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### Liquid Column Chromatography

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

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## 19. PROTEINS

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## 20. ENZYMES AND ENZYME ACTIVITY ESTIMATION

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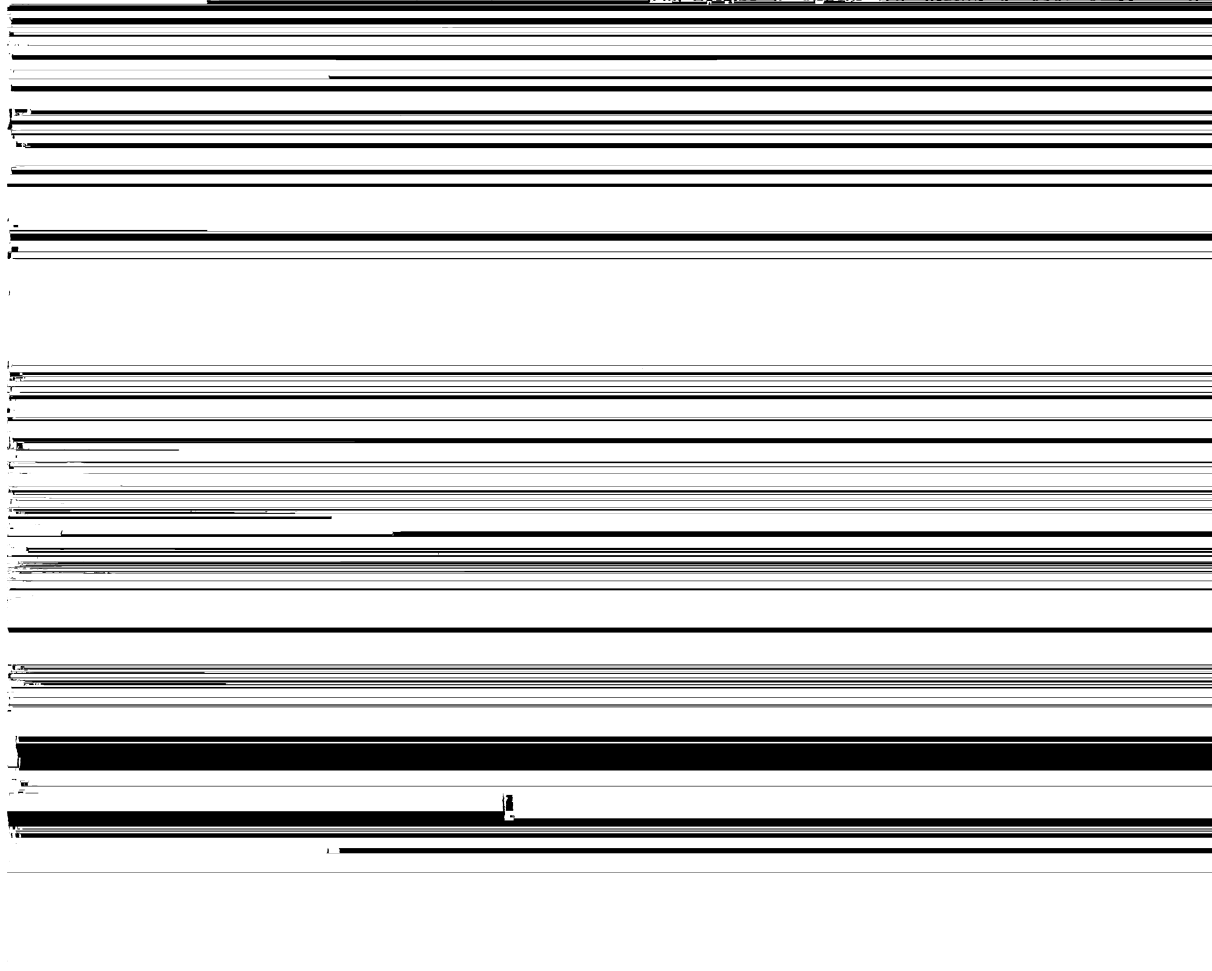
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30. SYNTHETIC AND NATURAL DYES

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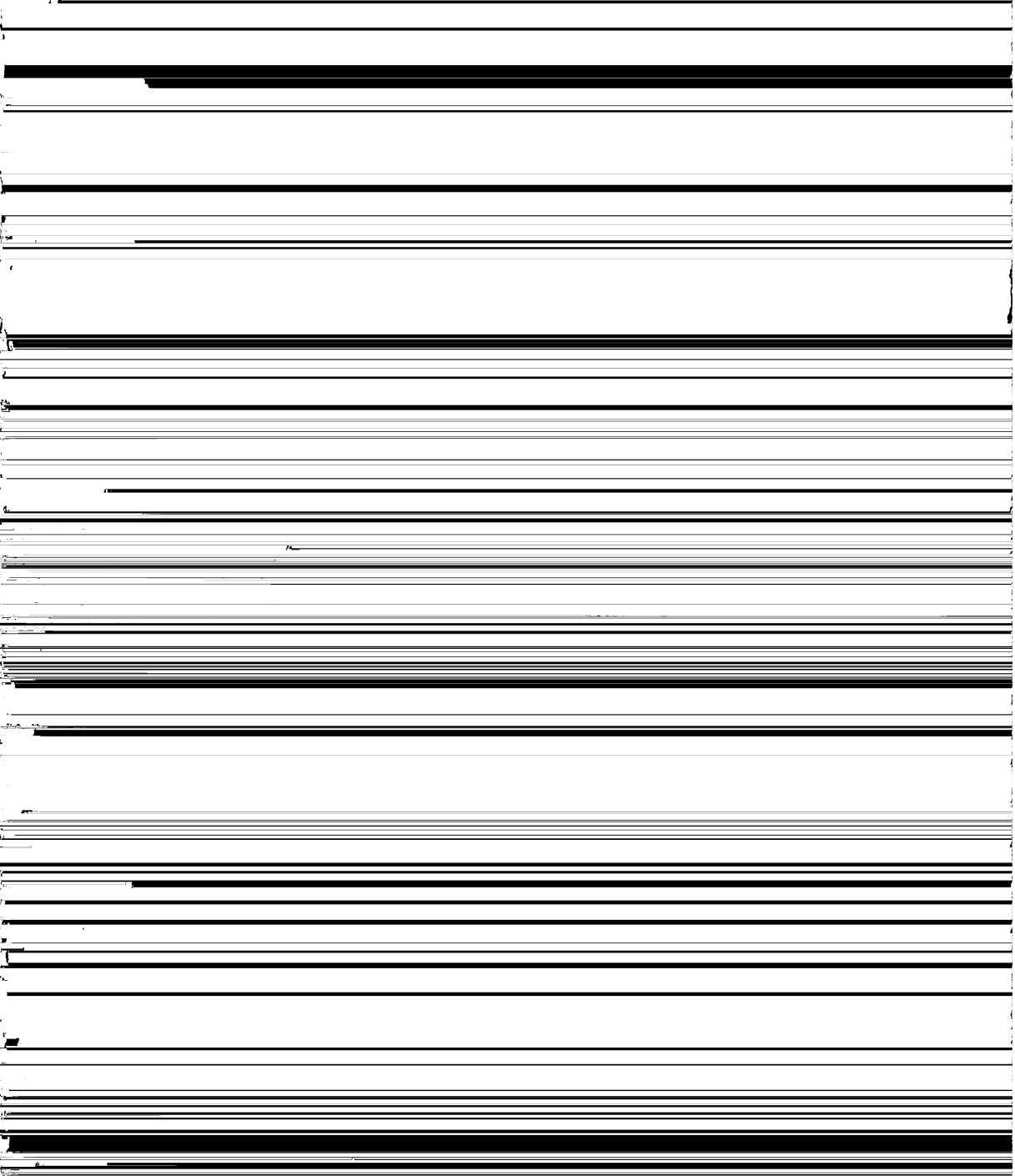
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## 38. INORGANIC COMPOUNDS

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## Gas Chromatography

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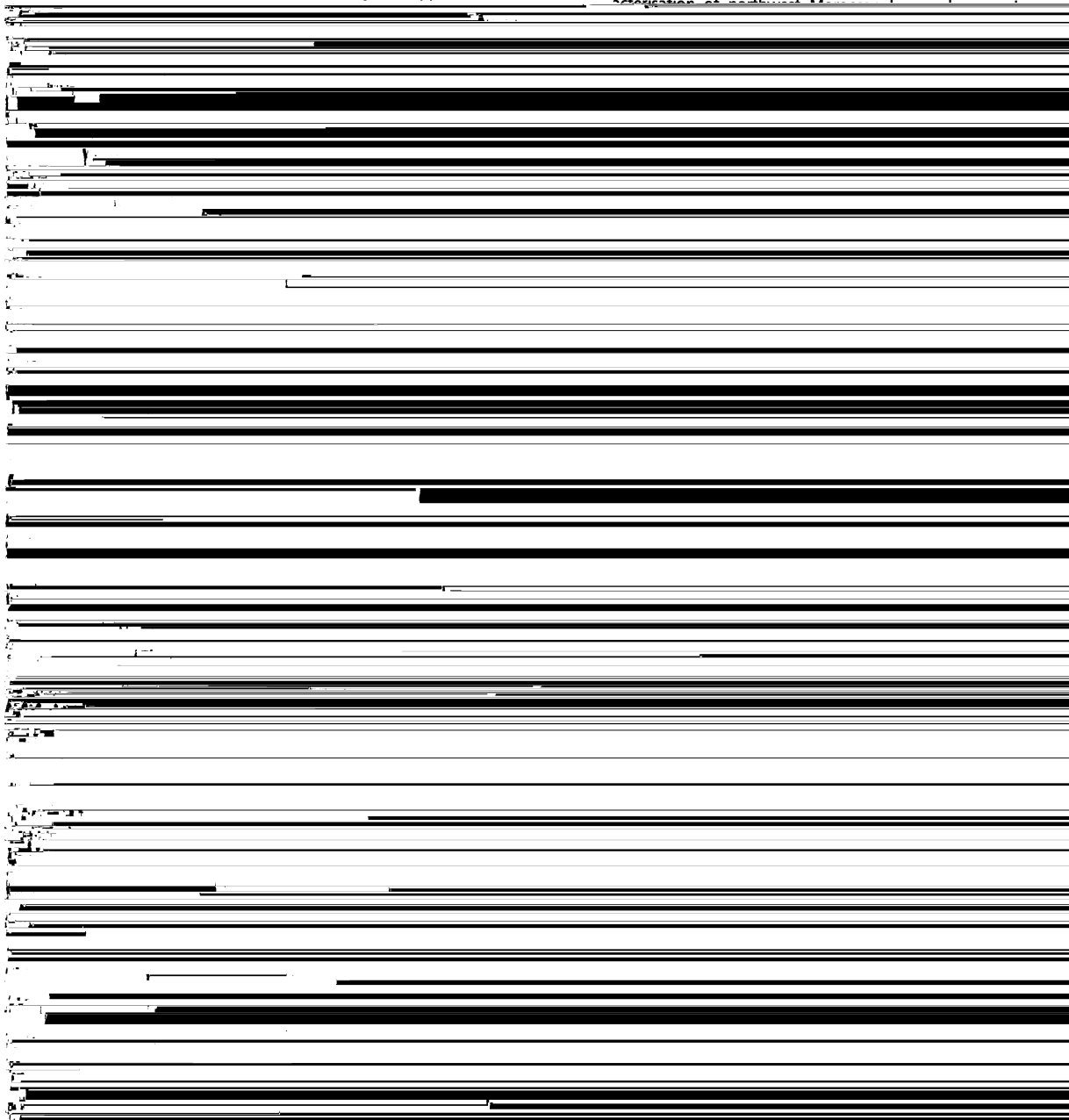
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## Planar Chromatography

### 1. REVIEWS AND BOOKS

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See also 854, 871, 889, 945, 952, 974, 975, 988, 1018, 1037.

### 2. FUNDAMENTALS, THEORY AND GENERAL

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

See 896.

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

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### 3. GENERAL TECHNIQUES

#### 3a. Apparatus and accessories

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#### 3b. Detectors and detection reagents

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See also 852, 881, 1009.

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

See 1034.

#### 3d. Quantitative analysis

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15 (2002) 88-93.

See also 876, 890, 956, 1040, 1047, 1056, 1058.

#### 3e. Preparative scale chromatography

See 869, 873, 1043.

### 4. SPECIAL TECHNIQUES

#### 4b. Computerization and modelling

See 841.

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

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4g. *Enantiomers, separation*

See 838, 840.

4h. *Other special techniques*

See 1034.

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5a. *Aliphatic hydrocarbons*

See 901.

5b. *Cyclic hydrocarbons, fullerenes*

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

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8. SUBSTANCES CONTAINING HETEROCYCLIC OXYGEN

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## 17. AMINES, AMIDES AND RELATED NITROGEN COMPOUNDS

17a. *Amines and polyamines*

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17b. *Catecholamines and their metabolites*

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## 19. PROTEINS

19i. *Specific binding and receptor proteins*

See 996.

## 20. ENZYMES AND ENZYME ACTIVITY ESTIMATION

20a. *Oxidoreductases*

See 937.

20i. *Ligases*

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21a. *Purines, pyrimidines, nucleosides, nucleotides*

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## 23. OTHER SUBSTANCES CONTAINING HETEROCYCLIC NITROGEN

## 23d. Pyridine derivatives

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## 25. ORGANIC PHOSPHORUS COMPOUNDS (INCL. SUGAR PHOSPHATES)

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## 26c. Coordination compounds

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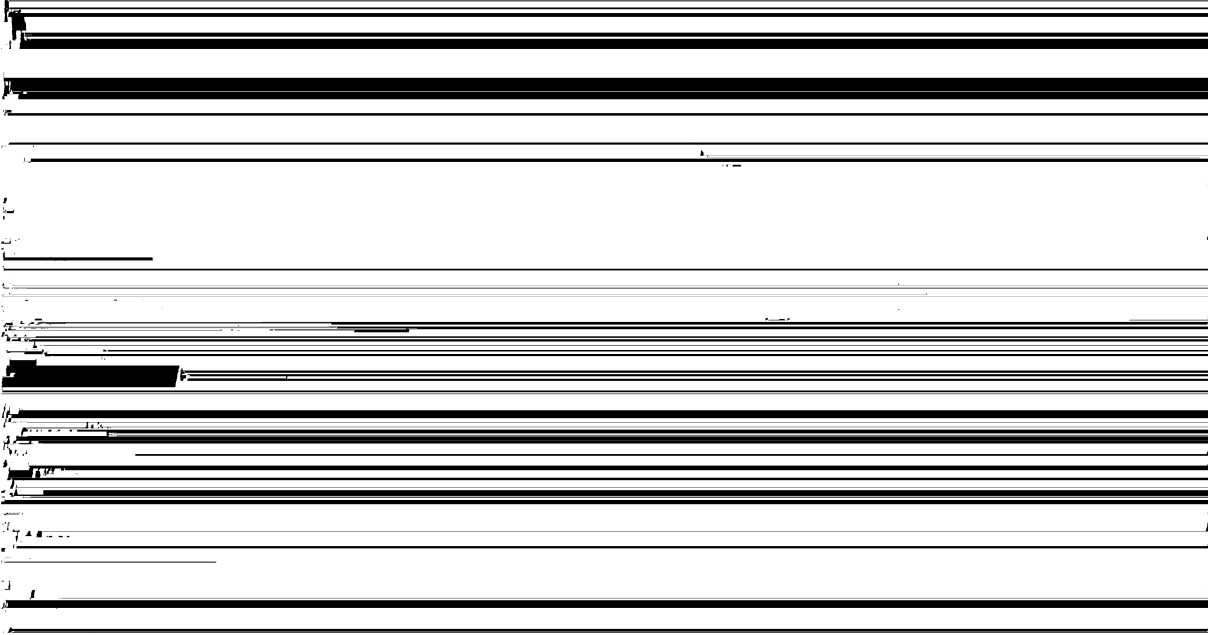
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## Gel Electrophoresis

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33. CLINICO-CHEMICAL APPLICATIONS

33a. *General papers and reviews*

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34. FOOD ANALYSIS

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

See 1572.

35. ENVIRONMENTAL ANALYSIS

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

See 1774, 1875, 1989.

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

See 1967, 1972, 1973, 1984.

36. SOME TECHNICAL PRODUCTS AND COMPLEX MIXTURES

## Capillary Electrophoresis and Electrokinetic Chromatography

### 1. REVIEWS AND BOOKS

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### 2. FUNDAMENTALS, THEORY AND GENERAL

#### 2a. General

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- 877 Munson, M.S., Cabrera, C.P. and Yager, P.: Dynamic electrokinetic

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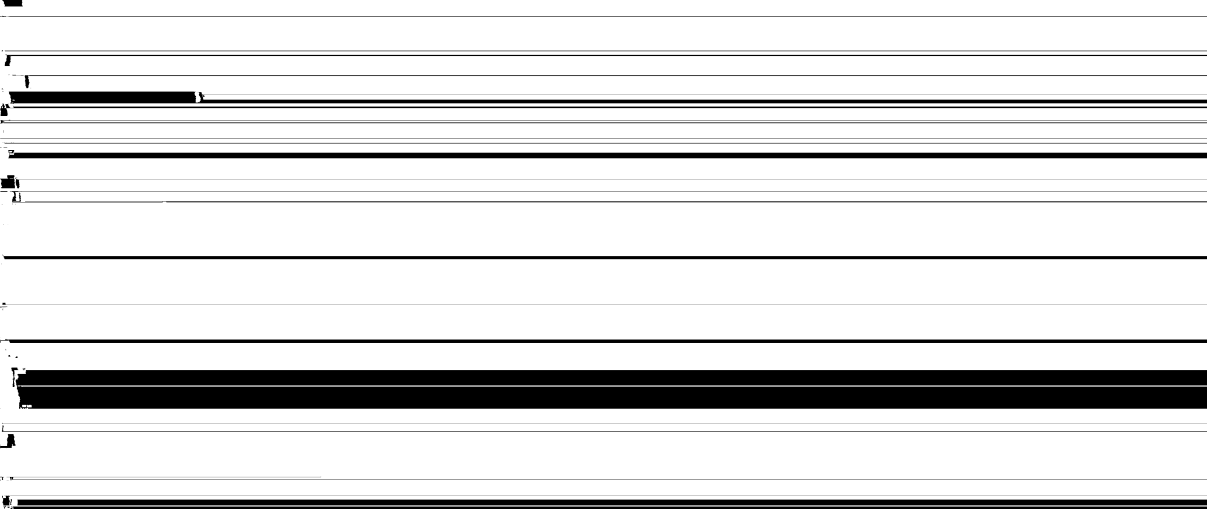
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INDEXES



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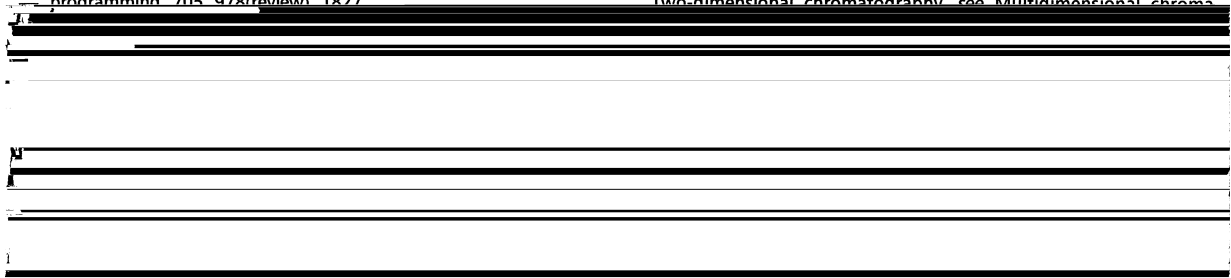
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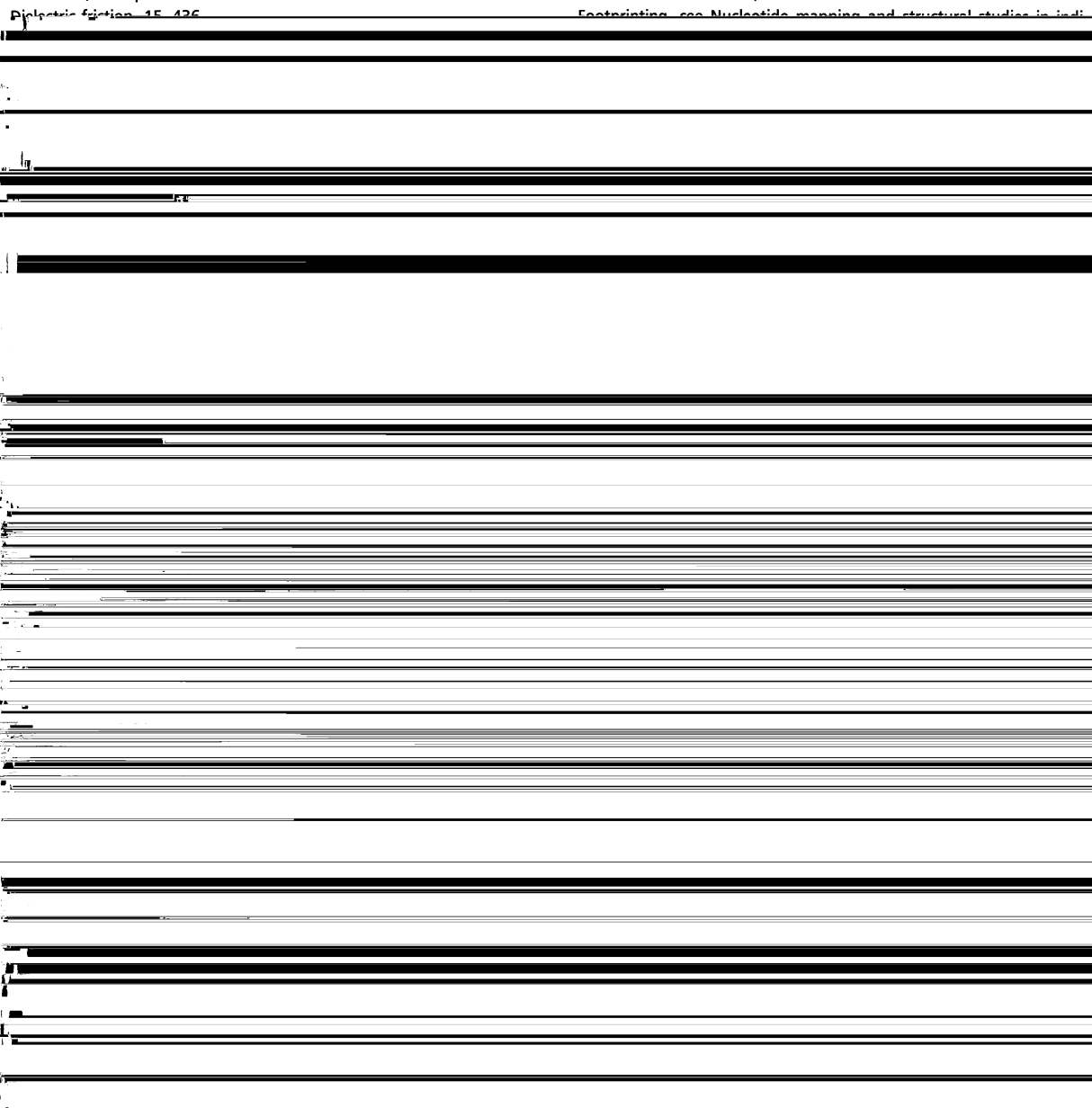
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This Index follows generally identical rules as those published in previous years i.e. references of general interest and techniques are within a given entry listed first, followed by applications and finally by papers limited to certain area of applications only. This, however, is applicable to highly populated entries, where subdivision appeared necessary. As in the past years the individual parts of the Bibliography Section i.e. Liquid column chromatography (L), Gas chromatography (G), Planar chromatography (P), Gel electrophoresis (E) and Capillary electrophoresis and electrokinetic chromatography (C) were numbered separately. Therefore the respective shortening should direct the reader to one of the techniques first before looking for a particular number (identical numbers occur under different techniques). Please note that this Index refers to the entry numbers in the Bibliography Section, J. Chromatogr. A, Vols. 980 and 981.

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 G: 156-158, 161-164, 167, 178, 309, 363, 630, 631, 638, 639, 641, 644, 645, 647, 650, 832, 833, 976, 991, 1389, 1390, 1398, 1409, 1414-1416, 1419, 1422, 1423, 1429-1431, 1438, 1448, 1778, 1784  
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- Cardiac glycosides, techniques  
 L: 324
- , —, biological  
 P: 692
- Cardiotonics (cardiostimulants)  
 L: 1791, 2419, 2669, 3732
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- Catecholamines, reviews  
 L: 1325  
 C: 471
- , techniques  
 L: 75, 359, 1326, 1328, 3282  
 P: 129  
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- , applications  
 L: 357, 358, 1324, 1327, 1329, 1330, 1789, 2329, 2672, 2959, 3265-3269  
 G: 685  
 P: 128, 701  
 C: 422, 440, 472, 754, 1043-1046
- , metabolites  
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- Cations, inorganic  
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 P: 278-281, 560-562, 833, 834, 1060  
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- C: 158(review), 667, 1307
- , —, applications, non-biological  
 L: 279, 1141, 1237, 1242, 1245, 1256, 1260, 1265-1267, 1762, 1985, 2262, 2263, 2267, 2269, 2273, 2551, 2763, 3185, 3202, 3866  
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- , —, —, microorganisms  
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- L: 951, 2021, 2043, 2062  
 C: 340, 343, 392, 639, 642, 647, 650, 656, 662, 874, 898
- , —, techniques  
 L: 942, 944, 945, 948, 965, 966, 1017, 2016, 2018, 2020, 2022, 2031, 2032, 2034, 2037, 2048, 2830, 2831, 2834, 2841-2843, 2854, 2982, 3081, 3930, 3943, 3945-3950, 3955, 3956, 3973, 3984  
 P: 279, 280, 457, 833, 834, 1060  
 C: 34, 377, 575, 649, 654, 856, 857, 914, 941, 1295
- , —, analytical group I and IIa (Ag, Bi, Cd, Cu, Hg, Pb, Pd, Tl)  
 L: 925, 936, 952, 2013, 2017, 2023, 2024, 2030, 2833, 3951  
 G: 426  
 P: 278, 281, 561, 834

Cations, inorganic, analytical group III (Al, Be, Co, Cr, Fe, Ga, Mn, Nb, Ni, Ta, Th, Ti, Zn, Zr)

L: 925, 938, 949, 954, 956, 957, 2013, 2015, 2017, 2023-2027, 2044, 2047, 2049, 2540(review), 2836, 2837, 2839, 3932-3934, 3937, 3941, 3951, 3954, 3957, 3961

P: 560, 834

C: 341, 514, 648, 653, 1292, 1297

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Cells, viruses and microorganisms

L: 934, 1118, 2012

G: 1927

E: 82, 382, 1505, 2038, 2039

C: 333, 338, 646, 1264, 1270, 1272, 1273, 1274(review), 1275, 1276(review), 1277, 1280, 1282, 1288, 1290

—, metabolites and taxonomical studies

L: 2011

G: 918, 919, 1394, 1928

E: 1504(review)

C: 855, 1266, 1268, 1271, 1279, 1284, 1286

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Cephalosporins

L: 665, 1670, 3830

P: 192, 471

C: 1198, 1199

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Cerebrosides, see Sphingolipids

Chelates, see Coordination compounds

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L: 3782

G: 326, 1727, 1728

C: 848

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Chloramphenicol and related compounds

L: 636, 869, 1653, 2601, 2709, 3591

G: 327

Chloroplast pigments

Cinchona alkaloids

L: 3522(review), 3524

G: 1536

P: 974(review)

C: 1177(review)

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L: 357, 367, 434, 1230, 1249, 1324, 1327, 1337, 1353, 1354, 1358, 1391, 1429, 1430, 1442, 1454, 1511, 1569, 1980-1982, 2264, 2340, 2351, 2370, 2404, 2414, 2500, 2698, 3193, 3227, 3267, 3275, 3280, 3287, 3289, 3299, 3440, 3534, 3900

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—, reviews and books

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G: 830

E: 540, 2030

C: 324-326, 356, 477

—, profiling body fluids

G: 187, 241, 244, 353-357, 684, 696, 721, 827-829, 994, 996, 1246, 1371, 1393, 1418, 1436, 1452, 1460, 1761-1769

Coal analysis

G: 921, 972, 1065, 1329, 1426, 1549, 1868, 1884, 1891

P: 23, 486

Coal tar and bitumens, hydrocarbons in

L: 139

G: 106, 910, 1305, 1897, 1898, 1918, 1925

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Cobalt, see Cations, inorganic, analytical group III

Coccidiostatics

L: 656, 801, 1858-1860, 3649

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- L: 181, 182, 897, 1182, 1237, 1287, 1960, 2191, 2192, 2194, 2198(review), 3132  
 G: 1344, 1494  
 P: 40, 41, 869  
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## Crude oil and petroleum analysis

- L: 135, 2160, 3092(review)  
 G: 107, 130, 392, 398, 413, 415, 419, 421, 422, 425, 436, 561, 571, 595, 620, 705, 707, 864, 875, 877, 880, 884, 885, 898, 903, 907, 912, 942, 1081, 1126, 1214, 1225, 1238, 1239, 1245, 1263, 1304, 1306, 1308, 1354, 1370, 1548, 1550, 1559, 1866, 1884-1886, 1905-1908, 1913, 1915, 1919, 1920, 1926  
 P: 24, 583, 584

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Cyanates, see Halides and other inorganic halogen compounds

Cyanides, see Halides and other inorganic halogen compounds

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- L: 3499

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- L: 547, 754, 809(review), 810, 811(review), 812-815, 816(review), 817(review), 818-820, 821(review), 822(review), 823(review), 824(review), 825(review), 826, 827, 828(review), 829, 830, 831(review), 832(review), 833(review), 834(review), 881, 898, 899, 1807, 1863-1877, 2499, 2712-2714, 2818, 2912, 3519, 3558, 3803-3823  
 G: 328-335, 658, 797, 1030, 1729  
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 C: 300(review), 301(review), 302(review), 443, 618-622, 1240  
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- L: 1600, 2339

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- L: 137, 1990, 3091, 3136  
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- L: 865, 1774, 1785, 1790, 2668, 2684, 2718, 2719, 3835, 3837, 3847  
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- E: 342, 450, 761, 762, 769, 797, 1237, 1315, 1381

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- Drugs of abuse (general papers)  
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P: 234, 794, 798, 1031  
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- Ecdysones and other insect hormones of steroid nature  
L: 317-319, 1299, 1300, 2313, 2314, 3246  
P: 112, 113, 944
- Endorphins, enkephalins and their analogues  
L: 3314
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L: 1888
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- L: 630, 651, 799, 805, 1669, 2580, 2681, 3584, 3592, 3593, 3604
- P: 762
- C: 1200, 1202
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- L: 594, 1632, 1636, 1638, 1639, 2550, 2554, 2556
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- E: 769, 1502, 1572
- C: 139, 155, 308, 640, 641, 1022, 1209
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- L: 312, 329, 2803, 3085, 3146, 3902
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- P: 854
- C: 639, 1256
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- Food dyes
- L: 329(review), 1715
- P: 493, 499
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- L: 155, 1184, 1188, 1196, 2159, 2197, 2348, 3133
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- G: 37, 44, 81, 86, 413, 415, 419, 422, 428, 487, 496, 920, 925, 1097, 1168, 1170, 1463, 1892, 1911, 1921, 1923, 1931, 1938, 1939

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L: 1612, 3547

## Glycerides, simple

L: 1273

G: 182, 358, 656, 1455

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P: 93, 102, 364, 366, 658, 662, 739, 912

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## Glycols and polyols

G: 1315

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P: 62

E: 15(review), 17, 505(review), 520, 936(review)

C: 373, 452, 453, 1018

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P: 710

E: 149, 924, 925, 926, 931, 935, 938, 1034, 1098

C: 182, 451, 454

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P: 364

E: 922

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L: 2245(review)

E: 509, 928(review), 932, 1017

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L: 242, 243, 24, 250, 251, 253(review), 254, 255, 258, 422, 1220, 1223, 1228, 1230, 2241, 2243, 2248-2251, 3174, 3179

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 C: 450(review), 747, 1016  
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 E: 502(review)  
 C: 140, 449(review)  
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L: 1894

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 G: 226, 243, 763, 1067, 1068, 1937  
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L: 1775, 1925, 3857, 3859, 3892  
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 P: 1034  
 C: 1226, 1246

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L: 351, 676, 677, 680, 684-686, 918, 1043, 1689, 1693, 1695, 1696, 1698-1700, 1702-1705, 1707, 2619, 2620, 2898, 3625, 3627, 3628, 3630-3632, 3635, 3638-3640, 3642-3644  
 G: 289, 739, 740, 743, 747, 749, 1659  
 P: 201, 202, 479-481, 1007-1009  
 E: 1496  
 C: 262, 265, 833, 890, 1206-1208

## —, carboxylic acid, anilides and related compounds

L: 679, 681, 1692, 1697, 1701, 1708, 2618, 3047, 3633, 3637  
 G: 287, 288, 290, 737, 741, 748, 1229, 1654, 1655  
 C: 265-268

## —, triazine derivatives

L: 678, 683, 1028, 1694, 1706, 2616, 3629, 3636, 3641

L: 675, 682, 687, 2617, 3626, 3634

G: 286, 1660

P: 482, 483, 767, 1005

## Heterocyclics, nitrogen (other)

L: 1357

G: 1031

P: 136, 152, 407

C: 941, 944

see also individual groups of nitrogen containing heterocyclics and drugs

## —, oxygen (other)

L: 1185, 1921

C: 448

see also individual groups of oxygen containing heterocyclics

## —, sulphur (other)

L: 3077

P: 450

C: 572

see also Thiazoles and isothiazoles; Thiophenes

## Histamine and related substances

G: 1515

C: 168

see also Imidazoles

## Hormones peptidic and proteinous (including synthetic analogues)

L: 377, 452, 1375, 1391, 2361, 2374, 3294, 3312, 3319

G: 698

C: 1068

## —, synthesis and structural studies

L: 2361

see also individual categories of peptidic hormones

## Humic acids

G: 901, 906, 1329, 1426

E: 916, 1494

C: 590, 642, 836, 837

## Hydrazines, hydrazides and hydrazones

L: 2330

G: 687, 1526

## Hydrocarbons

L: 129-139, 1122-1137, 2150-2160, 3074-3092

G: 99-131, 561-596, 970-976, 1234-1308

P: 21-24, 296-309, 577-584, 854, 855

E: 1524

C: 129, 130, 441, 999, 1000

## —, review and books

L: 129

## —, aliphatic

L: 2981

G: 16, 22, 30, 56, 70, 99, 428, 431, 445, 447, 460, 507, 518, 535, 561-564, 834, 864, 907, 941, 1089, 1113, 1116, 1122, 1123, 1138, 1169, 1202, 1234-1240, 1332, 1372, 1834, 1859, 1907, 1936

P: 23, 577

C: 889, 999, 1000

## —, cyclic

- G: 21, 70, 72, 100-112, 449, 460, 469, 515, 518, 521, 526, 545, 548, 552, 558, 559, 565-567, 569-575, 600, 709, 723, 852, 859, 864, 865, 878, 941, 947, 964, 970-973, 1054, 1056, 1070, 1102, 1103, 1113, 1114, 1116, 1122, 1138, 1155, 1178, 1205, 1225, 1237, 1241-1269, 1272, 1273, 1325, 1342, 1372, 1463, 1532, 1704, 1834, 1839, 1859, 1915
- P: 4, 21, 21, 151, 297-301, 304, 305, 307, 554, 578-581, 854(review)
- E: 1524
- C: 54, 59, 62, 65, 78, 129, 390, 414, 617, 642, 880, 890, 937
- Hydrocarbons, halogen derivatives
- L: 136, 137, 1136, 1137, 1606, 1990, 2090, 2158, 2159, 2808, 3078
- 
- G: 84, 114-117, 119, 120, 122-124, 126, 127, 129, 206, 266, 273, 444, 452, 462, 499, 574, 576, 578-580, 588-593, 709, 723, 879, 975, 1113, 1136, 1174, 1219, 1236, 1270, 1271, 1273-1275, 1280, 1284-1286, 1289, 1291, 1294, 1296-1298, 1300, 1301, 1303, 1327, 1359, 1366, 1704, 1834, 1839, 1859
- P: 302, 304, 305
- C: 441, 958
- see also Biphenyl and derivatives; Pesticides, chlorinated
- , complex mixtures
- L: 138
- G: 130, 131, 398, 419, 421, 596, 898, 903, 1108, 1304, 1306, 1307
- P: 304, 305, 855
- , in cigarette smoke
- G: 917, 1268
- Hydrogen
- G: 428, 432, 480, 907, 920, 926, 1132, 1183, 1929, 1930, 1932, 1933
- Hydrolases, acting on ester bonds (E.C. 3.1.-.-)
- L: 271, 499-507, 1506-1511, 2461, 2466-2470, 3458-3464
- E: 257-266, 407, 709-713, 1191-1202, 1289, 1608, 1788-1792
- C: 787, 788
- , —, structural studies
- L: 397, 1754
- , acting on glycosyl compounds (E.C. 3.2.-.-)
- L: 501, 508-514, 1512-1521, 2471-2476, 3346, 3465-3476
- P: 425
- E: 234, 267-270, 714-716, 1027, 1203-1205, 1525, 1708, 1793-1796
- C: 214, 1097
- , —, structural studies
- L: 398
- , acting on ether bonds (E.C. 3.3.-.-)
- E: 1801
- , acting on peptide bonds (E.C. 3.4.-.-)
- L: 501, 515-518, 1523, 1525-1527, 1531, 1532, 2478, 2479, 2481-2485, 3025, 3479-3481, 3483, 3484, 3486
- P: 428
- E: 139, 272, 273, 275-278, 280, 318, 720, 721, 1061, 1167, 1168, 1207-1210, 1212, 1215, 1216, 1218-1222, 1471, 1797, 1799
- C: 789(review), 1098, 1099
- , —, structural studies
- L: 2381, 3332
- E: 953
- Hydrolases, acting on C-N bonds other than peptide bonds (E.C. 3.5.-.-)
- L: 519, 1524
- E: 233, 1217
- , acting on acid anhydride bonds (E.C. 3.6.-.-)
- L: 1522, 1528, 1529, 2477, 2480, 3477, 3482, 3485
- E: 207, 279, 717, 718, 1040, 1206, 1211, 1214, 1269, 1798
- , uncompletely identified
- P: 143
- , activity measurement
- L: 271, 501
- P: 425-427, 428, 621, 693, 718-720
- E: 1210, 1213
- 
- C: 214
- Hypnotics (barbiturates, sedatives)
- L: 761, 1003, 1838, 1855, 2700, 2701, 2722, 3733, 3748
- G: 310, 315, 319, 782, 783, 785, 787, 1711, 1719, 1725
- P: 218, 224, 784
- C: 294, 610, 612(review)
- Hypolipidemic agents
- L: 1779, 1792, 2676, 2680, 3785
- Hypotensives and antihypertensives
- L: 741, 746, 1091, 1772, 1777, 1789, 1790, 2410, 2668, 2671, 2683, 2684, 3711, 3727
- G: 317, 789
- P: 511, 1023
- C: 285, 608, 1220
- see also Adrenergic and adrenergic blocking agents
- 
- Imidazoles and related compounds
- L: 570, 571, 573, 791, 1108, 1601, 252
- G: 242
- see also Histamine and related substances
- Immunosuppressives and immunomodulatory drugs
- L: 620, 657, 850, 857, 867, 1668, 1889, 2583, 2729, 3579, 3813, 3826, 3836, 3841
- P: 750
- C: 630
- see also Peptide and amino acid antibiotics
- Indole alkaloids
- L: 72, 552, 562, 1202
- P: 162
- Indoles, techniques
- L: 75, 1328, 1613
- G: 241
- P: 166-168
- C: 42
- , applications
- L: 357, 363(review), 570, 1324, 1345, 1589-1595, 1726, 2523, 2672, 3533-3535
- G: 1003, 1540
- P: 442, 443, 495, 735, 957, 979
- C: 130, 1232
- Inhibitors of enzymic activity, proteinous
- L: 427, 463, 465, 1470, 1471, 2410, 2744, 3429

## Inhibitors of enzymic activity, non-proteinous

- L: 619, 638, 729, 795, 811(review), 825(review), 834(review), 835(review), 844, 1594, 1772, 1842, 1877, 1896, 1905, 1912, 2664, 2891, 3548, 3589, 3590, 3605, 3606, 3698, 3785, 3793, 3800, 3834
- P: 235, 255
- C: 283, 608

## Inks

- P: 206, 492, 772, 774

## Inorganic compounds

- L: 936-972, 2013-2064, 2827-2861, 3830-3985
- G: 426-430, 920-925, 1067-1069, 1929-1940
- P: 278-282, 560-564, 833-836, 1060
- E: 899
- C: 339-350, 647-667, 856-858, 1291-1308

see also Anions, inorganic; Cations, inorganic; individual types of anions and cations

## —, reviews and books

- L: 2024, 2043, 2062
- C: 647

## Insulin and analogues

- L: 1367, 1368, 1390(review), 2354, 2358, 2420, 3305, 3317, 3321

## Iridoid glucosides

- C: 1035

## Iron, see Cations, inorganic, analytical group III

## Isocyanates and cyanates, inorganic, see Halides and other inorganic halogen containing compounds

## —, organic

- L: 1332

## Isomerases

- L: 2491, 2492

E: 900

C: 635, 638, 854

## Lipids

- L: 283-288, 1271-1280, 2292-2301, 3204-3216
- G: 181-185, 656, 995, 1449-1455
- P: 78-103, 360-384, 649-676, 902-930
- E: 513, 514, 1531
- C: 159, 160, 1025-1027

## —, reviews and books

L: 298, 3205

G: 183

P: 379

## —, general techniques

L: 8, 286, 288, 1272, 1273, 2292, 3213, 3900

P: 81, 351, 659, 671, 925

C: 336

## —, group separation

L: 1030

P: 351, 853

## —, applications, non-biological

L: 283, 1271, 2297, 2301, 3204

P: 78, 79, 369, 372, 669, 717, 737, 904, 910, 911, 913, 996

## —, —, microorganisms

L: 1279, 2294, 2295

P: 91, 384, 652, 656, 907

## —, —, plants

L: 1275, 2295, 3207, 3214

G: 185

P: 87, 91, 372, 375, 382, 595, 646, 667, 737, 901, 906, 927, 929, 996

## —, —, blood

G: 353, 1452, 1454

E: 285, 724, 810, 1224, 1436, 1804

P: 374, 653

## —, —, brain and nerve tissue

L: 2299

P: 663

## —, —, milk and food products

L: 258, 1276, 1277, 2292, 3208

G: 1449, 1451

P: 87, 92, 370, 906

E: 21

see also Food analysis

## —, —, other animal material

L: 284, 518, 1278, 3210

G: 181, 184, 1450

P: 79, 80, 90, 93, 101, 102, 365, 668, 670, 909, 917

## —, oxidation products

L: 291, 2256, 3212, 3900

P: 873, 924

## Lipopolysaccharides

L: 285, 1274, 1280, 2238, 2298, 2481, 3206

P: 60

E: 569(review)

## —, structure studies

L: 1280

P: 907

## Lipoproteins (including apolipoproteins), reviews

## L

## Larvicides, insecticides

- L: 2624
- G: 1668, 1669, 1904
- P: 198

## Lead, see Cations, inorganic, analytical group I and IIa

## —, organic

- G: 250, 1579

## Lectins

- L: 247, 249, 252, 1221, 1224-1227, 1231, 2244, 2247
- E: 13(review), 16, 168, 923, 930, 1049, 1051, 1549
- C: 453

## Ligases, forming C-S bonds (E.C. 6.2.-.-)

- L: 2496
- E: 1225

## —, forming C-N bonds (E.C. 6.3.-.-)

- L: 2495

## —, activity

- P: 429

## Lignin compounds

## Lipoproteins, techniques

E: 1537

## —, applications

L: 289, 1281, 1282, 2302, 3217-3219

G: 355, 1531

P: 104, 105, 654

E: 22-25, 211, 515-519, 939-942, 1060, 1532-1535

C: 160, 161, 163, 749, 750, 1028-1030

see also Proteins of blood, serum and blood cells

## Local anaesthetics, see Anaesthetics

## Lubricants

G: 425

## Lyases, carbon-carbon (E.C. 4.1.-.-)

L: 521, 1537, 2487, 2489, 3490

## —, carbon-oxygen (E.C. 4.2.-.-)

L: 520, 1533, 2490

E: 233, 282, 723

C: 791

## —, other

L: 522

E: 283

**M**

## Macrolides (including erythromycine)

L: 127, 624, 634, 657-659, 661, 662, 664, 1643, 1646, 1647, 1651, 1661, 1664, 1668, 1671, 1673, 2574, 2587, 2590, 2596, 2602, 2605, 2707, 3579, 3580

P: 191, 469, 761

## Magnesium, see Alkaline earths

## Manganese, see Cations, inorganic, analytical group III

## Medicated feed

L: 625

## Mercury, see Cations, inorganic, analytical group I and IIa

## —, organo-compounds

L: 586, 1622, 2833

G: 1065, 1574, 1578, 1579, 1581, 1585

C: 1186

## Mineral oils, hydrocarbons

P: 303, 306(review), 307, 308, 582

## Molybdenum, see Cations, inorganic, analytical group IIb

## Mycotoxins, other

L: 178, 1171-1175, 1177, 1178, 2173, 2188, 2189, 2968, 3123-3129, 3131

G: 143, 606, 985, 1347

P: 32, 34, 37, 38, 318, 320, 600, 603, 866, 868, 1055

see also Aflatoxins

## Myorelaxants

L: 1881, 1909, 1910, 2692, 3728

P: 218, 224, 527

**N**

## Narcotic analgesics and antagonists

L: 1837, 2702

G: 312, 313, 805, 806, 1741, 1751

## Neuroleptics

L: 776, 1803, 1813, 1843

G: 310, 788, 790

P: 512, 787

## Neuromuscular blocking agents, see Myorelaxants; Cholinergic and cholinergic blocking substances

## Nickel, see Cations, inorganic, analytical group III

## Nicotinic acid and derivatives

L: 603

G: 237, 239, 700-703, 1541

## Niobium, see Cations, inorganic, analytical group III

## Nitriles

G: 349, 414, 688, 1001

see also Nitrogen compounds, inorganic

## Nitro compounds

L: 75, 341-343, 578, 1312, 1653, 1762, 2084, 2322-2324, 2709, 3028, 3031

G: 105, 128, 224, 242, 442, 603, 682, 683, 687, 688, 851, 859, 868, 1507-1509, 1511, 1512, 1842

P: 404, 489, 568, 699, 953, 954

C: 42, 165, 692, 1036-1038

see also Explosives

## Nitrogen

G: 467, 920

## Nitrogen compounds, inorganic

L: 1603, 2050, 2052, 2063, 2845, 2853, 2859, 3968, 3976

C: 348, 659, 661, 664, 665, 1299, 1302, 1305

see also Ammonia

## Nitrogen oxides

G: 37, 860, 1899

## Nitrosamines

L: 351, 2321

G: 1230, 1510

## Nitroso compounds

L: 340, 3258

## Noble metals, see Platinum metals and gold

## Nucleic acids, see DNA; RNA

## Nucleosides, see Purines, pyrimidines, nucleosides, nucleotides

## Nucleotides, see Purines, pyrimidines, nucleosides, nucleotides

**O**

## Oestrogens, techniques and theory

L: 306, 307, 1004, 1292, 3236, 3239

P: 289, 391

C: 462

## —, applications, non-biological

L: 309, 310, 1295, 2309, 3235

G: 1463

P: 682, 938

## —, —, biological

L: 1293, 1294, 2310, 2311, 3238, 3240, 3241

G: 189, 660-662, 996, 1464, 1465

## —, —, non-steroidal

L: 308, 311

G: 1346

## Oligonucleotides and polynucleotides

L: 1542, 1548, 2112, 2501, 2505, 2506, 3498, 3500, 3502  
E: 201, 200, 202, 220, 220, 222, 222, 225, 226, 800, 848, 850

## Oxidoreductases, acting on single donors with incorporation of oxygen (oxygenases) (E.C. 1.13.-.-)

L: 271, 468, 1406, 2420, 2442

C: 218, 520, 689, 792, 933, 1101, 1104

## Oligosaccharides

L: 203-205, 207, 208, 213-216, 220, 221, 1206, 1218, 2211, 2212(review), 2224, 2225, 3148, 3149, 3152, 3155  
P: 51, 56, 335, 618, 620, 623, 718, 879, 884  
C: 140, 143, 144, 146, 147

## Opium alkaloids

L: 557, 1583, 1904, 2691, 2694, 3516  
G: 344, 347, 1723, 1751  
P: 978, 1032

## Organoleptics (flavors, volatiles, odours)

L: 913, 914, 1988, 1989  
G: 132, 212, 218, 365-385, 409, 416, 668, 676, 679, 839-849, 857, 1046, 1048-1052, 1063, 1207, 1356, 1368, 1376, 1379, 1380, 1430, 1479, 1494, 1495, 1771-1775, 1788-1821, 1823-1829, 1854, 1880, 1881, 1887, 1890, 1901, 1924  
P: 270  
C: 350

## Organometallic compounds (other)

L: 583, 585, 587, 937, 939, 1623, 2042, 2071, 2542, 2828, 2831, 3030, 3057, 3943, 3973  
G: 251, 254, 292, 856, 1571, 1575, 1582  
P: 453, 744  
C: 524

—, reviews and books

L: 1618

—, acting on paired donors with incorporation of oxygen into one donor (hydroxylases) (E.C. 1.14.-.-)

L: 466, 467, 469, 472, 476, 479, 1474, 1476, 1484, 1488, 1855, 2443, 2445, 2455

E: 680, 681, 1163

—, acting on superoxide radicals as acceptor (E.C. 1.15.-.-)

L: 478, 2449

E: 236, 1730

—, —, structural studies

E: 951

—, other and uncompletely identified oxidoreductases (E.C. 1.99.-.-)

L: 473, 1479, 2441, 2451-2453

E: 1154

C: 783

—, activity measurements

L: 271

P: 679

Oxo compounds, reviews

P: 871

C: 642

—, general techniques

L: 188, 196, 1186, 1190, 1197, 1252, 2200, 2204, 2208, 2981, 3141

G: 1113

P: 310, 872, 874

C: 9, 138, 879, 880, 937, 953, 1010

## Penicillins (including carbapenem antibiotics)

L: 623, 643, 644, 1655, 1666, 2563, 2570, 2577, 2588, 2591, 2606, 3573

P: 190

C: 259, 581, 1203

## Peptide (and amino acid) antibiotics

L: 620, 625, 640-642, 645, 857, 1656, 1663, 1889, 2353, 2583, 2589, 2602, 3285, 3575, 3599, 3600, 3836, 3897

P: 196, 468, 750, 761, 1001

E: 1495

C: 1204

## Peptides

L: 377-394, 1365-1395, 2353-2375, 3294-3323

G: 698

P: 422, 710-714, 962, 963

E: 26-33, 522, 523, 943-949, 1540-1546

C: 181-186, 479-487, 758-760, 1062-1071

## —, reviews and books

L: 3348, 3351, 3902

E: 70

C: 480, 484, 789, 849, 925, 1078

## Pesticides

L: 666-692, 1679-1714, 2607-2625, 3609-3649

G: 259-295, 718-749, 1010-1019, 1590-1669

P: 197-204, 475-485, 763-771, 1003-1011

E: 1496, 1497

C: 262-269, 584-588, 833, 834, 1205-1208

## —, reviews and books

L: 922, 3609, 3613

G: 1603

P: 197, 475

E: 890

C: 585

## —, techniques and complex mixtures

L: 667-672, 918, 1680-1685, 2607-2610, 2917, 2991, 3271, 3610-3612, 3614-3616, 3622, 3691, 3908

G: 259-264, 391, 718-722, 827, 873, 875, 878, 1010, 1058, 1590-1594, 1596-1598, 1601, 1602, 1604-1609, 1863

P: 198, 199, 476, 1003-1005

C: 262, 584

## —, carbamates

L: 67, 1688, 1691, 1906, 2612, 2615, 2624

L: 377, 378, 387, 388, 391-393, 575, 650, 1019, 1021, 1366, 1376, 1378, 1381, 1388, 1395, 1972, 2141, 2357, 2360, 2361, 2535, 2538, 2995, 3027, 3303, 3304, 3311, 3313, 3315, 3316, 3322, 3350

P: 713

E: 26, 33, 244, 1493, 1540, 1545, 1546

C: 46, 48, 49, 54, 69, 77, 80, 179, 181, 182, 184-188, 197, 367,

P: 204

C: 264

## —, chlorinated

L: 668, 2611, 2612, 3617-3622

G: 113, 206, 265-275, 278, 614, 723-732, 734, 1011-1015, 1053, 1179, 1272, 1282, 1350, 1595, 1600, 1610, 1611, 1614-1626, 1628, 1630, 1632-1635, 1648, 1853, 1864



- 1031, 1034, 1106, 1224, 1557, 1693-1695, 1698, 1699, 1701, 1702, 1735, 1759  
 P: 215, 284, 287, 503, 575, 779, 787, 846, 1019  
 C: 13, 60, 88, 193, 274-277, 279, 371, 372, 422-424, 426, 594-597, 599, 600, 673, 684, 718, 720, 722, 724, 751, 758, 841-844, 893, 963, 966, 1212, 1213, 1215, 1218
- Pharmaceutical applications, systematic analysis and screening programs  
 L: 1006, 3683, 3684  
 G: 323
- , complex mixtures  
 G: 1731
- Pharmacokinetic studies, *see* Drug monitoring and pharmacokinetic studies
- Phenols, reviews and books  
 L: 1143, 1148, 2181, 2258, 3099  
 C: 419
- , techniques  
 L: 57, 75, 142, 145, 149, 152, 155, 156, 171, 2083, 2084, 2916  
 P: 958  
 C: 12, 42, 132, 445, 642, 692, 1001
- , applications  
 L: 59, 143, 146-148, 150, 151, 153, 154, 157, 158, 185, 195, 218, 308, 701, 706, 708, 880, 894, 1139-1142, 1144-1147, 1149-1153, 1243, 1276, 1312, 1585, 1948, 1984, 1986, 1987, 2003, 2004, 2113, 2121, 2164-2170, 2216, 2268, 2324, 2759, 2915, 2999, 3040, 3094-3098, 3100-3107, 3120, 3138, 3240, 3899  
 G: 77, 135-140, 326, 361, 394, 515, 520, 600-604, 649, 882, 900, 916, 972, 980-984, 996, 1104, 1111, 1325-1343, 1366, 1512, 1855  
 P: 311-314, 341, 356, 568, 585-588, 640, 826, 858-861, 1058  
 E: 916, 1774  
 C: 6, 7, 131, 133, 443, 444, 714, 741, 742, 850, 879, 880, 895, 1001, 1002, 1036, 1257
- Pheromones  
 G: 6, 1235
- Phospholipids  
 L: 258, 287, 1049, 1275, 1276, 1278, 1279, 1433, 2293, 2295, 2296, 2299, 3205(review), 3209, 3211, 3215  
 G: 186  
 P: 68, 81-83, 86, 89, 95, 98, 102, 103, 233, 351, 360, 362, 370, 371, 373, 376, 378, 381, 383, 385, 394, 448, 654, 655, 663, 665, 666, 672, 742, 902, 903, 914, 916, 918, 922, 923, 926, 928, 929  
 E: 21, 514, 1531  
 C: 159, 160, 1025-1027  
*see also* Sphingolipids
- Phosphorus compounds, inorganic  
 L: 967, 970, 2845, 2848, 2852, 3970, 3973, 3977, 3981  
 G: 1069  
 P: 281, 563  
 C: 251, 1303
- , organic, techniques  
 L: 1613, 1617, 3205(review)  
 G: 1064  
 P: 173, 988(review)  
 C: 723(review)
- Phosphorus compounds, organic, applications  
 L: 533, 580-582, 601, 1115, 1433, 1526, 1548, 1550, 1614-1616, 1699, 2014, 2296, 2365, 2535-2538, 3291, 3548-3553, 3627, 3631, 3806, 3914  
 G: 248, 710, 1561, 1563, 1564, 1567-1569  
 P: 82, 89, 98, 174, 175, 351, 360, 362, 364, 373, 376, 378, 383, 394, 424, 451, 452, 655, 665, 666, 672, 717, 740-743, 760, 902, 903, 914, 916, 920, 922, 928, 929, 968, 987  
 E: 58, 514, 573, 946, 979, 1493  
 C: 159, 213, 481, 1024, 1065, 1185  
*see also* Purines etc.; Phospholipids
- Pigments natural (and fluorescent substances)  
 L: 126, 431, 598, 604, 609, 694, 695-698, 700-702, 1720-1724, 1726, 1727, 1729(review), 1731, 1732, 2524, 2544, 2553, 2537, 2630-2633, 2910, 3651-3655, 3977  
 G: 750, 1757  
 P: 42, 80, 182, 207-211, 272, 494-500, 775-778, 1015, 1016  
 E: 891  
 C: 1258
- Piperazines  
 L: 1332, 1597  
 P: 714
- Pituitary hormones and proteins  
 L: 389, 1386, 2368, 2698
- Plant extracts, reviews and books  
 L: 831, 2794, 3864, 3884, 3890  
 G: 335  
 P: 823, 1037  
 C: 849, 1253
- , general techniques  
 G: 264, 681, 1066
- , applications  
 L: 101, 116, 153, 161, 162, 170, 174, 185, 186, 198, 199, 225, 316, 845, 869, 878-907, 1080, 1168, 1182, 1195, 1237, 1248, 1283, 1300, 1304-1306, 1310, 1363, 1577, 1580, 1582, 1591, 1614, 1723, 1758, 1929-1979, 2004, 2172, 2194, 2195, 2203, 2205, 2230, 2285, 2289, 2316, 2318, 2319, 2517, 2520, 2555, 2670, 2689, 2716, 2719, 2731, 2743, 2746-2793, 2795-2801, 2994, 3095, 3109, 3113, 3143, 3153, 3185, 3245, 3250(review), 3252-3254, 3527, 3530, 3547, 3700, 3750, 3861-3863, 3865-3883, 3885-3889, 3891-3899  
 G: 204, 211, 336, 342, 351, 352, 642, 676, 727, 825, 826, 838, 992, 1032, 1045, 1432, 1638, 1709, 1736, 1755-1760  
 P: 76, 156, 157, 240-269, 271, 315, 322, 326, 402, 437(review), 470, 535-552, 557, 586, 590, 644, 690, 696, 801-822, 824-827, 830, 893, 935, 947, 949, 972, 1035, 1036, 1038-1054, 1056  
 E: 2029  
 C: 164, 252, 318-323, 348, 467, 503, 569, 633-638, 743, 744, 751, 850, 851, 1009, 1023, 1035, 1240, 1249-1252, 1254, 1255
- Plasticizers, stabilizers (including other additives)  
 L: 2638, 3216  
 G: 176, 388, 756, 759, 760, 876, 891, 990, 1060, 1232, 1395, 1408, 1410, 1417, 1561, 1672, 1680, 1761
- Plastics and other synthetic polymers (including intermediates)  
 L: 705-711, 1733-1742, 2635-2646, 3656-3674  
 G: 1670-1692  
 P: 213, 501, 502, 1017  
 E: 271, 272, 591-593, 838-840, 1211

## Plastics and other synthetic polymers, reviews and books

L: 1620

C: 272, 929

## —, techniques and theory

L: 113, 978, 1000, 1733, 1738, 1741, 1742, 1998, 2086, 2635, 2641, 2645, 2646, 2905, 3002, 3017, 3066, 3067, 3656-3658, 3660, 3662-3667, 3669-3671

G: 896

P: 213

E: 1888

C: 55, 102, 271, 591-593, 839, 953, 1211

see also individual types of plastics

## Platinum metals and gold

L: 946, 950, 2019

G: 1381

P: 561

## Polyamides, polyimides and their intermediates

L: 709, 1737

G: 1134

## Polyamines, see Amines, polyamines and their derivatives

## Polycarbonates

G: 243, 1688

## Polyene antibiotics

L: 2584

P: 757

## Polyether antibiotics

L: 656, 1665

## Polyethers

G: 302, 886

## Polymerase chain reaction (PCR) products

L: 540, 544, 545, 1566, 2513, 3514

P: 726

E: 430, 460, 463, 468, 476, 771, 777(review), 779, 780, 788, 797, 798, 848, 851, 852, 855, 859, 862, 863, 865, 867, 868, 869(review), 870, 874-876, 879, 881-883, 887, 893, 1010, 1174, 1235, 1359, 1445, 1448(review), 1453, 1454, 1459, 1463(review), 1468, 1469, 1476, 1478, 1485(review), 1487, 1490, 1491, 1499-1501, 1511, 1814, 1816, 1822, 1824, 1826, 1846, 1909(review), 1917, 1924, 1925(review), 1946, 1947,

E: 501, 918, 937, 1530

C: 144, 145, 373, 746, 956, 1013, 1014(review), 1015

see also Starch components

## Polysaccharides and their constituents, structural studies

L: 204, 229, 236, 1198, 3169

G: 28

P: 53, 54, 332, 333, 340, 614, 619, 621, 624

C: 147, 746

## Polyurethanes, see Urethanes and polyurethanes

## Poly(vinyl butyral)

L: 3673

## Porphyrins and metalloporphyrins

L: 431, 1588, 2521, 2522

P: 441, 461

C: 410, 629, 1180

## Potassium, see Alkali metals

## Pregnane derivatives, techniques

L: 299, 3225, 3226, 3228

P: 933

## —, applications, non-biological

L: 72, 301, 304, 728, 734, 2305, 3227, 3229, 3230

G: 194, 658

P: 107, 678, 679, 683, 934-936, 1020, 1021

## —, —, biological

L: 300, 303, 305, 1289, 1291, 2306, 2308, 2658, 3233

G: 195, 812, 1461

## Propellants

L: 2008

G: 1518

## Prostaglandins and thromboxanes

L: 269, 1269, 1270, 2290, 2291, 3203

G: 180, 653-655, 799, 801, 1444-1446

P: 77, 575

C: 461

## Protamines, histones and other nuclear proteins (including chromatin proteins)

L: 1394, 1440

E: 145, 146, 147(review), 148(review), 149-156, 314, 320, 435, 580, 586, 610-617, 699, 738, 777(review), 804, 836(review),

- 3349, 3350, 3352-3359, 3509
- E: 3, 37, 39, 46, 47-49, 51-53, 55-60, 62-64, 68, 69, 71, 316, 499, 503, 525, 526, 529, 530, 532, 533, 535-539, 542, 543, 545-547, 555, 786, 901-903, 950(review), 955, 957-960, 965-968, 971, 972, 974-979, 1053, 1062, 1512, 1513, 1518, 1522, 1551, 1555, 1556, 1557, 1559-1563, 1565, 1566, 1569-1572, 1574-1579, 1582, 1583, 1585, 1591, 1604, 1623, 1761
- C: 25, 54, 80, 100, 118, 187, 188, 190-193, 195-198, 489, 491, 493-495, 498-500, 698, 726, 732, 737, 740, 749, 761, 763, 765, 766, 769, 787, 788, 797, 913, 960, 961, 1073, 1074-1077, 1079-1081, 1083
- see also Glycoproteins, lipoproteins
- Proteins, general techniques, sequence and structural studies
- L: 395, 2245(review), 2378(review), 3324, 3326, 3330, 3331(review), 3333, 3553
- E: 34, 35, 37-42, 44, 46, 525-528, 952, 954, 957, 1522, 1548(review), 1550-1552, 1555
- C: 49, 187-189, 198, 488, 761, 762(review), 1072, 1073
- see also structural studies on individual categories of proteins
- , cells, subcellular particles and viruses (including ribosomal proteins)
- L: 406, 407(review), 408, 1090(review), 1408, 2389, 2390, 3360, 3361
- E: 28, 72-76, 77(review), 78-93, 195, 227, 250, 332, 427, 477, 522, 548-562, 570, 603, 702, 755, 922, 985-987, 988(review), 989(review), 991(review), 992-1006, 1007(review), 1008(review), 1009-1015, 1016(review), 1017-1020, 1023, 1026, 1035, 1050, 1072, 1190, 1221, 1306, 1308, 1431, 1434, 1458, 1569, 1570, 1586-1609, 1610(review), 1611-1618, 1621, 1671, 1700, 1706, 1799, 1839, 1978, 2016
- C: 764(review), 770, 771(review)
- , —, structural studies
- L: 3328
- E: 36, 1554
- , synthesized by gene manipulation
- 3357, 3381-3391, 3413, 3415
- P: 367, 716
- E: 12, 19, 64, 124-133, 272, 446, 495, 515, 587-601, 619, 620, 622, 646, 652, 657, 659, 742, 892, 913, 923, 1053-1056, 1057(review), 1058-1070, 1089, 1093, 1092, 1127, 1145, 1313, 1446, 1498, 1518, 1574, 1667-1675, 1676(review), 1677, 1678, 1705, 1707, 1740, 1749, 1764, 1873
- C: 79, 118, 160, 194(review), 202(review), 203(review), 205, 326, 373, 406(review), 410, 505-507, 508-507, 508(review), 509, 510, 683, 702, 730, 739, 773-776, 1086, 1087(review), 1088-1090
- see also Lipoproteins; Chromoproteins and metalloproteins; Specific binding proteins (receptors)
- Proteins, of blood serum and blood cells, structural studies
- L: 2381, 3327
- E: 446, 951, 953
- , structural proteins (except contractile elements)
- L: 427, 430, 1438, 2413, 3392-3394
- E: 135, 136, 139-141, 143, 179, 266, 338, 607, 1003, 1004, 1071, 1074, 1076, 1123, 1222, 1683, 1685
- C: 777, 778
- , —, structural studies
- L: 382, 3392
- E: 43, 140, 946, 1553
- , of brain, nerves, cerebrospinal fluid and eye
- L: 244, 444-446, 1454-1456, 2371, 2429-2431, 3408-3410
- E: 79, 131, 171, 172-173, 174(review), 211, 227, 559, 610, 632-645, 1019, 1081, 1104-1107, 1133, 1172, 1447, 1532, 1580(review), 1717(review), 1718-1734
- C: 209, 210(review), 780, 781, 1093, 1094
- , —, structural studies
- L: 2357, 2377, 3329
- E: 1733
- for eye pigments see Pigments natural (and fluorescent substances)
- 
- L: 96, 409, 410, 423, 430, 457, 1058, 1396, 1409-1413, 1525, 2381, 3350, 3362-3367, 3373, 3414, 3419
- P: 715
- E: 62, 90, 94, 110, 125, 158, 247, 278, 317, 543, 545, 547, 548, 563-565, 580, 684, 852, 931, 998, 1021-1025, 1030, 1032, 1073, 1156, 1169, 1189, 1219, 1221, 1225, 1276, 1306, 1602, 1619-1622, 1649, 1655, 1704, 1747, 1748, 1766, 2027
- C: 407, 496(review), 1017, 1073
- , microbial and plant proteins (including proteins of foods of plant origin)
- L: 408, 411-418, 435, 454, 1414-1416, 1417(review), 1418-1427, 1448, 2391-2399, 2441, 2486, 3367-3380, 3419, 3520
- E: 87, 95-118, 119(review), 120-123, 160, 161, 201, 204, 417, 509, 523, 565-567, 568(review), 569(review), 570-583, 584(review), 585, 586, 618, 719, 726, 762, 995, 1021, 1025-1052, 1221, 1606, 1611, 1622-1666, 2027, 2028
- C: 201, 501-504, 772, 915, 1084, 1085
- , —, structural studies
- L: 3015
- E: 1549
- of blood serum and blood cells
- , of muscle and meat products (including related contractile proteins)
- L: 1439, 2409, 2410, 2411(review), 2412
- E: 134(review), 137, 138, 142, 144, 602-606, 608, 609, 718, 1072, 1073, 1075, 1077-1080, 1088, 1211, 1267, 1502, 1675, 1679-1682, 1684, 1686
- C: 511(review)
- , —, structural studies
- L: 2411(review), 3326
- E: 1079, 1080
- , of glands and gland products (except mammary gland), various zymogens
- L: 403, 1405, 1450, 2419, 2420, 2422, 3403
- E: 164-168, 170, 226, 553, 559, 624, 625, 627-629, 631, 653, 676, 1097-1100, 1108, 1148, 1708-1710, 1713, 1714, 1739, 1760, 1978
- , of milk
- L: 258, 368, 440, 1228, 1445-1449, 2365, 2421, 2426, 2535, 3402, 3404, 3405, 3407
- E: 21, 510, 630, 1102, 1103, 1502, 1591, 1597, 1706, 1707, 1711, 1712, 1715, 1716

## Proteins, of eggs

L: 464, 3431

E: 231, 508, 1765

## —, urinary

L: 459, 1467

E: 131, 670-672, 1576, 1758

C: 203(review), 211

## —, from neoplastic tissue

L: 447-451, 1457, 1526, 2432, 3411

E: 20, 32, 130, 135, 175(review), 176, 177, 178(review), 179, 180(review), 181(review), 182, 183(review), 184-188, 189(review), 190(review), 191-195, 196(review), 197, 198, 214, 443, 451, 507, 610, 629, 646-651, 664, 674, 805, 1011, 1018, 1102, 1108-1110, 1111(review), 1112-1116, 1596, 1603, 1687, 1700, 1708, 1710, 1714, 1728, 1735-1739, 1763

C: 782

## —, complex mixtures and uncompletely specified proteins

L: 460-462, 1468, 1469, 2439, 3372, 3377, 3424, 3426, 3430

G: 691, 895

E: 28, 225-229, 675, 1013, 1146-1148, 1151(review), 1152, 1759-1765

## —, —, structural studies

L: 2367

## Psychostimulants

L: 769, 779, 787, 790, 1802, 1824, 1842, 3734, 3736, 3752, 3766, 3849

G: 345, 350, 805-808, 810, 814, 816, 817, 820, 1034, 1038, 1044, 1737, 1740, 1741, 1746-1749, 1751

P: 223, 785, 786, 788

C: 292, 719, 1236

## Purine alkaloids (xanthines)

L: 558, 910, 1577, 1585, 2514, 3517

G: 1002

## Purine antibiotics

L: 2578

## Purines, pyrimidines, nucleotides, nucleosides

L: 523-534, 1538-1555, 2499-2506, 3493-3507

G: 699, 1535

P: 144-152, 431, 432, 721-725, 965-969

E: 290-303, 729-736, 1232-1253, 1811-1820

C: 215-218, 519-525, 792-795, 1101-1113

## —, reviews

L: 1547, 3497, 3503, 3513

C: 419, 1103

## —, techniques

L: 53, 63, 202, 297, 523-525, 528, 534, 1538, 1539, 1541, 1543, 1546, 1550, 1552, 1554, 2975, 3495

P: 147, 723

E: 290, 1239

C: 215, 349, 365, 413, 519, 521, 524, 625, 701, 794, 795, 935, 1024, 1105, 1106, 1108, 1111-1113

## —, analogues of purines, pyrimidines, nucleotides and nucleosides (fluoro ...)

L: 579, 754, 856, 871, 1549, 1866, 2499, 2502, 2650, 3494, 3496, 3507, 3536, 3537, 3777, 3846

P: 144, 145, 149-152, 431, 432, 724, 954, 958, 965, 968

E: 1818

C: 216, 217, 523, 525, 619, 825, 1102, 1193, 1239

## Purines, pyrimidines, nucleotides, nucleosides, applications, non-biological

L: 527, 530-533, 1544, 2500, 2503, 2504, 3504

P: 149, 150, 174, 722, 965-967, 969

E: 731, 734

C: 793

## —, —, microorganisms

L: 3506

P: 652, 725

## —, —, plants

L: 1553

C: 1107, 1110

## —, —, animal material

L: 526, 529, 1540, 1543, 1545, 1546, 1551, 1555, 1982, 2500, 3501, 3505

G: 699, 1535

P: 146, 721, 723, 724

C: 522, 523, 1107, 1109

## Pyrazines

L: 1008

see also Diazines

## Pyrethrins (and other natural insecticides)

L: 1714, 1936

G: 128, 738, 745, 746, 1011, 1019, 1179, 1191, 1599, 1612, 1613, 1627, 1629, 1631, 1632, 1635

C: 269, 834

## Pyridine and piperidine derivatives

L: 57

P: 980, 981

C: 78, 130, 246, 718, 944, 1181

see also Nicotinic acid and derivatives

## Pyridones

L: 1919, 1928

## Pyridoxine, see Vitamins, B group

## Pyrimidines, see Purines, pyrimidines, nucleosides, nucleotides

 $\gamma$ -Pyrone derivatives, see Flavonoids and  $\gamma$ -pyrone derivatives

## Pyrroles, pyrrolidines and pyrrolidones

L: 565-568

G: 1538, 1539

C: 456, 823

see also Bile pigments; Porphyrins and metalloporphyrins

## Q

## Quinazolines

L: 1912

## Quinoline and isoquinoline alkaloids

L: 1956

C: 569

## Quinolines and isoquinolines

L: 377, 650, 3801

G: 791

P: 170, 982

C: 130, 615, 626

## Quinolizidine alkaloids

L: 101, 2515, 3528, 3529

P: 731, 734, 973

Quinones 1273 1276-1278 1280-1284 1286-1288 1291-1295 1297

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## Silicium compounds, organic

L: 589  
G: 753, 754, 915, 1896  
P: 176

Silver, *see* Cations, inorganic, analytical group I and IIa

Snake venoms, *see* Venoms, snake

Sodium, *see* Alkali metal

## Soil pollution

L: 138, 680, 958, 959, 964, 1099, 1258, 1312, 1418, 1690, 1698, 1701, 1996, 2000, 2007, 2035, 2529, 2575, 2625, 2812, 2813, 3033, 3083, 3086, 3089, 3556, 3615, 3617, 3624, 3632, 3633, 3636, 3637, 3646, 3911, 3914, 3915, 3964  
G: 101, 112, 114, 116, 124, 130, 138, 145, 147, 159, 166, 224, 253, 272, 287, 392, 559, 561, 567, 570, 585, 592, 593, 607, 682, 711, 712, 714, 739, 866, 878, 880, 881, 883-885, 970, 1058, 1225, 1229, 1242, 1244, 1254, 1255, 1260, 1264, 1266, 1277, 1306, 1330, 1333, 1336, 1343, 1348, 1349, 1464, 1508, 1565, 1576-1578, 1620, 1634, 1639, 1661, 1830, 1861-1868  
P: 404, 478, 482

E: 329, 342, 1272, 1378, 1474, 1967, 1972, 1973, 1984  
C: 149, 348, 645  
*see also* individual polluting compounds

## Spasmolytics

L: 2419  
G: 342, 773, 816

## Specific binding proteins (receptors)

L: 229, 452-458, 463, 876, 1458-1466, 1500, 2241, 2389, 2433-2438, 3347(review), 3387, 3394, 3396, 3397, 3412-3423, 3427, 3926  
P: 996  
E: 31, 84, 124, 126, 128, 129, 146, 156, 199-224, 249, 465, 478, 551, 572, 652-669, 690, 693, 735, 757, 829, 923, 930, 949, 1049, 1117-1145, 1181, 1184, 1239, 1252, 1276, 1530, 1533, 1547, 1610(review), 1740-1757, 1828  
C: 407, 494, 770, 1087(review), 1090

—, structural studies

E: 1547

## Sphingolipids (sulfatides, gangliosides, ceramides, cerebrosides)

L: 518, 1276, 2293, 2300, 3011  
P: 84, 85, 88, 93, 94, 96, 97, 99, 100, 361, 366, 370, 377, 380, 381, 628, 649, 651, 660, 661, 664, 673-676, 905, 908, 915, 919-921  
E: 513

Stabilizers, *see* Plasticizers and stabilizers

## Starch components

L: 228, 231, 238-240, 2227  
G: 405, 627, 628

*see also* Polysaccharides

## Steroid alkaloids

L: 555(review)

## Steroids

L: 294-321, 1285-1300, 2303-2314, 3220-3245  
G: 187-203, 658-666, 996, 1457-1468  
P: 106-113, 386-396, 678-689, 931-944

## Steroids, general techniques and theory

L: 295, 297, 320, 321, 1106, 2303, 3070, 3220-3224  
G: 969  
P: 931

*see also* Androstane derivatives; Oestrogens; Pregnane derivatives; Sterols

## Sterols, reviews

L: 312, 314, 3884  
G: 196  
P: 109

—, techniques

L: 3021, 3221  
P: 385, 659  
E: 520, 1537  
C: 463, 1032

—, applications, non-biological

L: 1295, 3243  
G: 663

P: 392, 394, 395, 685, 687, 940, 942

—, —, biological

L: 313, 315, 1296, 3242  
G: 198-201, 363, 642, 664-666, 831, 1391, 1466, 1467, 1764  
P: 110, 393, 686, 688, 939, 941  
E: 2030(review)

Stimulants, *see* Psychostimulants

Strontium, *see* Alkaline earths

## Strychnine group

L: 1581

## Styrene polymers (inclusive pyrolysis products)

L: 711, 978, 2118, 2640, 2643, 3661, 3672, 3674  
G: 109, 297, 765, 766, 1020, 1088, 1101, 1250, 1670, 1676, 1678, 1835  
P: 502

Sulphatides, *see* Sphingolipids

Sulphides (thioethers) and polysulphides

L: 1355, 2531, 2532  
G: 246, 303, 705, 706, 1005, 1542-1546, 1553, 1556, 1564

## Sulphonamides

L: 648, 793, 794, 797, 800, 802, 924, 1053, 1608, 1852, 1882, 2709, 3586, 3775, 3783, 3796, 3798, 3843  
G: 293  
P: 449, 793  
C: 298, 299, 1241

## Sulphones

L: 1602  
G: 302, 1288

## Sulphoxides

L: 2528, 2530, 3539, 3543, 3544  
G: 233, 704  
P: 450, 738  
C: 570, 1184

## Sulphur compounds, inorganic

L: 2054, 2056-2058, 2838, 2845, 2848, 2852, 3964, 3976, 3978  
G: 430, 1938

E: 921(review)  
C: 378, 571, 573, 1047, 1182  
Sulphur compounds, organic, acids and derivatives  
L: 570, 1250, 1602, 1604-1607, 1610, 1717, 2001, 2533(review),  
3541, 3546  
G: 225, 245, 246, 248, 705, 707, 844, 1549, 1569, 1816  
P: 171, 179  
E: 488  
C: 378, 572, 643  
see also Heterocyclics, sulphur  
Sulphur, elemental  
L: 964, 2056  
Sunburn preventives  
L: 1884(review), 1908  
G: 1850  
Surfactants, emulsifiers and detergents  
L: 920, 929-931, 1997-2001, 2812-2814, 2821, 3251, 3916-3923  
G: 882, 886-889, 1059, 1336, 1869, 1870  
P: 555, 828, 829  
E: 901  
C: 390, 643, 644, 1260, 1261  
Suspensions, various  
L: 1049, 1119, 3072, 3213, 3927, 3928  
G: 559, 832  
E: 489, 1503, 2036, 2037  
C: 334-337, 695, 1265, 1267, 1269(review), 1278, 1281, 1283(re-  
view), 1285, 1287, 1289  
Sweeteners, artificial  
L: 910, 1985, 2716  
Sympathomimetics, see Adrenergic and adrenergic blocking agents

## T

Tannins (and catechins)  
L: 67, 144, 184, 1180, 1181, 1183, 2193, 2195, 3138  
P: 322, 323(review)  
C: 136, 320

Tantalum, see Cations, inorganic, analytical group III

Terpenes, acids  
L: 1303, 3255  
G: 1473  
P: 398  
C: 467  
—, alcohols  
L: 331, 2318  
G: 205, 209, 670, 997, 1472, 1473, 1476, 1477, 1736, 1758-  
1760  
—, resins  
G: 1061  
Tetracyclines  
L: 663, 924, 1678, 2566, 2575, 2604, 3228, 3574, 3576  
P: 1000  
C: 256  
Textile dyes (including bleaching agents)  
L: 693  
P: 487, 491, 773  
Thallium, see Cations, inorganic, analytical group I and IIa  
Thiamine, see Vitamins, B  
Thiazoles, isothiazoles and thiazolones  
G: 1218  
P: 986  
Thioamides  
L: 577  
Thiocyanates and isothiocyanates  
L: 1603  
Thiols  
L: 352, 367, 575, 2532, 3494, 3545  
G: 244, 705, 709, 839, 844, 1544, 1545, 1547, 1553, 1554  
C: 826, 1183  
Thiophenes  
L: 1613, 2529  
G: 621, 844, 1062, 1550-1552, 1555, 1557, 1558  
Thiophosphates  
G: 1544  
Thioureas  
L: 3540  
Thorium, see Cations, inorganic, analytical group III

## Toxicological (and forensic) analysis, general techniques

L: 917, 1917, 1918, 1923, 2740, 3858

P: 238, 239

C: 317, 631, 632

## —, applications

L: 355, 877, 937, 971, 1285, 1378, 1571, 1572, 1578, 1815, 1921, 2541, 2543, 2694, 2738-2743, 2745, 2808, 3037, 3039, 3123, 3124, 3380, 3849-3857, 3859, 3860, 3892

G: 128, 135, 160, 172, 194, 272, 310, 317, 338-350, 401, 412, 594, 599, 605, 723, 734, 783, 787, 803, 806-808, 810-818, 820, 823, 824, 827, 832, 854, 923, 924, 979, 992, 1001, 1007, 1024, 1033, 1035-1040, 1043, 1044, 1166, 1234, 1241, 1322, 1326, 1443, 1696, 1716, 1737-1753, 1770

P: 158, 405, 530, 531, 572, 577, 730, 788, 799, 800, 978, 1032-1034

E: 120, 416, 483, 1628, 1639, 2027, 2028

C: 275, 313-315, 664, 1246-1248

see also Proteins of blood, serum and blood cells

## Toxins (non-proteinous or unidentified)

L: 874-876, 1363, 1571, 1919, 1920, 1922, 1924, 1926-1928, 2738, 3852, 3853, 3855

P: 532-534

see also Aflatoxins; Mycotoxins

## —, proteinous

L: 1377, 1417(review), 1418-1421, 1424, 2395, 2744, 3295, 3860

E: 113, 1628, 1639, 2027, 2028

C: 502

see also Proteins of glands and gland products; Venoms; individual enzyme types

## Tranquilizers (anxiolytics)

L: 1802, 1805, 1820, 1821, 1847, 2689, 2692, 2693, 2700, 2701, 3733

G: 311, 784, 1028

P: 218, 224, 225, 513, 514, 783, 784

C: 1223

## Transferases, transferring one atom groups (methyl-, hydroxy-, formyl-, carbonyl-, carbamoyl-, amidine) and related transferases (E.C. 2.1.-.-)

E: 240, 1778, 1780

C: 786

## —, transferring acyl- and aminoacyl groups (E.C. 2.3.-.-)

L: 482, 2457, 2458, 2468, 3444, 3446

E: 210, 219, 241-256, 322, 602, 662, 685, 692-708, 866, 871, 879, 896, 1172-1190, 1289, 1454, 1592, 1689, 1692, 1781-1787, 1822

C: 213, 518, 1096

## Transferases, transferring phosphorus containing groups (E.C. 2.7.-.-), structural studies

E: 1189

## —, transferring sulphur containing groups (E.C. 2.8.-.-)

L: 484, 488

E: 688

C: 784

## —, activity measurements

P: 329, 339

## Triazines and triazanes

G: 1004

## Triazoles

P: 169

## Tropine alkaloids

L: 1572, 1587, 2519, 2745

C: 567, 607

## Trypsin inhibitor (antitrypsin)

L: 2440, 3300

E: 592

C: 739

## —, structural studies

L: 1396, 3325

## Tuberculostatics

L: 33, 1891, 1901, 2705

P: 227, 228, 1027, 1029

## Tungsten, see Cations, inorganic, analytical group IIb

## U

## Ubiquinones (coenzyme Q)

L: 608, 1629, 2294, 2552

P: 181

## Uranium, see Actinides and uranium

## Urea and urea derivatives)

L: 352

G: 1514

see also Thiourea



## Venom, snake

L: 438, 439, 441-443, 2425, 2427, 2428, 3400, 3406  
E: 16, 1101

## —, other

L: 436, 437, 876, 1451, 1452, 1508, 2364, 2424, 3401  
E: 626

see also Proteins, of glands and gland products; Toxins, proteinous; individual enzyme types

## Vinca alkaloids

C: 1176

## Vitamins (for vitamin protein complexes, see Specific binding proteins)

L: 591-617, 1627-1642, 2544-2561, 3561-3572

G: 1588, 1589

P: 181-186, 463-466, 748, 994-997

C: 252, 253, 577-579, 1192-1197

## —, reviews and books

L: 599, 607, 611, 932, 3570

C: 639

## —, techniques for fat soluble vitamins

L: 369, 606, 607(review), 1640, 2557, 3570(review)

C: 1194, 1196

## —, techniques for water soluble vitamins

L: 369, 606, 612, 1628, 3016

P: 183

C: 253, 1194, 1196

## —, A group (including synthetic retinoids)

L: 463, 592, 593, 596, 598, 599(review), 604, 605, 609, 614-616, 822(review), 932(review), 981, 1627, 1631, 1720, 1732, 2545, 2546, 2549, 2553, 2555, 2559, 2561, 2632, 3564, 3569, 3652

P: 182, 464, 466, 778

C: 579

see also Pigments, natural (and fluorescent substances)

—, B<sub>1</sub>

L: 601, 2554, 2558

—, B<sub>2</sub> and other flavins

L: 2554, 2556

C: 1192, 1193

—, B<sub>3</sub>

L: 2554

—, B<sub>6</sub>

L: 594, 1637, 3566

—, B<sub>12</sub> group (Cobalmin)

L: 594

P: 184, 185, 465

## —, biotin group

L: 591, 1634, 1635

C: 26

## —, C group

L: 822(review), 932, 2551, 2572

P: 13, 748

C: 578

## Vitamins, K group

L: 2559, 2560

## Volatile organic compounds (VOC)

G: 48, 122, 244, 359, 387, 391, 395, 409, 412, 434, 531, 554, 588, 709, 852, 854, 855, 867, 869, 872, 944, 1073, 1078, 1283, 1299, 1300, 1845, 1851, 1852, 1858, 1860, 1862

## Volatiles, flavours, odours, see Organoleptics

## W

## Warfare agents

L: 2007

G: 247, 256, 414, 713, 1006, 1007, 1016, 1560, 1562, 1565-1567, 1729, 1843

C: 645

## Water

G: 432, 914, 1109, 1156, 1283, 1849, 1938

## Water analysis and pollution

L: 150, 154, 268, 307, 354, 586, 725, 799, 917-921, 923-928, 935, 936, 939, 942, 943, 950, 952, 954, 956, 962, 963, 1005, 1084, 1129, 1132, 1137, 1140, 1141, 1145, 1153, 1197, 1250, 1313, 1320, 1323, 1362, 1418, 1606, 1607, 1614, 1617, 1619, 1682, 1684, 1688, 1692, 1693, 1704, 1706, 1716, 1740, 1744, 1753, 1755, 1926, 1991-1994, 2000, 2007, 2020, 2024, 2027, 2055, 2056, 2151, 2165, 2166, 2208, 2263, 2269, 2271, 2324, 2529, 2531, 2541, 2543, 2566, 2582, 2607, 2608, 2610, 2617, 2618, 2620, 2626, 2638, 2655, 2741, 2806-2809, 2811, 2833, 2837, 2843, 2847, 2853, 3027, 3030, 3031, 3036, 3039, 3045, 3047, 3077, 3084, 3103, 3102, 3104, 3106, 3240, 3255, 3295, 3542, 3610, 3615, 3625, 3631, 3638, 3640, 3644, 3646, 3682, 3852, 3907-3913, 3918-3920, 3935, 3938, 3944, 3936, 3967, 3968, 3970, 3972

G: 86, 114, 120, 122, 129, 136, 176, 209, 228, 247, 250, 252, 255, 262, 267, 271, 272, 282, 286, 288, 290, 293, 391-398, 426, 561, 566, 586, 590, 592, 603, 604, 622, 634, 662, 683, 709, 711-713, 720, 722, 767, 850, 852, 853, 872, 873, 875-879, 887, 890, 971, 973, 980, 984, 1057, 1063, 1135, 1158, 1179, 1215, 1245, 1247, 1248, 1252, 1267, 1272, 1274, 1289, 1293, 1295-1297, 1303, 1327, 1330, 1331, 1338, 1357, 1358, 1385, 1405, 1425, 1427, 1542, 1544-1546, 1572, 1580, 1583, 1597, 1604, 1608, 1611, 1617, 1623, 1624, 1628, 1639, 1645, 1646, 1655, 1661, 1699, 1761, 1830, 1850-1861, 1875, 1890, 1931, 1933

P: 278, 313, 619, 705, 766-768, 853, 1033

E: 393, 414, 488, 772, 1451, 1774, 1875, 1989

C: 265, 332, 379, 586, 645, 661, 666, 1021, 1205, 1207, 1208,

**X**

Xanthates

G: 243

Xanthine alkaloids, *see* Purine alkaloids

X-ray contrast media

L: 2626

**Z**

Zinc, *see* Cations, inorganic, analytical group III

Zirconium, *see* Cations, inorganic analytical group III