience of TLC, fulfils its purpose admirably in concisely providing sufficient information for successful utilization of densitometry. The editors point out that this purpose can only be achieved if the whole of the TLC process is performed satisfactorily, from application of the sample to final evaluation of the chromatogram, and all the essential steps are in fact dealt with.

The remainder of the book consists of 28 chapters dealing with specific applications of TLC with densitometry as an end-step. (Actually, in one chapter, on

bioautography, the quantitation is by planimetry, but the editors felt that the technique is sufficiently important to be included anyway. This is undoubtedly so. What is less immediately apparent is why it was necessary for this 20-page chapter to be written by 9 co-authors, all from the same institution. The range of topics is intentionally representative rather than comprehensive and covers such things as alkaloids, colorants in food and drugs, drugs in serum, mycotoxins, prostaglandins and steroids. The quality of the chapters is somewhat variable, but each provides useful detail for its specific topic and usually a number of hints and insights of more general application.

The standard of production is high, the diagrams are clear and the print is easily legible (apart from the rather quaint substitute used for italic script). The editorial control is generally good, although Quaternary Ammonia Compounds as a chapter title is one horror that should have been weeded out, and the book is much more readable than, for example, some of Professor Touchstone's earlier productions. It can be recommended for all those using, or intending to use, densitometry for quantitative TLC.

J. P. Leppard

*Electrokinetic Separation Methods*

Edited by P. G. Righetti, C. J. Van Oss and J. W. Vanderhoff

Elsevier/North-Holland; Amsterdam, New York, 1979

xiv + 476 pages. \$68.25, Dfl 140.00

As pointed out in the Introduction, the appearance of another book on electrophoretic techniques requires justification. Indeed this might not have been achieved but for the chapters by Righetti and by

Chrambach. Together they have covered the most rapidly advancing aspects of electrokinetic separation methods. Thus, although the 20 chapters are uneven, both stylistically and in the number of times each