

This article was downloaded by:

On: 24 January 2011

Access details: *Access Details: Free Access*

Publisher *Taylor & Francis*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Journal of Liquid Chromatography & Related Technologies

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713597273>

A Review of: “Advances in Thin Layer Chromatography - Chemical & Environmental Applications, J. C. Touchstone, ed., Wiley-Interscience, New York, 1982, 521 pp., \$55.00 (US)”

Edward Soczewinski^a

^a Medical Academy, Lublin, Poland

To cite this Article Soczewinski, Edward(1983) 'A Review of: “Advances in Thin Layer Chromatography - Chemical & Environmental Applications, J. C. Touchstone, ed., Wiley-Interscience, New York, 1982, 521 pp., \$55.00 (US)”', *Journal of Liquid Chromatography & Related Technologies*, 6: 8, 1549 – 1550

To link to this Article: DOI: 10.1080/01483918308064872

URL: <http://dx.doi.org/10.1080/01483918308064872>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

BOOK REVIEW

ADVANCES IN THIN LAYER CHROMATOGRAPHY - CHEMICAL & ENVIRONMENTAL APPLICATIONS, J. C. Touchstone, ed., Wiley-Interscience, New York, 1982, 521 pp., \$55.00 (US).

In comparison to gas chromatography, the development of the thin layer technique has been relatively modest. Nevertheless, major improvements have been introduced also in this relatively simple technique which help to retain its position in analytical chemistry and to utilize more fully its advantages. Among the recent developments in TLC, the introduction of narrow-classified normal and reversed-phase sorbents, and modifications of the development technique (including pressurized chambers) should be mentioned as well as the increasing use of auxiliary equipment such as densitometers (cf. for instance, ref. 1-3).

The book edited by J. C. Touchstone is an illustration of these trends. It contains 41 communications and lectures presented during the Second Biennial Symposium on Thin Layer Chromatography held in December, 1980 at the University of Pennsylvania School of Medicine. As a typical proceedings volume, it is composed of a number of reviews on various aspects of TLC, systematic investigations of methodological problems (especially quantitative scanning with photometric or radiometric detectors) and brief reports of current work in clinical and environmental analysis. Most of the papers are concerned with quantitative evaluation of the thin-layer chromatograms.

The review articles discuss actual directions of development of TLC: applications of chemically bonded (silanized) adsorbents, preparative TLC, ion exchange systems in clinical analysis; the role of solvent type on selectivity is discussed. A series of investigations are concerned with the application of new scanning equipment for quantitative evaluation of chromatograms and systematic analysis of various groups of substances - steroids, lipids, mycotoxins, sulfonamides, bile acids, pesticides, polycyclic aromatic hydrocarbons.

Novel techniques of TLC are illustrated in the papers. For instance, in a study on the analysis of mycotoxins, it is demonstrated that the combination of multiple and continuous

development permits to improve greatly the separation and quantitative analysis of complex mixtures. Several examples of automation of analysis are given.

The content of the book is a good representation of the present state of thin layer chromatography. It will be useful to those interested in quantitative clinical and environmental analysis and biomedical research.

1. A. Zlatkis and R. E. Kaiser, eds., High Performance Thin Layer Chromatography (HPTLC), Elsevier, Amsterdam, 1978.

2. W. Bertsch, S. Hara, R. E. Kaiser, A. Zlatkis, eds., Instrumental HPTLC, Dr. Alfred Huthig Verlag, Heidelberg, 1980.

3. V. G. Berezkin, A. S. Bochkov, Quantitative Thin-Layer Chromatography, Instrumental Methods, (in Russian), Nauka, Moscow, 1980.

Edward Soczewinski
Medical Academy
Lublin, Poland