

## Planar Chromatography

### 1. REVIEWS AND BOOKS

- 1 An, D. and Liu, W.: (Pharmaceutical analysis in China). *Fenxi Shiyanshi*, 13 (1994) 83-110; C.A., 121 (1994) 117841h - a review with 935 refs.
- 2 Maslowska, J. and Zakrzewski, W.: (Difficulties and methods for overcoming them in the chromatographic separation of the Fe<sup>3+</sup>, Cr<sup>3+</sup>, and Al<sup>3+</sup> ion mixtures). *Zesz. Nauk.-Politech. Łódz. Technol. Chem. Spozyw.*, 589, No. 46 (1993) 107-144; C.A., 121 (1994) 147761z - review with 98 refs.
- 3 Potuzak, M., Turan, J. and Matejek, S.: (Use of chromatography on a thin layer for pharmaceutical control. I. Technique of thin-layer chromatography). *Ceska Slov. Farm.*, 43 (1994) 128-135; C.A., 121 (1994) 141802s - a review with 55 refs.

See also 35, 165.

### 2. FUNDAMENTALS, THEORY AND GENERAL

#### 2a. General

- 4 Busch, K.L.: Cost analysis of determinations with planar chromatography and column chromatography. *J. Planar Chromatogr.*, 7 (1994) 318-321.
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See also 169.

#### 2b. Thermodynamics and theoretical relationships

- 6 Kowalska, T. and Klama, B.: On the mechanism of retention in adsorption TLC with aliphatic alcohol - n-hexane eluents. *J. Planar Chromatogr.*, 7 (1994) 147-152.
- 7 Soczewinski, E. and Maciejewicz, W.: The eluent strength of homologous series of ethers and ketones in normal phase thin layer chromatography. *J. Planar Chromatogr.*, 7 (1994) 153-156.

See also 24, 147.

#### 2c. Relationship between structure and chromatographic behaviour

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- 9 Pyka, A.: The topological indices and  $R_M$  values of benzoic acid derivatives: a structure - activity investigation, part IV. *J. Planar Chromatogr.*, 7 (1994) 108-116.

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See also 118, 210.

#### 2d. Measurement of physico-chemical and related values

- 11 Merkku, P., Yliruusi, J., Vuorela, H. and Hiltunen, R.: Determination of specific heats and adsorption energies of ternary TLC eluents and silica gel. *J. Planar Chromatogr.*, 7 (1994) 305-308.

See also 149.

### 3. GENERAL TECHNIQUES

#### 3a. Apparatus and accessories

See 192.

#### 3b. Detectors and detection reagents

- 12 Bonnier, H., Delvordre, P. and Postaire, E.: Preliminary results of a collaborative study of overpressured derivatization. *J. Planar Chromatogr.*, 7 (1994) 117-121.
- 13 Nagatsuka, S., Ueda, K., Ninomiya, S. and Esumi, Y.: (Application of bioimage analyzer on drug metabolism studies using thin layer chromatography. (I). Performance of the system coupled to an image analyzer). *Yakubutsu Dotai*, 8 (1993) 1261-1271; C.A., 121 (1994) 103106k.
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See also 34, 96, 206.

#### 3c. Sorbents and columns, packing procedures

- 16 Kriz, D., Kriz, C.B., Andersson, L.I. and Mosbach, K.: Thin-layer chromatography based on the molecular imprinting technique. *Anal. Chem.*, 66 (1994) 2636-2639.

See also 52, 101, 207.

**3d. Quantitative analysis**

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See also 152.

**3e. Preparative scale chromatography**

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See also 83, 95, 187.

**3f. Programmed temperature, pressure, vapors, gradients**

See 19, 25.

**3g. High performance procedures**

See 26, 27, 116.

**4 SPECIAL TECHNIQUES****4a. Automation**

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See also 116.

**4b. Computerization and modelling**

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See also 110, 193.

**4c. Combination with other physico-chemical techniques (MS, IR etc.)**

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See also 41, 56, 87, 143, 150, 159, 211.

**4g. Enantiomers, separation**

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- 31 Lepri, L., Coas, V., Desideri, P.G. and Zocchi, A.: The mechanism of retention of enantiomeric solutes on silanized silica plates eluted with albumin solutions. *J. Planar Chromatogr.*, 7 (1994) 103-107.

See also 16, 37, 121.

**4h. Other special techniques**

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See also 13, 212.

**5 HYDROCARBONS AND HALOGEN DERIVATIVES****5b. Cyclic hydrocarbons, fullerenes**

- 33 Baranowska, I., Szeja, W. nad Wasilewski, P.: The analysis of polycyclic aromatic hydrocarbons in soil extracts by adsorption and reversed phase thin layer chromatography. *J. Planar Chromatogr.*, 7 (1994) 137-141.
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See also 117.

## 5c. Halogen derivatives

See 53.

## 5d. Complex hydrocarbon mixtures (incl. analysis of tars, bitumens and mineral oils)

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## 6. ALCOHOLS

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See also 54.

## 7. PHENOLS

See 30.

## 8. SUBSTANCES CONTAINING HETERO CYCLIC OXYGEN

## 8a. Flavonoids

- 39 Kurkin, V.A., Braslavsky, V.B. and Zapesochnaya, G.G.: (Determination of flavonoids in propolis). *Farmatsiya (Moscow)*, 41, No. 1 (1992) 35-39; C.A., 121 (1994) 164088c.

## 8b. Aflatoxins and other mycotoxins

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## 8c. Other compounds with heterocyclic oxygen (incl. tannins)

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See also 204.

## 9. OXO COMPOUNDS, ETHERS, EPOXIDES AND QUINONES

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See also 7, 41, 203, 204.

## 10. CARBOHYDRATES

## 10a. Mono and oligosaccharides. Structural studies

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See also 12, 61, 82.

## 11. ORGANIC ACIDS AND LIPIDS

11a. *Organic acids and simple esters*

- 51 Aarney, D.B., Kapeller, H., Fregapane, G. and Vulfson, E.N.: Chemo-enzymatic synthesis of disaccharide fatty acid esters. *J. Am. Oil Chem. Soc.*, 71 (1994) 711-714.
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See also 9, 38, 77, 89.

11b. *Prostaglandins*

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11c. *Lipids and their constituents*

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See also 19, 48, 112, 126, 141, 142, 143, 146, 150.

## 33. CLINICO-CHEMICAL APPLICATIONS

- 33b. Complex mixtures and profiling (single compounds by cross-reference only)

See 32, 42, 63, 81, 91, 105, 140, 182, 185.

### 34. FOOD ANALYSIS

- 34b. Complex mixtures (single compounds by cross-reference only)

See 41, 87, 119, 163, 200.

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35b. *Air pollution (complex mixtures; single compounds by cross-reference only)*

See 100, 117.

35c. *Water pollution (complex mixtures; single compounds by cross-reference only)*

See 56, 116.

35d. *Soil pollution (complex mixtures; single compounds by cross-reference only)*

See 33, 116.

## 36. SOME TECHNICAL PRODUCTS AND COMPLEX MIXTURES

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See 45.

## 37. CELLS, CELLULAR PARTICLES AND SUPRAMOLECULAR STRUCTURES

See 63.

## 38. INORGANIC COMPOUNDS

38a. *Cations*

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See also 152.

## 39. RADIOACTIVE AND OTHER ISOTOPE COMPOUNDS

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See also 13.