

Subject Index

Please, note that this Index refers to the entry numbers in the Bibliography Section (J. Chromatogr. A, Vols. 860 and 861). Individual parts of the Bibliography Section (Liquid Column Chromatography, Gas Chromatography, Planar Chromatography, Gel electrophoresis and Capillary electrophoresis and electrokinetic chromatography) are numbered separately.

Liquid Column Chromatography

- Adsorption 2619, 3323
 — isotherms 1136, 1206, 1208, 2316, 3379
 Advances in chromatography 1098(review)
 Affinity chromatography, applications to various fields of science and technology 149, 151, 251, 358, 489, 497, 500, 503, 506, 515-517, 527, 529-531, 589, 590, 606, 608, 610, 634, 636, 646, 652, 671, 862, 883, 970, 1248-1250, 1252, 1379, 1438, 1580, 1588, 1590, 1626, 1649, 1672, 1682, 1685, 1688, 1773, 1781, 1828, 2106, 2228, 2404, 2405, 2705, 2735, 2738, 2740, 2747, 2761, 2810, 2835, 2870, 2899, 3063, 3304, 3596, 3600, 3653, 3741, 3758, 3801, 3820, 3835-3837, 3839, 3867, 3884, 3886, 3929, 3945, 3957, 3974, 3978, 3979, 4128
 see also Membrane chromatography; Immobilized metal (ion) affinity chromatography; Immunoaffinity chromatography
 — —, magnetic 1190
 — —, membrane 1254, 1255, 1258, 1623, 2698, 3439(review), 3441(review), 3443, 3803, 4169
 — —, new sorbents, see Dyes as ligands in affinity chromatography; Stationary phase(s) for affinity chromatography; various kinds of sorbents
 — —, reviews 139-142, 146, 147, 153, 155, 1251, 1257, 1701, 2219, 2402, 2406, 3439-3442
 — perfusion chromatography 1672
 — precipitation 1207
 Amide bonded stationary phases 4195, 4216
 Amino bonded stationary phases 1345, 3383
 Amperometric detection, see Detection, amperometric
 Antipeptide antibodies as affinity ligands 148
 Atomic adsorption spectrometry application in LCC, see LC/AAS coupling
 Automated procedures 291, 359, 399, 413, 499, 504, 819, 872, 876, 946, 958, 1010(review), 1110, 1119, 1216-1218, 1229, 1333, 1496, 1584, 1829, 1832, 1880, 1946, 1950, 1961, 1990, 2225, 2465, 2475, 2493, 2892, 2945, 3086, 3090, 3091, 3106, 3116, 3121, 3137, 3408, 3662, 3695, 3711, 3724, 3802, 4095, 4274, 4292, 4390, 4458
 Avidin 164, 3125
 Avidin-biotin immobilized 1629
 Band broadening 27(review), 859, 2301
 Baseline determination 11(review)
 — noise 1107
 Bioaffinity chromatography, see Affinity chromatography, applications to various fields of science and technology
 Books (and symposia proceedings) 2, 4, 1577, 2290, 2390, 4334
 Boronate ligands for affinity chromatography 243, 1252
 Butyl-agarose 636
 Calibration in chromatography, general 3786
 see also Data processing
 — — gel permeation chromatography, see Gel permeation chromatography, calibration
 — — steric exclusion liquid chromatography, see Gel permeation chromatography, calibration
 Calmodulin-agarose 646
 Capacity factor 4187
 Capillary liquid chromatography 58, 97, 236, 1113, 1165, 1275, 1938, 2077, 2084, 2664, 2691, 3213, 3384, 3471, 3801, 4081
 — — —, combination with GC 126, 3213
 — — —, — — MALDI/TOF 453
 — — —, — —, comparison with conventional HPLC 3414
 — — —, coupling with microdialysis 1938
 — — —, — — MS 236, 455, 513, 711, 1233, 1564, 1809, 2084, 2395, 2653, 2714, 2932, 2933, 2995, 3419, 3423
 — — —, — — MS-MS 721
 — — —, detector 58, 3349, 3616
 — — —, electric assisted 1564
 — — —, instrumentation 3337
 — — —, optimization 3309, 4081
 — — —, temperature effect 3384, 4081
 — columns, see Column(s), microbore and capillary
 Carbon as sorbent, see Stationary phase(s), carbon
 Cellulose based sorbents 70, 195, 388, 715, 1267, 1431, 1473, 2363, 2754, 2920, 3076, 3453, 3456, 3672, 4169, 4223
 Centrifugal countercurrent chromatography, see Countercurrent chromatography
 — partition chromatography 119, 335, 3178, 3508, 3517, 4034, 4036, 4394, 4412(review)
 Chelating agarose 535
 Chelation chromatography 1060, 2243, 4402, 4416
 see also Metal chelate chromatography
 Chemiluminescence, see Detection and detectors chemiluminescence
 Chemometrics 147(review), 723, 2009, 3113, 3312, 3316, 3321, 3411, 4171, 4179, 4198
 Chiral derivatization 410, 1405, 2042, 2061, 2096, 2155, 2602
 see also Enantiomers (and diastereomers), separation
 — mobile phases 203, 863, 1272, 2062, 2410, 2411, 4197
 see also Cyclodextrin, mobile phase

- Chiral sorbents and stationary phases 36, 70, 71, 92(review), 102, 164-168, 170(review), 172, 173, 175, 357, 388, 391, 408, 415, 715, 988, 1143, 1182, 1263-1268, 1270, 1272, 1275, 1278, 1293, 1431, 1473, 1488, 1516, 1517, 1523, 1838, 1843, 1854, 2107, 2363, 2409, 2414-2416, 2418-2421, 2424, 2425, 2606, 2626, 2628, 2639, 2910, 2914, 2920, 2931, 3076, 3111, 3357, 3433, 3434, 3436, 3450, 3453-3456, 3461, 3672, 3689, 4037, 4061, 4121, 4195, 4200, 4215, 4216, 4223
 see also Cyclodextrin, stationary phase
- Chromatofocusing 488, 640, 1191, 2741, 3152
- Chromatography information management system (CIMS) 1217
- Clean-up procedures 797, 803, 830, 917, 1112, 1322, 1324, 1812, 1831, 1948, 1950, 1961, 2950, 2985, 3002, 3008, 3010, 3014, 3208, 3512, 3748, 3895, 4295
 see also Immunoaffinity clean-up; Solid-phase extraction
- Closed-loop steady state recycling 2002
- CN-bonded phases 910, 1977, 2071, 2136, 3156, 4258, 4268
- Collagen column 147
- Column(s), chiral, see Chiral sorbents and stationary phases
- , backflushing 4091
- , care of 2348
- , comparison 3393
- , conical 2364
- , coupling 1951, 1981, 2616, 2966, 3010, 3223, 3467
- , microbore and capillary 2349, 3467
 see also Microbore liquid chromatography; Microcolumn chromatography
- , nano- 81
- , packed, heterogeneously 1116, 1123, 1141
- , packing 843, 2344
- , Pirkle 1268, 1843, 2062, 2927
- , precolumn 3445, 4032
- , selectivity, see Selectivity
- , switching 227, 827, 928, 958, 961, 981, 1024, 1144, 1214, 1457, 1495, 1496, 1820, 1924, 1928, 1943, 1975, 2001, 2083, 2096, 2153, 2166, 2616, 2617, 2660, 2974, 2985, 3050, 3067, 3068, 3091, 3149, 3445, 3662, 3697, 3718, 3757, 4095, 4096, 4136, 4248, 4257
- , washing 2311
- Comparison of sorbents, see Stationary phase(s), comparison
- Computerization 11(review), 26, 114-119, 1104, 1122, 1217, 1219-1229, 1573, 2375, 2377, 2378, 2379(review), 2380, 2892, 3290, 3294, 3295, 3302, 3317, 3410-3412
 see also Data processing; Models in chromatography; Retention model
- Conductivity detector (and detection), see Detection and detectors conductivity
- Continuous bed chromatography 1191, 2349, 2771
- chromatography 109, 378
 see also Preparative (and semipreparative) chromatography
- Correlation chromatography 178
- Counter-current chromatography 181, 335, 1003, 1128, 1150, 1280, 1284, 1287, 1312, 1921, 2426, 2428, 2571, 3466(review), 3827
- , coupling with MS 1241(review)
- , enantiomer separation 161, 162
- , high-speed 999, 1046, 1241(review), 1286, 1834, 2239, 2429, 2490, 3246
- , pH-zone-refining 716
- , preparative 1834
- , rotation locular 1000
- Counter-current chromatography, simulated 2427
- Coupled column chromatography, see Columns(s), coupling
- Cyclodextrin, mobile phase 203, 728, 2062, 2411, 3670, 4049, 4126
- , stationary phase 391, 2374, 2415, 2895, 3357, 3681, 3734, 4231, 4284
- Data processing 1110, 1132, 1219, 1221, 1224, 1229, 2304, 3290, 3351, 4171, 4179, 4445
 see also Calibration in chromatography, general
- system, see Computerization
- Database 169(review)
- Derivatization, see Post column derivatization; Precolumn derivatization
- , chemiluminescence 3144
- , chiral, see Chiral derivatization
- , electrochemical 3765
- , fluorescence 320(review), 350, 362, 367, 410, 418, 454, 753, 758(review), 760, 884, 937, 967, 1307, 1310, 1320, 1418, 1441, 1502, 1506, 1509, 1510, 1512, 1518, 1528, 1836, 1932, 1955, 1967, 2033, 2061, 2155, 2337, 2602, 2627, 2632, 2634, 2924, 3006, 3106, 3144, 3489, 3490, 3556, 3701, 3724, 3939, 4294, 4317
 see also Post column derivatization; Precolumn derivatization
- , on-column 412, 1512, 3091
- , review 320, 758, 2285
 see also Post column derivatization; Precolumn derivatization
- Detection (and detectors), acoustic wave, bulk 2251, 2274, 3256
- — —, amperometric 68, 69, 212, 902, 1321, 1365, 2223, 2275, 2604, 3003, 3069, 3074, 3137, 3348, 3684, 4183, 4205
- — —, pulsed 233, 237, 250, 1075, 1342, 1364, 2477, 2478, 2486, 2494, 2583, 3539, 3540
 see also Detection (and detectors), electrochemical
- — —, atomic absorption, see LC/AAS coupling
- — —, biosensor 2689
- — —, chemiluminescence 900, 901, 992, 1160, 1168, 1425, 1440, 1449, 1485, 1860, 2076, 2333, 3073, 3144, 3210, 3608, 3683, 3687, 3708
 see also Detection (and detectors), fluorescence
- — —, circular dichroism 66, 2302, 2329, 2338, 2931, 3111, 3417, 3430
- — —, coulometric 69, 911, 4078
- — —, conductivity 280, 731, 1029, 1056, 1157, 1408, 1489, 1499, 1846, 2241, 2263, 2336, 3163, 3343, 3354, 3624, 4437
- — —, coulometric 395, 688, 1519, 3003, 3627, 3660, 4139
- — —, diode array, see Detection (and detectors), photodiode array
- — —, electrocatalytic 1402
- — —, electrochemical 212, 292, 379, 386, 399, 402, 404, 434, 707, 750, 753, 754, 893, 911, 927, 969, 976, 1006, 1034, 1164, 1165, 1457, 1482, 1487, 1507, 1837, 1882, 1901, 1975, 2015, 2053, 2276, 2450, 2451, 2475, 2483, 2493, 2621, 2664, 2944, 2962, 3003, 3017, 3066, 3093, 3108, 3352, 3645, 3688, 3691, 3714, 3730, 3756, 3765, 3937, 4059, 4078, 4215, 4265, 4359(review), 4444, 4456(review)
- — —, array 1034
- — —, pulsed 764
 see also Detection (and detectors), amperometric
- — —, electrochemiluminescence 1159(review)
- — —, electrode array 1165
- — —, electron-capture 1158
- — —, enzyme 354

- Detection (and detectors), flame ionization 2332, 3647
 — — —, flow scintillation, see Detection and detectors radioactivity
 — — —, fluorescence (luminiscence, phosphorescence) 192, 196, 238, 243, 266, 320(review), 350, 351, 362, 367, 370, 371, 384, 399, 409, 410, 418, 420, 422, 454, 682, 685, 705, 720, 726, 749, 758, 760, 777, 786(review), 811, 828, 851, 880, 884, 897, 921, 937, 952, 961, 966, 967, 1294, 1301, 1307, 1310, 1320, 1330, 1376, 1418, 1419, 1441, 1464, 1490, 1496, 1502, 1506, 1509, 1510, 1512, 1518, 1521, 1522, 1528, 1836, 1847, 1869, 1898, 1932, 1937, 1951, 1952, 1955, 1964, 1967, 2015, 2032, 2033, 2038, 2041, 2051, 2054, 2061, 2074, 2076, 2089, 2096, 2114, 2127, 2132, 2140, 2155, 2171, 2337, 2433, 2435, 2438, 2450, 2466, 2527, 2591, 2602, 2614, 2616, 2627, 2632, 2634, 2637, 2642, 2643, 2797, 2801, 2906, 2911, 2921, 2924, 2942, 2947, 2981, 2989, 3006, 3012, 3072, 3081, 3085, 3086, 3092, 3099, 3106, 3132, 3134, 3141, 3142, 3144, 3155, 3157, 3208, 3211, 3489-3491, 3505, 3512, 3556, 3607, 3632, 3648, 3701, 3724, 3725, 3757, 3939, 3980, 4031, 4062, 4070, 4076, 4090, 4105, 4121, 4198, 4206, 4259, 4282, 4287, 4293, 4294, 4317, 4410, 4436
 — — —, —, indirect 3799, 4079
 — — —, —, laser induced 412, 700, 2016, 3530, 3801
 — — —, —, scan 199
 — — —, indirect 281, 1084, 1404, 2237, 2272, 2991
 — — —, infrared, see LC/FTIR coupling
 — — —, laser based 831, 844, 3032
 — — —, light scattering 202, 225(review), 241, 259, 320(review), 336, 338, 339, 369, 502, 844, 1155, 1341, 1351, 1780, 2260, 2334, 2476, 2552, 2553, 2633, 3032, 3041, 3048, 3204, 3268, 3349, 3557, 3582, 3616, 3647, 3858, 4065, 4163, 4167, 4277, 4355
 — — —, limits 3305, 3350
 — — —, NMR, see LC/NMR coupling
 — — —, noise smoothing 1166
 — — —, on column 63
 — — —, photodiode array 196, 197, 207, 336, 360, 388, 499, 712, 723, 732, 749, 804, 816, 819, 820, 836, 850, 871, 878, 887, 903, 935, 976, 997, 998, 1005, 1013, 1162, 1292, 1302, 1315, 1477, 1520, 1530, 1550, 1817, 1872, 1894, 2128, 2154, 2157, 2173, 2175, 2190, 2195, 2198, 2204, 2297, 2381, 2471, 2568, 2893, 2915, 2923, 2998, 3008, 3077, 3053, 3162, 3172, 3193, 3199, 3312, 3495, 3521, 3526, 3632, 3688, 3754, 4018, 4020
 — — —, photographic 38
 — — —, photometric, indirect 281, 2237, 2272, 2991
 — — —, piezoelectric quartz crystal 4364
 — — —, pneumatic 62
 — — —, polarimetric 831, 2330
 — — —, post column reaction, see Post column derivatization
 — — —, potentiometric 301, 3266
 — — —, radioactivity 303, 336, 343, 365, 648, 741, 1431, 1450, 1451, 1759, 2461, 2522, 2547-2549, 3703, 3997, 4252
 — — —, —, whole-column 3344
 — — —, reaction, see Post column reaction detection
 — — —, refractometric 253, 299, 1207, 1351, 2097
 — — —, review, general 2335, 3353
 — — —, second order derivative spectroscopy 2658
 — — —, spectrophotometric, see Detection (and detectors), photometric
 — — —, sulfur flame 4052
 — — —, thermal lens 748, 2223
 Detection (and detectors), voltammetry 1075, 4127
 — — —, wavelet 3346(review), 3347
 — — —, whole-column 3344
 Detector(s) cell 65, 1161, 3342
 —, noise 1118
 Developments, recent 1(review)
 Diastereoisomers, separation, see Enantiomers (and diastereomers), separation
 Diode array detection, see Detection (and detectors), photodiode array
 Displacement chromatography 488, 1091(review), 1531, 1556, 1813, 3220, 3221, 3793
 — —, ion exchange 3298, 3326, 3381, 3812, 4384
 — complexing chromatography 1049, 1052-1054, 1153, 2280
 Dissociation constants, determination 55(review)
 Distillation, sample preparation 1260
 DNA-agarose 3796, 3892
 Droplet countercurrent chromatography, see Countercurrent chromatography
 Dyes as ligands in affinity chromatography 104, 138, 489, 610, 652, 1704, 2882, 3820
 — see also Stationary phase(s) for affinity chromatography
 Education 1103, 3283, 3285
 Electric assisted capillary liquid chromatography 1564
 Electrochemical detection, see Detection (and detectors), electrochemical
 — detector, see Detection (and detectors), electrochemical
 Electrochemically modulated liquid chromatography 2097, 2202
 Electrochromatography 177
 — see also Capillary electrophoresis and electrokinetic chromatography section
 Electrokinetic chromatography, see section Capillary electrophoresis and electrokinetic chromatography section
 Electrostatic ion chromatography 2271, 3264, 3265, 4395
 Enantiomers (and diastereomers), separation 70, 71, 161-169, 172, 173, 175, 176, 195, 203, 228, 357, 388, 391, 408, 410, 411, 415-417, 715, 728, 733, 734, 738, 829, 863, 881, 887, 888, 913, 915, 920, 937, 988, 1263-1278, 1293, 1405, 1431, 1473, 1486., 1488, 1493, 1510, 1513, 1515-1517, 1523, 1553, 1838, 1843, 1854, 1865, 1900, 1949, 1965, 2002, 2011, 2032, 2034, 2042, 2051, 2060, 2062, 2063, 2070, 2077, 2155, 2329, 2410, 2412, 2416, 2417, 2440, 2457, 2472, 2521, 2534, 2602, 2606, 2623, 2626, 2628, 2638-2641, 2910, 2914, 2920, 2927, 2931, 3055, 3065, 3071, 3075-3077, 3083, 3107, 3111, 3357, 3452-3459, 3461, 3462, 3483, 3623, 3626, 3672, 3689, 3734, 4037, 4054, 4061, 4063, 4073, 4121, 4126, 4174, 4195, 4197, 4200, 4210-4212, 4215, 4216, 4223, 4231, 4243, 4250, 4269, 4284, 4289
 —, —, comparison with capillary electrophoresis 3059, 4063
 —, —, membrane 2420
 —, —, model 1269
 —, —, optimization 2422, 2423, 4212
 —, —, preparative 167, 1553, 2422, 3071, 3457
 —, —, reviews 92, 169-171, 174, 858, 2010, 2014, 3054, 3451, 5460
 —, —, temperature effect 1523, 2421
 Enzyme-linked immunosorbent assays 1324
 Expanded bed chromatography 1582(review), 1583, 3370(review)
 Extraction chromatography 13(review), 1047, 1066, 1071, 1863, 2230, 3225, 3231, 3243, 3274(review), 4390, 4397(review), 4406, 4419, 4427, 4428, 4431

- Extraction disk 2456
- Fast (protein) liquid chromatography (FPLC) 1632, 2565, 3816
- — —, coupling with AAS 2518, 4409
- — —, — — MS/MS 3408
- Fourier transformation, *see* LC/FTIR coupling
- Field-flow fractionation 1283, 1987, 3463, 3464, 4162, 4375
- — —, gravitational 3464
- — —, thermal 4160
- Fingerprinting, *see* under structural studies in individual entries in the List of Types of Compounds Chromatographed
- Flame ionization detector, *see* Detection (and detectors), flame ionization
- Flow distribution 1129
- , reversal 179
- , reversible 183
- Flow-gradient ion chromatography 4440
- Flow-rate effect 1530, 2426
- Flow-thin cell fractionation, continuous split 3465
- Fluorescence detection, *see* Detection (and detectors), fluorescence
- detector, *see* Detection (and detectors), fluorescence; Detection (and detectors), chemiluminescence
- labelling, *see* Derivatization, fluorescence
- Fractionation 21
- Frontal analysis 517, 1586, 2205(review), 3205, 3381
- Future of chromatography 20
- Gel permeation chromatography, calibration 1989, 2213, 2214
- — —, capillary 2682, 3044
- — —, combination with MS 3044
- — —, comparison with CE 2807
- — —, — — — electrophoresis 1371
- — —, — — — HPLC 3035
- — —, — — — MALDI 3042
- — —, — — — SFC (supercritical fluid chromatography) 3042
- — —, coupling with AES 3248
- — —, — — — HPLC 1290
- — —, — — — MALDI/TOF 846, 847
- — —, — — — MS 849, 1239, 2244, 2638, 3241(review), 3427, 3429, 4178, 4418
- — —, — — — NMR 853
- — —, detection 1126, 1985, 1992, 1997, 2476, 3177, 4159, 4163
- — —, *see also* Detection (and detectors), light scattering
- — —, mobile phase 1986
- — —, models 3409
- — —, molecular mass estimation 1151, 1984, 3036, 3040, 3043, 3502, 3834
- — —, preparative 3409
- — —, reviews 7, 326, 1982, 1983, 2218, 2284, 3033, 3034, 3241
- — —, stationary phase(s) 1170, 2341
- — —, temperature, high 3339
- — —, troubleshooting 3288
- Glycyrhizin column 634
- Good Laboratory Practice (GLP) 1105, 1222
- Gradient background peaks 1117
- Hemoglobin immobilized 144
- Heparin-agarose 625, 629, 3961(review)
- Heparin-immobilized 3653
- Heparin-Ultrigel 536
- High-speed chromatography 3791
- History of chromatography 29, 2313
- HSA (human serum albumin) immobilized 4391
- , tryptophan modified 143
- Hydrophilic interaction chromatography 1339
- Hydrophobic interaction chromatography 493, 606, 639, 1581, 1748, 1765, 2289(review), 2312, 2692, 2854, 3316, 3744, 3960
- — —, preparative 1532
- — —, stationary phases 1184, 3960
- interaction-ammonium sulphate fractionation 2690
- Hydrophobicity, determination of 56(review), 2324
- Hydroxyapatite 351, 543, 1395, 2761, 2904, 3579
- Hyphenation techniques, *see* individual types of hyphenated techniques
- Immobilized 3,5-diiodo-L-tyrosine affinity chromatography 1256
- dye, *see* Dyes as ligand in affinity chromatography
- enzyme reactor 1928, 2934
- ligand affinity chromatography, *see* individual types of affinity sorbents
- membrane support, *see* Membrane, immobilized
- metal (ion) affinity chromatography 150(review), 154, 490, 510, 530, 589, 681, 1252, 1658, 1715, 1793, 2649, 2815, 2817
- — —, stationary phase 1252, 2403
- *see also* individual types of affinity sorbents
- Immunoaffinity chromatography 145(review), 592, 1020, 1022(review), 1044, 1292, 1632, 1662, 1896, 2460, 2511, 2746, 3000, 3066, 3315, 3726, 3826, 3891, 3950, 3996, 4307
- — —, combination with reversed-phase chromatography 3891
- — —, recycling 152
- — —, stationary phase 148, 1258, 2346
- clean-up 364, 1324
- extraction 1948, 2906, 4338
- Immunoextraction, coupling with HPLC 3476
- Immunsorbent 3389
- Infrared detector (and detection), *see* LC/FTIR coupling
- Injection, *see* Sample injection
- Instrumentation for liquid column chromatography 58-62, 89(review), 128, 180, 1120, 2325-2328, 2386, 2397, 3335, 3336(review), 3337-3340, 3420
- Interaction chromatography, *see* Ion interaction chromatography
- Interlaboratory studies 1941
- Ion and ion pair chromatography 686, 701, 704, 731, 735, 827, 828, 1021, 1024, 1050, 1058, 1064, 1068, 1070, 1081, 1083-1085, 1358, 1401, 1454, 1484, 1522, 1524, 1792, 1812, 1817, 1902, 1929, 1953, 1963, 1972, 2040, 2049, 2082, 2126, 2157, 2204, 2209, 2223, 2235, 2240-2243, 2251, 2252, 2254, 2256, 2257, 2259, 2262, 2264-2267, 2269, 2271, 2274, 2275, 2281, 2373, 2491, 2523, 2525, 2601, 2644, 2885, 2934, 2961, 2990, 3050, 3129, 2156, 3202, 3235, 3238, 3247, 3256, 3260, 3261, 3266, 3267, 3269-3271, 3622, 3628, 3631, 3712, 3727, 3736, 4045, 4055, 4064, 4065, 4113, 4240, 4345, 4347, 4364, 4380, 4400, 4415, 4423, 4434, 4435, 4437-4439, 4442, 4444-4446, 4448-4451, 4453, 4458, 4459
- — —, comparison with capillary (ion) electrophoresis 2267, 4055
- — —, coupling with AAS (atomic absorption spectrometry) 2221
- — —, — — — MS 1058, 1062, 1953, 2259, 2990, 3200, 3233, 3712, 4066, 4332, 4354
- — —, detection 68, 1084, 2223, 2241, 2251, 2256, 2274, 2275, 2336, 3352, 4364, 4444

- ion and ion pair chromatography, electrostatic 2271, 3264, 3265, 4395
 — — — — —, enantiomers separation 1489
 — — — — —, flow-gradient 4440
 — — — — —, instrumentation 3336, 3338
 — — — — —, mobile phase 59, 407, 1524, 1972, 2241, 2243, 3336, 3338
 — — — — —, non-suppressed 731, 1139
 — — — — —, optimization 1081, 1524, 1972, 3267
 — — — — —, reviews 858, 2291, 3197
 — — — — —, stationary phase(s) 40, 2359, 3400
 — — — — —, suppressed 1157, 1489, 2263, 3201, 4446, 4455
 — — — — —, theory 3324
 — — — — —, validation 1929
 — exchange chromatography, reviews 10, 1391, 3250
 — — — — —, mobile phase 496
 — — — — —, model 1135
 — — — — —, pH gradient 2741
 — exchangers, membrane 1671, 2697, 3470
 — — — — —, new types 40, 75, 1199, 1591, 2340, 2362, 2745, 3009, 3364
 — exclusion chromatography 280, 290, 297, 302, 1408, 2343, 2520, 3262
 — interaction chromatography 16, 2258, 2317, 2994, 4050, 4421
 — pairing modifiers 407, 960, 2885, 4113
 see also Mobile phase modifiers
 Jacalin-agarose 2732
 Laser based detection and detectors, see Detection and detectors, laser based
 LC/AAS (atomic absorption spectrometry) coupling 430, 1073, 1077, 1247, 1856, 1858, 2221, 2261, 2518, 3251, 3437(review), 4409
 LC/AES (atomic emission spectrometry) coupling 1048(review), 1529, 3248, 4420
 LC, combination with annular diffusion scrubber 2465
 — — — — — atomic fluorescence spectrometry 3242
 — — — — — circular dichroism see Detection (and detectors), circular dichroism
 — — — — — continuous membrane extraction 2944
 — — — — — dialysis 413, 3158
 — — — — — electrochemistry 2618
 — — — — — electron spin resonance spectroscopy 313, 3217
 — — — — — electrophoresis, capillary (CZE and MECC) 425, 457, 2321
 — — — — —, gel 3025
 — — — — — field-flow fractionation 2321
 — — — — — GC 120, 125(review), 126, 135(review), 385, 1295, 2327, 2435, 2548, 3213, 3444, 3452, 3474, 3726, 4313
 — — — — — immunoaffinity capture 4099
 — — — — — immunoassay 428
 — — — — — immunoextraction 3476
 — — — — — immunosorbent 184
 — — — — — MALDI/TOF (matrix-assisted laser desorption/ionization mass spectrometry) 129, 3604, 3740, 3804, 3888
 — — — — — microbiology assay 1870
 — — — — — microdialysis 317, 402, 1364, 1403, 1837, 1938, 3141, 3630
 — — — — — Raman spectrometry 1230
 — — — — — receptor affinity detection 132
 — — — — — reversed isotope dilution 4278
 — — — — — TLC 134, 3335, 3673
 — — — — — comparison with capillary electrochromatography 22, 790, 1564, 2024
 LC, combination with electrophoresis (CZE and MECC) 23, 25, 127, 204, 288, 289, 412, 450, 533, 662, 694, 790, 816, 875, 957, 1564, 1593, 1859(review), 1918, 2117(review), 2139, 2267, 2478, 2536, 2589, 2729, 2771, 2776, 2807, 2917, 3013, 3059, 3156, 3195, 3540, 3716, 3737, 4024, 4050, 4055, 4063
 — — — — — electrophoresis, two-dimensional 3781
 — — — — — FTIR 2090, 3035
 — — — — — GC 285, 804, 811, 815, 816, 1422, 1423, 1483, 1859(review), 2538, 3553, 3624, 4168
 — — — — — GC/MS 273, 814, 1078, 1086, 1414, 1964, 2130, 2200, 2248, 2529, 2921, 3162, 3619, 4133, 4295
 — — — — — immunoassay 977, 3605
 — — — — — isoelectric focusing 4331
 — — — — — MALDI (matrix-assisted laser desorption/ionization mass spectrometry) 3042
 — — — — — microbiology 1874
 — — — — — microparticle enzyme-linked immunoassay (MEIA) 2135
 — — — — — MS 870(review)
 — — — — — other analytical methods 445, 1078, 1086, 1859(review), 2501, 4182
 — — — — — chromatographic methods 864, 1692, 2003, 2024, 2200, 2771, 3846, 4029
 — — — — — radioimmunoassay 419
 — — — — — spectrofluorometric method 2139
 — — — — — spectrophotometry 214, 393, 875, 1835, 2191, 3061, 4068
 — — — — — TLC 214, 321, 384, 687, 1090, 1327, 2142, 2454, 2471, 3051, 3115, 3191, 3611, 3668, 4030, 4048
 — — — — — coupling, general, review 1243, 2390(symposia proceeding)
 LC/FIA coupling 2389
 LC/FTIR coupling 248, 3345, 3431
 LC/ICP-MS 124, 1062, 1080
 LC/GC coupling, see LC, combination with GC
 LC/LC coupling
 see also Column coupling
 LC/LLE (liquid-liquid extraction) coupling 3474
 LC/MALDI (matrix-assisted laser desorption/ionization mass spectrometry) coupling 453, 477, 846, 847, 1541, 1635
 LC/MS coupling 21, 127, 128, 131, 136, 137, 193, 201, 205, 210, 223, 230, 236, 239, 270, 273, 296, 331, 340, 363, 365, 366, 378, 392, 455, 468, 470, 495, 504, 513, 533, 538, 549, 623, 690, 710, 711, 723, 742, 756, 776, 789, 808, 809, 815, 820, 849, 854, 871, 872, 889, 926, 928, 936, 938, 950, 962, 980, 983, 991, 998, 1002, 1028, 1058, 1059, 1062, 1074, 1131, 1163, 1233, 1234, 1236, 1238, 1239, 1246, 1288, 1309, 1315, 1325, 1331, 1340, 1400, 1428, 1450, 1451, 1463, 1466, 1487, 1538, 1546, 1578, 1587, 1593, 1630, 1635, 1645, 1651, 1678, 1691, 1707, 1809, 1832, 1844, 1848, 1851, 1853, 1858, 1861, 1864, 1890, 1904, 1909, 1916, 1943, 1947, 1953, 1956, 1973, 1976, 2006, 2024, 2028, 2036, 2067, 2084, 2144, 2150, 2153, 2158, 2160, 2163, 2167, 2174, 2180, 2199, 2200, 2231, 2244, 2248, 2259, 2381, 2386, 2388, 2394, 2395, 2397, 2400, 2417, 2437, 2569, 2574, 2576, 2579-2581, 2584, 2585, 2587, 2590, 2595, 2629, 2638, 2653, 2660, 2661, 2682, 2687, 2714, 2723, 2729, 2889, 2912, 2915, 2916, 2921, 2932, 2933, 2939, 2942, 2951, 2963, 2970, 2995-2997, 3007, 3013, 3044, 3055, 3110, 3159, 3164, 3165, 3169, 3187, 3191, 3199, 3200, 3209, 3224, 3231, 3233, 3236, 3239, 3252, 3290, 3304, 3312, 3413-3415, 3418-3420, 3422-3425, 3427, 3428, 3432, 3473, 3486, 3487, 3494, 3500, 3506, 3514, 3518, 3521, 3526, 3528, 3533, 3601, 3612, 3615, 3637,

- 3643, 3650, 3667, 3673, 3678, 3680, 3712, 3735, 3745, 3760, 3762, 3766, 3770, 3772, 3792, 3823, 3895, 4044, 4053, 4065, 4066, 4069, 4088, 4129, 4131, 4134, 4143, 4149, 4165, 4172, 4178, 4225, 4264, 4269, 4274, 4279, 4288, 4295, 4297, 4301, 4303, 4311, 4332, 4335, 4339, 4348, 4354, 4355, 4357, 4367, 4383, 4393, 4398, 4399, 4407, 4418, 4425, 4432, 4433, 4441, 4451, 4459, 4460
- LC/MS coupling, reviews 122, 225, 263, 370, 758, 766, 1231, 1232, 1237, 1241, 1945, 1998, 2172, 2286, 2290(book), 2331, 2382, 2391, 2392, 3241, 3279, 3280, 3636, 3657, 4232, 4247, 4300, 4308
- LC/MS-MS coupling 121(review), 123(review), 220, 231(review), 308, 315, 359, 365, 446, 484, 690, 693, 721, 730, 768, 794, 797, 810, 826, 876, 890, 899, 906, 974, 980, 1235(review), 1240, 1296, 1318, 1331, 1334, 1455, 1470, 1508, 1546, 1650, 1829, 1832, 1848, 1853, 1916, 1969, 1999, 2001, 2028, 2029, 2037, 2045, 2048, 2050, 2088, 2094, 2099, 2100, 2125, 2131, 2135, 2141, 2166, 2174, 2186, 2194, 2286(review), 2293(review), 2387, 2396, 2672, 2770, 2935, 2962, 2990, 2992, 3046, 3065, 3084, 3103, 3138, 3139, 3150, 3153, 3160, 3176, 3189, 3209, 3408, 3417, 3418, 3485, 3512, 3632, 3635, 3643, 3706, 3739, 3783(review), 3802, 3986, 4051, 4101, 4115, 4170, 4177, 4190, 4222, 4252, 4280, 4288, 4296, 4309
- LC/NMR coupling 133, 231(review), 378, 853, 1246, 2200, 2282, 2383, 2384(review), 2393, 2398(review), 2587, 2593, 2596, 2693, 2907, 3190, 3417, 3421(review), 3426(review), 3429, 3430, 4088, 4279, 4312, 4356
- LC/NMR/MS coupling 3045
- LC/SFE (supercritical fluid extraction) coupling 1026, 3005
- LC/SPE (solid-phase extraction) coupling 130(review), 838, 1853, 1975, 2221, 2959, 2998, 3102, 3121, 3153, 3199, 3445, 3448, 3687, 4132, 4194, 4348
- LC/SPME (solid-phase microextraction) coupling 2448, 2531, 3340, 3448
- LC/TLC, see LC, combination with TLC
- Lectins, immobilized 251, 1781, 2404, 2567, 3600
see also Affinity chromatography
- Ligand-exchange chromatography, chiral 172, 858(review), 1493, 2521, 3708
- Light scattering detection and detectors, see Detection (and detectors), light scattering
- Liquefied gases as mobile phase, see respective entries under Supercritical fluid chromatography in the section on Gas Chromatography
- Liquid-liquid extraction 304(review), 783, 808, 822(review), 884, 896, 953, 974, 1487, 1914, 1917, 1940, 2032, 2040, 2050, 2071, 2072, 2101, 2171, 3083, 3107, 3141, 3310, 4237, 4265, 4274, 4281, 4282, 4284, 4292, 4297, 4454
— —, coupling with HPLC 3474
— —, subzero temperature 3310
— —, partition chromatography 3844(review)
- Liquid membrane extraction 3446
- Liquid scintillation counting, see Detection (and detectors), radioactivity
- Liquid-solid extraction 821, 1154, 2314, 4281
— —, on-line 821
- Magnetic affinity sorbent 1190
— chromatography 3970
— technique 1285(review), 1823
- Mannose-agarose 525
- Mannose immobilized 260
- Membrane chromatography 478, 1356, 1695, 3442(review), 3470, 4169
— —, affinity 1254, 1255, 1258, 1623, 2698, 3439(review), 3441(review), 3443, 3803, 4169
— —, enantiomer 170(review), 415
— —, ion-exchange 1671, 2697
— —, convective chromatography 2771
— —, extraction 208, 2944
— —, gel fiberglass affinity chromatography 155(review)
— —, immobilized artificial 678, 2165, 3468
— —, immunochromatographic 2566
— —, ion-exchange 1671, 2697, 3470
- Metal affinity chromatography 1249, 1252, 2403, 3976
— chelate chromatography 3358
 see also Chelation chromatography
- Method development 26, 290, 1125
— validation 173, 290
 see also Validation
- Micellar chromatography 396, 945, 1067, 1193, 1215, 1282, 2043, 2058, 2577, 4198, 4361, 4362
 see also Capillary chromatography, micellar in the Capillary electrophoresis and electrokinetic chromatography section
— —, hybrid 1192, 2140
— —, mobile phase 1215
— —, modelling 115
— —, theory 1282
- Microbore (narrow bore) columns, see Columns, microbore and capillary
- liquid chromatography 67, 227, 239, 370(review), 732, 900, 939, 2084, 2618, 3068
— — —, coupling with MS 127, 128, 239, 470
- Microcolumn chromatography 188, 914, 1095(review), 1155, 1161, 1230, 1495, 2055, 2181, 2339, 2388, 2424, 2486, 3342, 3862, 4052, 4102
 see also Columns, microbore and capillary
- Microdialysis 136, 317, 395, 402, 1244(review), 1364, 1403, 200(review), 3449, 3630
- Microfractionation 3471
- Microwave-assisted solvent extraction 1294, 2407, 2441
- Mobile phase(s), buffer, see pH effect
— —, chiral, see Chiral mobile phase
— —, delivery system 2310(review)
— —, effects 2668
— —, interaction with stationary phase 3322
— —, micellar 1215
— —, modifiers 233, 416, 863, 2052, 2243, 2385, 2623, 2970, 3289, 3320-3322, 3461, 3482, 3609, 4404
 see also Ion pairing modifiers
— —, optimization 817, 1972, 3296, 3302, 3332, 3406
— —, recycling 2368
— —, temperature, see Temperature effects
— —, viscosity effects 2298
— —, water, pressurized hot 3407
— —, —, superheated 1124
- Models in chromatography 24, 52, 104, 115, 451, 490, 1099, 1104, 1115, 1135, 1137, 1139, 1148, 1152, 1157, 1158, 1215, 1220, 1223, 1225, 1269, 2321, 2380, 2413, 2434, 3267, 3298, 3301, 3315, 3316, 3327, 3409, 3411, 3412, 3625, 3670, 4197, 4341
 see also Computerization; Retention model

- Molecular mass estimation 1151, 1984, 3036, 3040, 3043, 3502, 3834
see also Gel permeation chromatography, molecular mass estimation
- Monitoring of chromatographic procedures, see Detection (and detectors)
- Moving-bed chromatography, instrument 60
— —, simulated 112-114, 1208, 1209(review), 1211, 1213(review), 1220, 1228, 1273, 2011, 2367(review), 2369, 3404(review), 3405(review), 3460(review), 4336
— —, true 3469
- Multi-column chromatography, see Column coupling
- Multidimensional chromatography 1032, 1993, 2321, 3050, 3335, 3467, 3471, 3665, 4166(review)
see also Column(s) switching
- Neural networks 1221, 3329, 3334, 4179, 4442
- Nicotinic receptor, immobilized 565
- Nonlinear chromatography 1142, 2371
- Octyl-agarose 636
- Oligosaccharide mapping, see under structural studies in individual entries in the List of Types of Compounds Chromatographed
- On-line processes, see individual LC coupling techniques
- Open tubular liquid chromatography 3424
- Optimization 33, 80, 173, 196, 489, 490, 679, 726, 738, 817, 866, 888, 988, 1005, 1081, 1122, 1137, 1138, 1210, 1223, 1238, 1524, 1814, 1972, 1999, 2110, 2308, 2319, 2421-2423, 2433, 3267, 3296, 3302, 3308, 3309, 3311, 3317, 3332, 3333, 3406, 3481, 3685, 3907, 4081, 4198, 4212, 4221, 4429
see also various types of chromatography, optimization
- Organic modifiers, see Mobile phase modifiers
- Partition chromatography, see Centrifugal partition chromatography
— coefficient 1150, 1152, 3114
— mechanism 1114
- Peak(s) asymmetry 3364
—, broadening, see Band broadening
—, capacity 39, 1110
—, carryover 2303
- Peak(s), overlapping 41, 1162, 1289, 2297, 3334
— purity 37, 66, 2302
— recognition 11(review)
— shape 1116, 1141, 2297, 2298, 2309
- Peptide mapping, see under structural studies in individual entries in the List of Types of Compounds Chromatographed
- Perfusion chromatography 550, 1609, 2296(review), 2763, 2771
- Perturbation chromatography 44
- pH effect 80, 423, 726, 765, 817, 832, 855, 888, 988, 1081, 2159, 2914, 3332, 3333, 3551, 4024, 4221
see also Mobile phase
— gradient 2741
- γ -Phosphate-linked nucleoside affinity chromatography 1590
- Phosphorescence detection, see Detection (and detectors), fluorescence
- Photoconductivity detection (and detectors), see Detection (and detectors), conductivity
- Photodiode array detector, see Detection (and detectors), photodiode array
- Pirkle column, see Column(s), Pirkle
- Pitfalls in HPLC 14(review)
- Polarimetric detection, see Detection (and detectors), polarimetric
- Poly(ϵ -lysine) adsorbents 1438
- Porous glass, see Stationary phase(s), glass
- Post column derivatization 350, 354, 356, 420, 766(review), 811, 828, 1376, 1522, 1869, 1898, 1977, 2076, 2223, 2242, 2273, 2337, 2616, 2981, 3005, 3006, 3277(review), 3623, 4079
— — irradiation 2015
— — photolysis 379
— — reaction detection 353, 371, 955, 1088, 2256, 4382, 4434, 4450
— — reactors 67, 867, 2621
see also Chiral derivatization; Derivatization, fluorescence
- Potentiometric detection (and detectors), see Detection (and detectors), potentiometric
- Precolumn derivatization 64(review), 225(review), 276(review), 288, 307, 313, 320(review), 362, 367, 404, 410, 411, 414(review), 418, 454, 753, 758(review), 766(review), 772, 773, 822, 874, 884, 894, 919, 920, 937, 953, 967, 972, 1026, 1055, 1072, 1265, 1307, 1310, 1320, 1332, 1336, 1339, 1405, 1417, 1418, 1441, 1449, 1452, 1502, 1505, 1506, 1509, 1510, 1515, 1516, 1518, 1527, 1528, 1530, 1809, 1836, 1853, 1932, 1951, 1955, 1965, 1967, 2033, 2042, 2061, 2096, 2130, 2155, 2466, 2469, 2527, 2528, 2602, 2603, 2607, 2610, 2622, 2627, 2630, 2631, 2632, 2634, 2664, 2924, 2964, 3106, 3121, 3144, 3254, 3272, 3488-3490, 3526, 3556, 362, 3632, 3691, 3692, 3701, 3710, 3724, 3733, 3734, 3757, 3765, 3770, 3939, 4057, 4220, 4264, 4272, 4292, 4294, 4317
see also Chiral derivatization; Derivatization, fluorescence
- Preconcentration, see Sample, preconcentration
- Prediction, see Retention prediction
- Preparative (and semipreparative) chromatography 108-110, 111(review), 112, 113, 167, 376, 451, 523, 609, 716, 833, 835, 872, 925, 935, 1206-1208, 1210-1212, 1532, 1534, 1539, 1544, 1553, 1560, 1582(review), 1583, 1589, 1627, 1633, 1661, 1770, 1813, 1824, 1834, 1921, 1927, 2002, 2008, 2192, 2218, 2309, 2370-2372, 2414, 2422, 2492, 2579, 2766, 3071, 3403, 3409, 3457, 3481, 3852, 3853, 3871
see also various kinds of chromatography
— —, materials 111(review)
— —, reviews 1209, 1213
- Pressurized fluid extraction 1314
- Problems in chromatography, see Troubleshooting problems in chromatography
- Programs for chromatography, see Computerization
- Protein A - agarose 1672
- Protein G 3801
- Pump(s) 3337
- Quantitative structure-activity relationships (QSAR) 1221, 1962, 1965, 3331, 4187
- Quantitative structure-retention relationship 53, 725, 1133, 1146, 1303, 3316, 3330, 3451(review), 4048
- Radioactivity detection (and detectors), see Detection (and detectors), radioactivity
- Radiochromatography, see Detection (and detectors), radioactivity
- Reactor, chromatographic 206
see also Post column reactors
- Reactors, co-immobilized enzyme, see Post column reactor
- Refractometric detector, see Detection (and detectors), refractometric
- Relationship between mobility and mobile phase composition 15, 2324
— — retention and structure, see Structure-retention relationships
- Reproducibility 1108, 1109, 3299, 3300

- Resolution 3284, 3311
- Retention 1097(review), 2292(review)
- behaviour 16, 54, 287(review), 765, 1306, 2312, 2359, 2444, 3329, 3333, 3355, 3625
 - index 360
 - mechanism 914, 2426, 3263, 3328
 - model 104, 1099, 1137, 1139, 2380
 - see also Computerization; Models in chromatography
 - prediction 33, 52, 279(review), 1148, 2323, 2439, 2937, 3329, 3775, 4442
- Reversed-phases characterization, see Sorbents new types (incl. bonded phases)
- Review(s), affinity chromatography 139-142, 146, 147, 153, 155, 1251, 1257, 1701, 2219, 2402, 2406, 3439-3442
- , advances in chromatography 1098
 - , application of high performance chromatography to various fields of science of technology 3, 8-10, 12, 190, 213, 221, 225, 240, 263, 276, 284, 287, 293, 309, 312, 320, 324, 326, 370, 380, 382, 394, 414, 426, 475, 481, 525, 680, 758, 766, 786, 805, 813, 822, 861, 870, 993, 1010, 1012, 1015, 1045, 1061, 1092, 1094, 1096, 1147, 1511, 1600, 1701, 1859, 2133, 2179, 2212, 2283, 2287, 2288, 2295, 2517, 2524(Special Volume), 2555, 2612, 2681, 2955, 3052, 3168, 3240, 3273, 3275, 3276, 3278, 3306, 3617, 3700, 3785, 3850, 4124, 4130, 4184, 4286, 4337, 4340, 4359, 4300, 4308, 4389, 4456
 - see also review articles within individual entries of this section and reviews in the List of Types of Compounds Chromatographed
 - , automation 1010
 - , band spreading 27
 - , baseline determination 11
 - , chemometric 147
 - , chiral HPLC, see Enantiomers (and diastereomers) separation, review
 - , — sorbents and stationary phases 92, 170
 - see also Enantiomers (and diastereomers), separation, review
 - , centrifugal partition chromatography 4412
 - , computerization 11(review), 2375, 2379
 - , countercurrent chromatography 1241, 3466
 - , database 169
 - , derivatization 320, 758, 2285
 - see also Enantiomers (and diastereomers), separation, reviews; Precolumn derivatization
 - , detection (and detectors), general 2335, 3353
 - see also review articles under individual entries of Detection (and detectors)
 - , —, chemiluminescence 1168
 - , —, electrochemical 4359, 4456
 - , —, electrochemiluminescence 1159
 - , —, fluorescence 320, 786
 - , —, light scattering 225, 320
 - , —, polarimetric 2330
 - , —, wavelet 3346
 - , developments, recent 1
 - , displacement chromatography 1091
 - , dissociation constants, determination 55
 - , enantiomers separation 92, 169-171, 174, 858, 2010, 2014, 3054, 3451, 3460
 - , expanded bed chromatography 1582, 3370
 - , extraction chromatography 13, 3274, 4397
 - , frontal chromatography 2205
 - , gel permeation chromatography 326, 1982, 1983, 2218, 2284, 3033, 3034, 3241
 - , heparin-agarose chromatography 3961
 - , hydrophobic interaction chromatography 2289
 - , hydrophobicity, determination of 56
 - , immobilized metal ion affinity chromatography 150
 - , immunoaffinity chromatography 145, 1622
 - , instrumentation 89, 3336
 - , ion and ion-pair chromatography 858, 2291, 3197
 - , — exchange chromatography 10, 1391, 3250
 - , LC combined with GC 125, 135
 - , LC comparison with capillary electrophoresis 1859, 2177
 - , — — GC 1859, 3553
 - , — — — MS 870
 - , — — — other analytical methods 1859
 - , LC coupling, general 1243
 - , LC/AAS (atomic absorption spectrometry) coupling 3437
 - , LC/AES (atomic emission spectrometry) coupling 1048
 - , LC/MS coupling 122, 225, 263, 370, 758, 766, 1231, 1232, 1237, 1241, 1945, 1998, 2172, 2286, 2290(book), 2331, 2382, 2391, 2392, 3241, 3279, 3280, 3636, 3657, 4232, 4247, 4300, 4308
 - , LC/MS-MS coupling 121, 123, 231, 1235, 2286, 2293, 3783
 - , LC/NMR coupling 231, 2282, 2388, 2398, 3421, 3426
 - , ligand-exchange chromatography 858
 - , liquid-liquid extraction 304, 822
 - , — partition chromatography 3844
 - , magnetic technique 1285
 - , membrane chromatography 170, 3439, 3441
 - , microbore liquid chromatography 370
 - , microcolumn chromatography 1095
 - , microdialysis 1244, 2000
 - , mobile phase delivery systems 2310
 - , moving-bed, simulated 1209, 1213, 2367, 3404, 3405, 3460
 - , multidimensional chromatography 4166
 - , peak recognition 11
 - , perfusion chromatography 2296
 - , pitfalls in HPLC 14
 - , postcolumn derivatization 766, 3277
 - , precolumn derivatization 64, 225, 276, 320, 414, 758, 766
 - , preparative chromatography 111, 1209, 1213, 1582, 2218
 - , quantitative structure-retention relationship 3451
 - , retention 1097, 2292
 - , — behaviour 287
 - , — prediction 279
 - , sample preparation 160, 225
 - , size exclusion chromatography, see Review(s), gel permeation chromatography
 - , solid-liquid extraction 304
 - , solid-phase dispersion, matrix 157
 - , — extraction 130
 - , — microextraction 158
 - , stationary phases (and sorbents) 78, 88, 89, 92, 93, 105, 147, 155, 1178, 1187, 1193, 2353, 3398, 3399
 - , temperature control 2376
 - , theory of chromatography 5, 46, 1111, 1140
 - , thermodynamics 1093, 1111
 - , troubleshooting 14, 3281
 - , zone spreading 2294
- Robotics, see Automated procedures; Computerization
- Rotating annular size-exclusion chromatography 1281

- Rotation locular countercurrent chromatography, *see* Countercurrent chromatography
- Sample clean-up, *see* Clean-up procedures
- enrichment 757, 3009, 3655, 4338
- —, on line 827
- injection and injectors 30, 3286
- —, large volume 4052
- preconcentration 389, 1064, 1112, 1954, 1957, 2240, 2268, 3242, 4449
- preparation 160(review), 225(review), 359, 413, 857, 946, 996, 1122, 1260, 1465, 2238, 2460, 2591, 2892, 3116, 3447, 3748, 4173
- *see also* Clean-up; Liquid-liquid extraction; Liquid-solid extraction; Solid-liquid extraction; Solid-phase extraction
- vial 61
- Selection of methods, *see* Method development
- Selectivity 3303, 3311, 3355
- Semipreparative chromatography, *see* Preparative (and semipreparative) chromatography
- Silver ion chromatography 185, 323, 2530, 2537, 2538, 2560
- Simulated operations 26, 112-114, 1114, 1208, 1220, 1223, 1228, 2427, 3318
- *see also* Computerization; Moving bed, simulated
- Size-exclusion chromatography, *see* Gel permeation chromatography
- Small bore columns, *see* Columns, microbore and capillary
- Snyder theory 3302
- Sock-ball chromatography 186, 187
- Software, *see* Computerization
- Solid-liquid extraction 1314, 2163
- —, multi-stage countercurrent 3469
- Solid-phase extraction 192, 304(review), 365, 684, 709, 711, 720, 768, 772, 773, 783, 806-808, 811, 828, 887, 892, 896, 917, 956, 968, 991, 1309, 1319, 1454, 1487, 1831, 1946, 1951, 1959, 1967, 1970, 2035, 2096, 2124, 2126, 2128, 2136, 2168, 2170, 2204, 2408, 2436, 2451, 2609, 2615, 2889, 2890, 2908, 2950, 2975, 2999, 3009, 3013-3015, 3058, 3066, 3085, 3096, 3101, 3104, 3126, 3760, 3770, 4094, 4115, 4123, 4181, 4194, 4202, 4205, 4221, 4237, 4264, 4268, 4280, 4287, 4292, 4338, 4354
- —, automated 291, 499, 876, 1829, 1832, 1946, 1990, 2111, 2125, 3086, 3137
- —, coupling with HPLC 130(review), 838, 1853, 1975, 2221, 2959, 2998, 3102, 3121, 3153, 3199, 3445, 3448, 3687, 4132, 4194, 4348
- —, disk 2968, 3008
- —, dispersion, matrix 157(review)
- —, membrane 2445
- —, on line, *see* Solid-phase extraction, coupling with HPLC
- —, sorbents 684, 828, 1261, 1305, 1970, 3360, 4132, 4338
- *see also* Clean-up
- microextraction 158(review), 197, 1259, 1261, 1262, 1492, 1990, 2203, 2448
- —, coupling with HPLC 2448, 2531, 3340, 3448
- Solvation energy 3320, 3325, 3378, 3392
- Solvent(s), *see* Mobile phase
- Solvent extraction, ultrasonic 156
- Sorption, *see* Adsorption
- Standard selection, *see* various types of chromatography
- Stationary phase(s), agarose based, *see* various types of agarose based sorbents
- —, acridine 188
- Stationary phase(s), acrylic polymer 2349, 4324
- —, age 3359
- —, albumin 166, 415, 416
- —, alginate 3396
- —, alumina based, *see* Alumina based sorbents
- —, amino bonded, *see* Amino bonded stationary phases
- —, amylopectin tris(phenylcarbamate) 1278
- —, amylose bonded 357, 1838, 3453
- —, antibiotic, macrocyclic 1264
- —, batch-to-batch reproducibility 1108, 1109
- —, bidentate silane 86
- —, bis(,,, -tetramethylbutyl)phosphinic acid
- —, bonded phases, *see* various kinds of bonded phases and Stationary phase(s), new types
- —, C₃₀ 72, 1468, 3479
- —, C₆₀ fullerene 187, 1479
- —, calixarene(s) 1182, 1514, 2240
- —, calix[4]arene, *p*-tert.-butyl 3401
- —, calix[6]arene-*p*-tert.-butyl 106
- —, calix[4]pyrroles 99
- —, calix[4]resorcinarenes 1198
- —, carbamate group, embedded 3386
- —, carbon 88(review), 97, 165, 177, 1275, 2240, 1542, 3204, 3291, 4065
- —, cellulose based, *see* Cellulose based sorbents
- —, cerium(IV) phosphate, acetonitrile based 2362
- —, cerium(IV) silicate 3367
- —, cesium bis(monomyristylphosphate) 2358
- —, cesium bis(octylphosphate) 2357
- —, characterization 48, 95, 96, 107, 1171, 1181, 1185, 1189, 1197, 1203, 1205, 1268, 2365, 3299, 3300, 3362, 3364, 3374, 375, 3379, 3381, 3392
- —, chelating resin 1057, 3398(review)
- —, chiral, *see* Chiral sorbents and stationary phases
- —, chitin 2403
- —, chitosan membranes 2697
- —, cholesteryl 3361
- —, cholesteryl-10-undecane bonded 2339
- —, clay conglomerates, spherical 3360
- —, collagen 147
- —, comparison 32, 87, 107, 722, 1173, 1176, 1471, 2342, 2361, 3382, 3392
- —, compression 1212, 3301
- —, copper-phthalocyanine, modified with 2350
- —, crown ether 408, 1180, 1488, 2606, 3244, 2345, 3434, 3689
- —, cyano, *see* CN-bonded phases
- —, cyclodextrins, *see* Cyclodextrin, stationary phase
- —, divinylbenzene-vinylpyrrolidone copolymer 2695
- —, Florisil 105(review)
- —, fluorocarbon 3072, 3392
- —, for affinity chromatography 78(review), 103, 143, 144, 147(review), 155(review), 527, 634, 1248, 1249, 1252, 1253, 1256, 1257(review), 1258, 1438, 2356, 2399, 2403, 2810, 2835, 2870, 3356, 3396, 3438, 3836
- *see also* various kinds of stationary phases(s)
- — gel permeation chromatography, *see* Gel permeation chromatography, stationary phase(s)
- — hydrophobic interaction chromatography, *see* Hydrophobic interaction chromatography, stationary phase(s)

- Stationary phase(s) for ion-exchange chromatography, see Ion exchangers, new types
- — — ion and ion-pair chromatography, see Ion and ion-pair chromatography, stationary phase(s)
 - — — preparative chromatography 2355, 2414
 - — —, fullerene 2431
 - — —, glass 3873
 - — —, glycidyl methacrylate 103
 - — —, guanidino bonded 865
 - — —, hydroxyapatite, see Hydroxyapatite
 - — —, hydroxyphenyl-triphenylporphyrin-silica 189
 - — —, immobilized, see various kinds of immobilized substances
 - — —, iron-protoporphyrin 3394
 - — —, keratin 147
 - — —, lipid layer imprinted 3438
 - — —, liquid crystal 96, 1181, 3385
 - — —, — crystalline polymers 1193(review)
 - — —, magnetic 1190, 1823
 - — —, melanin 147
 - — —, methacrylic ester of dihydroxydiphenylmethane diglycidyl ether and divinylbenzene copolymer
 - — —, molecularly imprinted polymers 98, 102, 1156, 1177, 1958, 2039, 2353(review), 2413, 2421, 2425, 2926, 3355, 3365, 3369, 3373, 3377, 3399(review), 3445, 4132
 - — —, monolithic 1173, 1240, 3390
 - — —, new types 73, 1174, 1175, 1189, 3380
see also various kinds of stationary phases(s)
 - — —, nonporous 3105, 3309, 3387, 4246
 - — —, ovoglycoprotein 1266, 2416
 - — —, perfluorinated 2561
 - — —, perlite 1169
 - — —, phenylhexyl bonded 2345
 - — —, phenylvinylmethylpolysiloxane 1204
 - — —, phthalocyanines 1195
 - — —, polyacrolein-isonicotinic acid hydrazone 77
 - — —, polyacrylic acid-thiohydrazides resins 77
 - — —, poly(acrylonitrile) grafted 82
 - — —, polyamide 2453
 - — —, poly(divinylbenzene) microspheres 2352
 - — —, polyfluoroalkylsilane coated 3374
 - — —, poly(N-isopropylacrylamide) bonded 79
 - — —, polymer coated 1189, 2226, 2366
 - — —, polymeric 101, 1029, 1609, 2349, 2444, 3322, 3395, 4108, 4381
 - — —, poly(methyl acrylate)-silica hybrids 83
 - — —, poly(methyloctylsiloxane) 3372
 - — —, polysaccharides 71, 92(review), 1516, 2359, 2418, 2628
 - — —, polystyrene based 3550
 - — —, poly(styrene-divinylbenzene) 1170, 1240, 1442, 1827, 2127, 2264, 2301, 2317, 2341, 4413
 - — —, polytetrafluoroethylene-ether 1071
 - — —, polyvinylpyrrolidone 4032
 - — —, pore 3362
 - — —, — structure 100
 - — —, porphyrin 1194, 2649, 3394
 - — —, preparation 74, 95, 96, 185, 2354, 2363, 3374
 - — —, properties 76, 77, 83, 84, 90
 - — —, pyrenyl-silica 4122
 - — —, 2-(1-pyrenyl)ethyltrimethylsilica 1291
 - — —, restricted access media 812, 2616, 3445, 4304
 - Stationary phase(s), reviews 78, 88, 89, 92, 93, 105, 147, 155, 1178, 1187, 1193, 2353, 3398, 3399
 - — —, scintillating extraction 2277
 - — —, silica rod 84
 - — —, silver ion 185
 - — —, sock-shaped 186
 - — —, squalane impregnated 3319
 - — —, stability 1171
 - — —, styrene-divinylbenzene, see Stationary phase(s), poly(styrene-divinylbenzene)
 - — —, superporous agarose 1183, 1184
 - — —, teicoplanin 1517, 1523, 2639, 4037
 - — —, R-(-)-,(-)-tetranitrofluorenylideneaminoxy)propionic acid
 - — —, tetraphenylporphyrin-silica 1503
 - — —, thermo-responsive 93(review)
 - — —, thermosensitive 85, 94
 - — —, titania 2342, 2360, 2361, 3388
 - — —, theory 3392
 - — —, vancomycin 1517, 2424, 3461, 4037
 - — —, zirconia 100, 2361
 - — —, zirconium phosphate 2340
 - — —, zirconized silica 3363
 - — —, zwitterionic 1188, 2305, 3265, 4395
 - Steric exclusion liquid chromatography, see Gel permeation chromatography
 - Streptavidin, affinity tag 153(review)
 - Structure-activity relationships 2467
 - Structure-retention relationships 24, 53, 54, 1099, 1120, 1221, 2323, 3291, 3331
 - Subcritical fluid chromatography 1434, 2412, 2623
 - Support(s) organic, see Stationary phase(s)
 - Surface diffusion coefficient 57
 - Temperature effects 72, 79, 360, 1056, 1127, 1143, 1523, 1530, 2421, 2588, 3236, 4081, 4223
 - Temperature control 2376(review)
 - gradient interaction chromatography 3029
 - , high 3384, 3472
 - programming 2332
 - responsive chromatography 85, 2312
 - swing chromatography 179
 - Theoretical plate 3220
 - Theory of chromatography 16, 31, 39, 42-45, 47-51, 179, 487, 1106, 1115, 1123, 1130, 1140, 1144, 1282, 2307, 2315-2317, 2322, 2365, 2368, 3293, 3313-3329, 3341, 3392
 - — —, reviews 5, 46, 1111
 - Thermal gradient chromatography 1481
 - Thermodynamics of chromatography 36, 45, 48, 107, 482, 1093(review), 1111(review), 1115, 2318, 2320, 2434, 3297, 3319, 3379, 3681
 - Thiol-agarose 1605
 - Toroidal coil centrifugal partition chromatography, see Centrifugal partition chromatography; Partition chromatography
 - Trace enrichment, see Sample enrichment; Sample preconcentration
 - Triazine dye affinity chromatography, see Dyes as ligands in affinity chromatography
 - Troubleshooting problems in chromatography 14(review), 17-19, 1117, 3281(review), 3286-3288
 - Two-dimensional chromatography, see Multidimensional chromatography

Validation (selected references only) 173, 196, 290, 702, 820, 989,
996, 1102, 1222, 1407, 1454, 1507, 1520, 1550, 1868, 1884,
1929, 2032, 2041, 2071, 2073, 2079-2081, 2089, 2114, 2119,
2123, 2138, 2451, 2591, 2914, 3132, 3143, 3744, 4138, 4175,
4212

Visualization of migration 38, 4027
Zone-spreading 2294(review)
see also Band broadening

Gas Chromatography

- Activity coefficients, measurements 20, 899, 1386
- Adsorbent(s), see Sorbent(s) and bed(s)
- Adsorption, see Sorption
- Analyzer(s) 46
- , instrumentation 1391, 1395, 1455
- Automation 154, 1392
- Bed(s), see Sorbent(s) and bed(s)
- Biography 3, 887, 1365
- Biomarker 199
- Books, chromatography general 881
- , techniques 2
- Calibration, see Quantitation, calibration
- Capillary column(s), glass 1412
- —, metal 1419
- —, packed 608
- —, PLOT (porous layer open tubular) 1585
- —, reviews and books 956
- —, selectivity 553
- GC, applications 108, 122, 166, 182, 222, 224, 236, 350, 358, 369, 370, 372, 443, 596, 598, 606, 616, 620, 624, 642, 643, 650, 656, 658, 675, 699, 732, 735, 743, 750, 840, 1048, 1073, 1088, 1109, 1117, 1127, 1142, 1158, 1167, 1192, 1225, 1227, 1250, 1251, 1270, 1280, 1321, 1326, 1358, 1359, 1500, 1509, 1516, 1535, 1565, 1566, 1610, 1642, 1654, 1663, 1664, 1670, 1703, 1747, 1766
- —, detector(s) and detection 522, 769, 1411, 1498, 1612
- —, efficiency 1418
- —, instrumentation 44, 73, 524, 966, 967, 1393, 1397, 1526
- —, multidimensional, see Multidimensional GC
- —, optimization 561, 581
- —, physico-chemical measurements 894
- —, pressure programmed, see Pressure programmed GC
- —, pyrolysis, see Pyrolysis GC
- —, standards 76
- —, stationary phase(s) 1406, 1410, 1715
- —, techniques 448
- —, temperature programmed, see Temperature programmed GC
- —, theory 1403
- GC/MS, see GC/MS, capillary
- GLC, see Capillary GC
- Carrier gas, preparation 45, 537, 897
- —, properties 13, 73, 577, 618, 884, 895, 949, 1028, 1471
- Chemometrics, applications 986
- , data processing techniques 566, 913, 984, 998, 1697
- Chromatograph(s), design 36, 48-50, 488, 516, 519, 520, 525-528, 530-533, 535, 536, 838, 925, 926, 928, 929, 967, 1060, 1186, 1496
- , performance 269, 875
- Column(s), packed, efficiency 896
- , —, optimization 955
- , switching 935
- Computer(s), data analysis and processing 565, 1430
- , modelling 1432
- Correlation GC 113, 443
- Countercurrent GC, instrumentation 117
- Cryofocusing, applications 281
- , instrumentation 410
- , techniques 575, 1011
- Cryotrapping, see Preconcentration, cryotrapping, see also Cryofocusing
- Data acquisition (without computers) 1390
- analysis and processing (without computers) 94, 1684
- Derivatization, acylation 242, 1096, 1596
- , alkylation 278, 376, 847, 848, 906, 1118, 1187, 1304, 1611
- , esterification 1002, 1542
- , etherification 761
- , instrumentation 1096
- , other types 172, 178, 219, 241, 243, 244, 640, 649, 699, 1164, 1169, 1183, 1264, 1316, 1469, 1540, 1541, 1590, 1619, 1771
- , oxidation 495
- , reagents 574
- , reduction 1190
- , reviews and books 104, 663, 882, 1445-1447
- , silylation 104, 151, 156, 669, 851, 871, 1129, 1448, 1512, 1588, 1590
- , techniques 1003, 1156, 1191, 1197
- Detection, alkali flame ionization 355, 1184
- , atomic emission 58, 62, 88, 103, 253, 260, 429, 542, 572, 712, 1051, 1191, 1423, 1444, 1494, 1605, 1617, 1619, 1753
- , chemiluminescence 121, 727, 946, 1020, 1501
- , chlorine selective, see Detection, halogen selective
- , electrochemical (electroconductivity; ion selective; polarographic) 411, 1489, 1770
- , electron capture 240, 297, 311, 335, 364, 629, 640, 644, 736, 750, 757, 763, 788, 826, 1051, 1086, 1181, 1206, 1249, 1259, 1263, 1292, 1411, 1563, 1634, 1635, 1668, 1702
- , element specific 486, 1469
- , flame ionization 124, 193, 781, 1034, 1039, 1069, 1098, 1260, 1292, 1501, 1515, 1674
- , — photometric 272, 732, 1608, 1611, 1640
- , fluorescence 270, 271
- , halogen selective 542
- , helium ionization, see Detection, inert gas ionization
- , infra red 999
- , ion mobility 1027
- , ionization, see Detection, alkali flame ionization
- , mass selective 38, 58, 124, 228, 245, 260, 272, 278, 283, 301, 331, 334, 351, 357, 361, 371, 391, 436, 439, 474, 572, 623, 692, 999, 1116, 1143, 1159, 1175, 1253, 1269, 1309, 1508, 1532, 1588, 1592, 1607, 1611, 1640, 1674, 1688, 1702, 1753
- , microwave induced plasma 1617
- , Na ionization, see Detection, alkali flame ionization
- , nitrogen selective 121, 794
- , nitrogen-phosphorus selective 249, 252, 297, 303, 314, 315, 328, 330-332, 334, 649, 711, 800, 1250
- , optical 41
- , optimization 625
- , photoionization 411, 1069, 1279

- Detection, plasma emission 1612
 —, response 53, 939, 1473, 1489, 1547
 —, reviews and books 946
 —, spectroscopic 940, 945
 —, sulphur selective 261, 1501
 —, techniques 67, 999, 1006
 —, thermal conductivity 491, 494, 878
 —, — energy analysis 1150
 —, thermionic, see Detection, alkali flame ionization
 —, ultraviolet absorption 64, 157, 1261
- Detector(s), acoustic 1437
 —, alkali flame ionization (AFID) 52, 549, 942
 —, argon ionization, see Detector(s), inert gas ionization
 —, atomic emission spectrometer 63, 538, 1348, 1433
 —, chemiluminescent 57, 66, 261, 880
 —, diode array 64, 157
 —, electrochemical 1196
 —, electron capture (ECD) 544, 547, 548, 945, 1485
 —, flame ionization (FID) 59, 60, 70, 540, 940, 1473, 1547
 —, — photometric (FPD) 274, 275, 723
 —, helium ionization, see Detector(s), inert gas ionization
 —, high voltage spark 54, 944, 1087
 —, instrumentation and accessories 539, 540
 —, ionization, see Detector(s), alkali flame ionization
 —, laser 61
 —, mass selective (MSD) 540, 571
 —, microwave induced plasma (MIP) 1401
 —, multifunctional 401
 —, Na ionization, see Detector(s), alkali flame ionization
 —, photoionization 546
 —, piezoelectric 543
 —, radioactive 522, 1454
 —, surface acoustic wave (SAW) 632
 —, — ionization 65, 68, 69
 —, thermal conductivity (TCD) 550, 880, 939, 1359, 1400, 1765
 —, — energy analyzer 1050
 —, ultraviolet (UV) 943, 1402
- Diffusion, measurements 17, 512, 1651
- Distillation GC, simulation 452, 478, 482
- Education 31, 67, 995, 1354
- Elution, see Retention
- Enantiomers separation, correlation with retention data 577
 — —, data tabulated 153, 204, 313, 590, 597, 692, 705, 707, 747, 748, 754, 790, 804, 1062, 1145, 1179, 1207, 1417, 1492, 1577, 1609, 1637, 1689
 — —, reviews and books 1574
 — —, techniques 1007
 — —, theory 1371, 1452, 1453
- Enrichment, see Preconcentration, enrichment
- Equilibrium, phase, see Phase equilibria
- Expert systems 1431
- Fast GC, see High speed GC
- Flow perturbation GC, applications 827, 902, 1378
 — — —, techniques 900
 — — —, rate, instrumentation 932
 — — —, measurements 891
 — — —, optimization 886
 — — —, theory 885, 895, 1403
- GC/AAS, applications 276, 279
 —, detector(s) and detection 269, 570
- GC/AAS, reviews and books 236
- GC/AES, applications 721, 733
 —, detector(s) and detection 53, 150, 263, 472, 477, 538, 542, 756, 768, 994, 1189, 1198, 1245, 1469, 1602, 1618, 1624, 1631
- GC/CIMS, applications 27, 232, 248, 254, 806, 1713
 —, detector(s) and detection 1205
- GC/combustion 380, 668, 872, 1501, 1768
- GC/EIMS, applications 27, 134, 140, 151, 156, 160, 163, 179, 183, 186, 189, 192, 197, 208, 218, 227, 232, 241, 242, 250, 254, 258, 259, 286, 310, 323, 324, 336, 343, 346, 348, 349, 352-354, 360, 373, 376-378, 383, 390, 395, 413, 414, 427, 432, 442, 449, 454, 460, 473, 480, 517, 569, 612, 617, 619, 621, 624, 626, 636, 637, 657, 669, 671, 680, 682-684, 691, 694, 697, 701, 704, 709, 710, 716, 718, 722, 734, 740, 761, 765, 787, 792, 793, 796, 798, 809, 812, 815, 820, 826, 835, 853, 862, 872, 879, 909, 993, 995, 1000, 1035, 1042, 1079, 1092, 1098, 1103, 1107, 1110, 1121, 1122, 1129, 1138, 1144, 1146, 1147, 1156, 1160, 1170, 1179, 1190, 1193, 1195, 1197, 1198, 1205, 1211, 1220, 1222, 1223, 1233, 1255, 1257, 1262, 1264, 1267, 1268, 1271, 1274, 1275, 1281, 1287, 1294, 1300, 1318, 1329, 1347, 1349, 1387, 1408, 1458, 1488, 1505, 1509, 1511, 1527, 1530, 1540, 1546, 1560, 1589, 1594, 1595, 1597, 1599, 1600, 1626, 1627, 1638, 1643, 1665, 1666, 1672, 1677, 1679, 1681, 1690, 1692, 1696, 1711, 1716, 1725, 1728, 1736, 1739, 1742, 1754, 1755, 1768, 1769, 1772
 —, detector(s) and detection 601, 1276, 1483, 1714
 —, theory 1044
- GC/ELISA 320, 715, 744
- GC/FTIR, applications 96, 229, 268, 356, 468, 514, 1350, 1351, 1718
 —, detector(s) and detection 55, 1100
 —, instrumentation 98
- GC/FTIR/MS, applications 339, 703
 —, detector(s) and detection 990
- GC/GC, see Multidimensional GC
- GC/GC/MS, applications 1572, 1733
- GC/ICPMS (inductively coupled plasma MS) 169, 281, 282, 287, 729, 1188, 1357, 1613, 1614
 —, instrumentation 941, 1441, 1612, 1622
- GC/immunoassay 220, 762, 1254, 1553, 1598
- GC/IMS (ion mobility spectrometry) 788, 1266
 —, instrumentation 97
- GC/ion trap MS, applications 149, 167, 195, 217, 302, 342, 347, 352, 398, 430, 498, 1546
 — — —, optimization 568
- GC/IRMS (isotope ratio MS) 1434, 1436, 1439
 —, applications 37, 174, 200, 363, 380, 382, 487, 568, 668, 672, 726, 818, 834, 872, 914, 1074, 1112, 1128, 1161, 1162, 1177, 1336, 1601, 1615, 1686, 1691, 1759, 1773
 —, reviews and books 996
- GC/LC 240, 303, 314, 330, 739, 745, 760, 819, 1083, 1219, 1240, 1633, 1671
- GC/LC/MS 173, 651, 741, 1741
- GC/MALDI-MS 1019
- GC/microwave induced plasma AES, applications 273, 277, 288, 570, 639
 — — — MS 144
- GC/MS, applications 96, 829
 —, automation 92
 —, capillary, applications 293, 412, 714, 791, 799, 1656
 —, —, pyrolysis, see Pyrolysis GC/MS, applications

- GC/MS, chromatogram reconstruction 1440
 —, data evaluation 93, 566, 573, 991, 1000
 —, — tabulated 1522, 1629
 —, detector(s) and detection 567, 997, 1433, 1714
 —, head space, see Headspace GC/MS
 —, instrumentation 95, 99-101, 564, 1433, 1435
 —, reviews and books 501, 883
 —, theory 1442
 GC/MS/FTIR 1343, 1575
 GC/MS/MS, applications 153, 292, 302, 836, 1040, 1130, 1172
 —, detector(s) and detection 545
 GC/MS/SIM, applications 180, 190, 196, 201, 205, 256, 295, 365, 366, 374, 403, 435, 437, 469, 634, 652, 667, 670, 728, 805, 811, 851, 1047, 1056, 1094, 1119, 1164, 1231, 1256, 1265, 1272, 1273, 1282, 1293, 1302, 1346, 1470, 1510, 1533, 1534, 1539, 1545, 1552, 1561, 1593, 1669, 1671, 1675, 1678, 1685, 1717, 1749
 —, detector(s) and detection 375, 908, 1567
 —, instrumentation 920
 —, quantitation 102
 GC/MS/TOF 992, 998, 1001, 1099, 1438
 GC/negative ion MS, applications 132, 306, 347, 622, 628, 677, 681, 717, 810, 877, 1040, 1115, 1120, 1130, 1153, 1154, 1163, 1183, 1208, 1376, 1550, 1551, 1628
 — — —, detector(s) and detection 753, 1520, 1553, 1583, 1584, 1598, 1714
 GC/NMR 200, 251, 428, 706, 901, 1641
 GC/olfactometry 238, 384, 388, 397, 541, 689, 823, 938, 1287, 1576, 1694, 1695, 1751
 GC/TLC 687, 1338
 GPC/GC 629
 GSC, applications 610, 1368, 1744
 —, retention data 13, 127, 504
 —, sorbent(s) 492, 959
 —, techniques 892
 Headspace analysis, applications 96, 158, 170, 322, 389, 408, 419, 447, 497, 499, 593, 594, 604, 664, 695, 697, 724, 798, 854, 907, 988, 1055, 1064, 1065, 1074, 1078, 1114, 1125, 1203, 1214, 1233, 1239, 1246, 1284, 1286, 1335, 1428, 1487, 1507, 1570, 1638, 1655, 1684, 1693, 1726, 1727, 1743, 1751, 1754, 1767, 1770
 — — —, detector(s) and detection 1046
 — — —, instrumentation 936, 1328
 — — —, optimization 1506
 — — —, phase equilibria 910
 — — —, reviews and books 921, 1009
 — — —, theory 4
 — GC/MS 827, 919, 1070, 1683, 1750
 Heat(s) of physico-chemical processes, see Thermodynamics
 Henry's constants 509
 High pressure GC, applications 429
 — resolution GC, see Capillary GC
 — speed GC, applications 845, 1059, 1185, 1342, 1680
 — — —, techniques 116, 521, 563, 581, 889, 916, 933, 992, 1289, 1403, 1426
 — temperature GC 579, 1014
 — — —, applications 829, 846, 1102, 1323, 1456, 1475, 1656
 Hold-up time, measurements 503
 HPLC/GC, applications 386, 719, 864, 1102, 1104, 1258, 1475, 1529, 1548
 —, reviews and books 989, 1013
 HPLC/GC, techniques 794
 HPLC/GC/MS, applications 318, 807, 938, 1171, 1221, 1296, 1476, 1579, 1584
 —, detector(s) and detection 1210
 —, techniques 1277
 HPLC/SFC 362
 Injection, at column, instrumentation 42, 534, 923, 927
 —, instrumentation 924, 930
 —, large volume 245, 291, 299, 325, 746, 767, 917, 918, 1304, 1389, 1399
 —, on column, instrumentation 41, 43, 758
 —, — —, techniques 108, 442, 1557
 —, optimization 277, 1563
 —, programmed temperature vapourizer 518, 746, 1124, 1479
 —, split-splitless, instrumentation 1625
 —, splitless, instrumentation 47
 Instrumentation, see Apparatus; or individual types of devices and sections on instrumentation in individual entries
 Inverse GC, applications 18, 19, 21, 33, 345, 457, 471, 508, 776, 779, 861, 903, 904, 1234, 1317, 1377, 1382, 1385, 1762, 1763
 — — —, thermodynamics 9, 28, 1236-1238, 1381, 1383, 1651
 Kinetics, measurements 1379
 Kovats' index(es), see Retention index(es)
 LC/GC, applications 35, 597, 633, 754, 767, 994, 1008, 1187, 1228, 1564, 1718
 —, reviews and books 39
 LC/GC/MS 177, 400, 483, 485, 772, 1174
 Liquid crystals, see Phase(s), stationary, liquid crystals
 — stationary phase(s), see Phase(s), stationary
 Mass transfer, kinetics 4
 Microcomputer(s), see Computer(s)
 Mixed phase(s), see Phase(s), mixed
 Mobile phase(s), see Phase(s), mobile
 Molecular interactions, thermodynamics 31, 913, 915, 1375, 1381, 1604
 — structure, see Structure study
 — weight determination 1097
 Multichromatography, techniques 409
 Multidimensional GC, applications 183, 419, 631, 749, 750, 1032, 1068, 1191, 1334, 1745
 — — —, automation 114
 — — —, instrumentation 281, 529, 1011, 1393
 — — —, techniques 1579, 1733
 — — —, theory 110
 Multiple column GC, applications 1333
 Packed column(s), see Column(s), packed
 Packing, see Column(s), packed, packing
 Partition coefficients, measurements 24, 30, 910, 948, 1504
 Pattern recognition 869
 Peak(s) calculation and theory 7, 12, 502, 890, 896, 977
 — overlapping (resolution) 6, 987, 1366
 Phase equilibria, measurements 22, 912, 1384, 1651
 Phase(s), mobile, water steam and other vapours 1028
 —, stationary, classification 556, 937, 1414
 —, —, modification 1404
 —, —, polarity 965
 —, —, preparation 962, 1404
 —, —, properties 1414
 —, —, reviews and books 559

- Phase(s), stationary, various (selected information only), calixcrown ethers 75, 77, 79, 954, 972, 974, 1410
 —, —, —, chemically bonded 552, 1416
 —, —, —, chiral (different types) 71, 77, 86, 577, 952, 1049, 1077, 1165, 1574
 —, —, —, crown ethers 81, 560, 561, 957, 958, 971, 1421
 —, —, —, cyclodextrins 74, 87, 138, 554, 558, 610, 952, 966, 969, 970, 1007, 1043, 1052, 1215, 1412, 1417, 1421, 1574, 1581, 1637, 1689, 1715
 —, —, —, liquid crystals 72, 78, 129, 133, 972, 1049
 —, —, —, new and rare types 80, 84, 159, 557, 562, 947, 953, 960, 964, 968, 973, 1057, 1405, 1409, 1415, 1416, 1420
 —, —, —, polysiloxanes 1383
 —, —, —, Reoplex (different types) 71
 —, —, —, siloxanes 974, 1405
- Plate height 8
- Polarity parameters 951
- Preconcentration, adsorption 109, 135, 139, 262, 411, 421, 835, 1135, 1303, 1713
 —, chemisorption 279, 637
 —, cryotrapping, see also Cryofocusing 114, 131, 484, 729, 1061, 1078, 1285, 1357, 1468, 1700, 1710, 1772
 —, distillation 115, 323, 385, 828, 1719
 —, enrichment 51, 700, 1291, 1508, 1732
 —, extraction 203, 245, 309, 330, 334, 385, 396, 605, 639, 737, 752, 797, 851, 1047, 1250, 1305, 1312, 1449, 1480, 1495, 1578, 1589, 1757, 1771
 —, instrumentation 420, 1394
 —, membrane extraction 387, 416, 576, 661, 841, 1665, 1721
 —, purge-and-trap (stripping) 103, 107, 150, 277, 453, 468, 473, 576, 592, 697, 724, 786, 853, 1295, 1513, 1621, 1717, 1767
 —, solid phase extraction 4, 22, 38, 58, 92, 96, 111, 130, 142, 149, 167, 212, 213, 219, 228, 230, 232, 240, 248, 269, 270, 274, 294, 300, 301, 303, 329, 330, 333, 360, 374, 387, 402, 404, 406, 408, 413, 418, 419, 423, 438, 439, 454, 456, 509, 594, 604, 621, 628, 645, 661, 671, 676, 692, 728, 730, 762-765, 768, 798, 802, 812, 814, 815, 820, 822, 828-830, 842, 1004, 1005, 1041, 1045, 1046, 1076, 1086, 1114, 1157, 1164, 1188, 1203, 1213, 1218, 1222, 1223, 1233, 1251, 1257, 1269, 1270, 1281, 1282, 1286, 1297, 1301, 1335, 1394, 1470, 1487, 1497, 1511, 1512, 1515, 1519, 1521, 1542, 1569, 1605, 1606, 1613, 1614, 1620, 1626, 1627, 1634, 1638, 1639, 1643, 1670, 1679, 1688, 1712, 1716, 1722, 1726, 1727, 1742, 1748, 1754, 1769
 —, techniques 148, 229, 339, 411, 417, 922, 1290, 1451, 1523, 1573, 1580, 1616
 —, trapping 399, 578, 664, 758, 936, 1134, 1450, 1706, 1736
- Preparative GC, applications 1244
- Pressure programmed GC 1085, 1427
- Process GC, applications 1008, 1176, 1549
 —, —, instrumentation 91, 1400, 1430
 —, —, reviews and books 881, 1364, 1429
- Pyrolysis GC, applications 185, 338, 341, 445, 461, 467, 470, 481, 487, 708, 774, 780, 785, 868, 906, 1149, 1352, 1646, 1652
 —, —, detector(s) and detection 1348
 —, —, instrumentation 1398, 1660
 —, —, optimization 1149
 —, —, pyrogram evaluation 466, 1012, 1235, 1338, 1648
 —, —, reviews and books 112, 1015, 1650, 1653
 —, —, techniques 455
 — GC/FTIR/MS 1146
- Pyrolysis GC/MS, applications 34, 235, 337, 428, 431, 465, 479, 595, 775, 777, 847, 848, 856, 857, 860, 868, 1243, 1308, 1316, 1320, 1322-1325, 1327, 1330, 1341, 1345, 1649, 1731, 1761
 —, —, instrumentation 934, 1010
 —, —, reviews and books 464
 —, —, techniques 440, 782
- Quality assurance/quality control 164, 602, 615, 660, 978, 980, 986, 1428
- Quantitation, calculation and theory 573, 613, 766, 975, 1422, 1423, 1504
 —, calibration 88, 1562, 1712
 —, detection limit 611
 —, optimization 102
 —, reference materials 844
 —, reproducibility 1434
 —, techniques 89, 266, 567, 1701
 —, validation 976, 979, 1424, 1673
- Response factor(s), see also Detection, response
- Retention data, see Capacity factor(s); Retention index(es); Retention time(s) and volume(s)
 — index(es), correlation with molecular structure 126, 506, 855, 898, 950, 1031, 1037, 1075, 1372
 — —, — — physical parameters 14, 507, 950, 1756
 — —, — — separation system 893, 950
 — —, — — thermodynamic data 11
 — —, optimization 985
 — —, prediction 506, 647, 1084, 1373, 1427
 — —, tabulated 143, 147, 349, 569, 616, 960
 — —, theory 1369
 — Kovats' index(es), see Retention index(es)
 — time(s) and volume(s), correlation with separation system 5
 — — — —, tabulated 394, 698
 — — — —, theory 1367
 —, correlation with molecular structure 897, 982, 1111, 1182, 1198, 1490
 —, — — physical parameters 10, 1453
 —, — — separation system 500, 504, 618, 949, 1182, 1374, 1471
 —, data tabulated 968, 1036, 1490, 1627, 1629
 —, theory 888
- Reversed flow GC, see Flow perturbation GC
 — phase GC, see Inverse GC
- Reviews, applications of GC to various fields of science and technology 175, 187, 188, 206, 223, 321, 379, 405, 422, 678, 808, 813, 1313, 1361-1363, 1454, 1477, 1481, 1482, 1517, 1522, 1528, 1531, 1558, 1559, 1613, 1616, 1630, 1632, 1650, 1653, 1657, 1698, 1699, 1704, 1708, 1709, 1723, 1752, 1759
 —, chromatography general 1013, 1422
 —, derivatization 105, 1446, 1447
 —, detector(s) and detection 940, 945, 946, 999
 —, instrumentation 996, 1015
 —, optimization 889
 —, phase(s) and separation conditions 953, 956, 1409
 —, retention data 500, 888
 —, sample introduction 917
 —, techniques 1, 922, 977
- Sample cleanup 312, 630
 — —, solid phase extraction 221, 1253, 1462
 — collection 51, 296, 305
 — pretreatment 109, 267, 307
- Sampling, automation 1396

- Sampling, instrumentation 35, 444, 931, 1479, 1526, 1605
 — , quantitation 1331
 — , reviews and books 40, 922, 963
 — , techniques 751
- SFC, applications 119, 209, 344, 367, 433, 475, 590, 659, 866, 911, 1023, 1081, 1196, 1242, 1465, 1502, 1514, 1568, 1659
 — , column(s), capillary 290, 1026
 — , — , packed 423, 436, 1025, 1242, 1247, 1248, 1261, 1344, 1459, 1467, 1514, 1555, 1603, 1609, 1647
 — , detector(s) and detection 66, 121, 1020, 1027, 1647
 — , elution processes 118
 — , instrumentation 1022, 1027
 — , mobile phase(s) 580, 1021, 1459, 1587
 — , preparative 584, 1018, 1019, 1024, 1459
 — , retention 118, 1464
 — , retention data 137
 — , reviews and books 475
 — , stationary phase(s) 1017
 — , techniques 583, 1029
 — , thermodynamics 118, 905, 1030, 1464
- SFC/GC, applications 1491
- SFC/GC/MS, applications 155, 1700
- SFC/HPLC, applications 409, 1212
- SFC/MS, applications 215, 216, 783, 1344, 1467
 — , detector(s) and detection 1016
 — , techniques 1587
- SFE, applications 62, 128, 162, 165, 209, 265, 298, 312, 315, 317, 319, 327, 402, 614, 615, 625, 627, 679, 693, 725, 755, 822, 824, 849, 850, 1131, 1137, 1141, 1166, 1200, 1303, 1311, 1460, 1462, 1478, 1537, 1616, 1633, 1644, 1662, 1724, 1730
 — , instrumentation 117, 585, 589
 — , modifiers 1166, 1667
 — , optimization 326, 1450
 — , preparative 120, 257, 425, 586, 587, 665, 685, 688, 690, 696, 738, 867, 874, 1139, 1461, 1463, 1466, 1554, 1738
 — , reviews and books 588
 — , supercritical fluid(s) 867
- SFE/GC, applications 246
- SFE/GC/MS 1472
 — , applications 136, 161, 393, 426, 434, 458, 1152
- SFE/HPLC, applications 280, 289, 582, 816, 1028, 1132, 1232, 1582
- SFE/SFC, applications 870, 1194
- Solubility, coefficients and parameters 29, 32
 — , measurements 513, 905
 — , thermodynamics 1370
- Solution, thermodynamics 28, 961
- Sorbent(s) and bed(s), modification 83
 — — — , properties 508
 — — — , various (selected information only), activated carbon 16, 123, 861
 — — — , — , alumina 492
- Sorbent(s) and bed(s), various (selected information only), carbon black (different types) 1413
 — — — , — , carbon fibres 25, 461
 — — — , — , cellulose 1360
 — — — , — , Chromaton (different types) 1360
 — — — , — , Chromosorb (different types) 951
 — — — , — , graphite 1456
 — — — , — , molecular sieves 490
 — — — , — , new and rare types 85, 555, 859, 1407
 — — — , — , porous polymers 489, 951
 — — — , — , silica 82, 1374
 — — — , — , — gel 83
 — — — , — , zeolites 33
- Sorption coefficients 515
 — , measurements 15, 1378, 1382, 1744
 — , modelling 1388, 1705
- Standard(s), preparation 1202
- Stationary phase(s), see Phase(s), stationary
- Steam distillation GC, see Phase(s), mobile, water steam and other vapours
- Stopped flow GC, see Flow perturbation GC
- Stripping, see Preconcentration, purge-and-trap (stripping)
- Structure, correlation with retention data 505, 779
- Subcritical fluid chromatography 1465
 — — extraction 1021, 1028
- Supercritical fluid chromatography, see SFC
- Support(s), properties 551
- Surface area measurements 345
 — phenomena 18, 19, 25, 457, 508, 904, 963, 1377, 1382, 1762
- Taxonomic studies 14, 1140, 1693, 1760, 1764
- Temperature programmed GC, instrumentation 523
 — — — , optimization 563, 1426
 — — — , retention data 90, 647, 981, 982
 — — — , reviews and books 981
 — — — , theory 983
- Thermal gradient programmed GC, instrumentation 1425
- Thermochromatography, applications 459
 — , techniques 1
- Thermodynamics, data correlation with retention data 11, 1371, 1453
 — , evaluation 1370
 — , measurements 87, 1368, 1464
 — , modelling 1474
 — , see also Diffusion; Dilution; Equilibrium constants; Heat of physico-chemical processes; Henry's constants; Partition coefficients; Phase equilibria; 511
- Thin layer chromatography/GC 1527, 1548
 — — — , applications 673, 801, 1108, 1525
- Trace analysis, applications 877
 — — , instrumentation 1006
 — — , techniques 106, 152, 292
- Trapping, see Preconcentration, trapping

Planar Chromatography

- Adsorption-partition model 478
- Advances in TLC 477(review)
- Alumina (selected references only) 208, 403, 492, 579
- Amino bonded silica gel 542
- Argentation TLC 40, 59, 72
- Automation 342
- Blotting 383(review)
- Books and proceedings on TLC 1, 329
- Cellulose as sorbent 181, 479
 - , PEI 240
 - , triacetate 16, 207
- Centrifugal TLC 287-289
- Charhe-transfer TLC 440
- Chemometrics 361
- Chiral mobile phases 360, 486, 602
 - sorbents 17, 254, 284, 353, 354, 598
- Chitin as sorbent 352
- Circular TLC 18
- Computerization 316, 361
- Cyano bonded phases 272, 349, 358, 542, 579
- Cyclodextrins as eluents 360, 534, 602
 - — sorbent 354
- Derivatization, fluorescence 506
- Detection and detectors, autoradiography 47, 52, 66, 69, 77, 161, 293, 438, 591
 - — —, chemiluminescence 304
 - — —, colour reactions, *see* Detection and detectors, reagents; Detection and detectors, visualization
 - — —, densitometric 72, 87, 128, 129, 134, 146, 153, 154, 159, 188, 197, 200, 235, 283, 292, 343(review), 359, 363, 427, 432, 443, 453, 461, 489, 573, 574, 599, 600
 - — —, electrochemical 196(review)
 - — —, FID (flame ionization) 80, 190, 199, 201, 374, 467, 488, 523
 - — —, fluorescence 276, 446, 506
 - — —, —, densitometry 427
 - — —, fluorometry 425
 - — —, FTIR 328(review), 351(review)
 - — —, immunostaining 81, 563
 - — —, photometric, *see* Detection and detectors, densitometric
 - — —, radioactivity 70
 - — —, reagents 97, 116, 149, 446
 - see also* Detection and detectors, visualization
 - — —, reviews 196, 343
 - — —, scanning 21, 35, 90, 118, 134, 146, 153, 154, 283, 294, 315, 400, 423, 427, 432, 461, 497, 564, 592, 614, 615, 619, 624
 - — —, videodensitometry 423
 - — —, visualization 8, 56, 69, 446
 - see also* Detection and detectors, reagents
- Detector, CCD 276, 432
- Development, displacement 148
 - , gradient 189, 293
 - , —, multiple 332, 372
 - , instrument, *see* Instrumentation for TLC
- Development, multiple 535
 - , —, automated (AMD) 189, 213, 308, 342, 404
 - , two-dimensional, *see* Multidimensional TLC
- Diastereoisomeric separation, *see* Enantiomers and diastereomers, separation
- Documentation of chromatography 197, 302
- Drying conditions 188
- Electrochromatography 7, 208
- Enantiomers and diastereomers, separation 16, 17, 207, 254, 353, 354, 360, 486, 598, 602
- Fingerprinting, *see* structural studies in individual entries in the List of Types of Compounds Chromatographed
- Florasil 10, 28, 216
- Forced slow PC 193
- Gradient elution, *see* Development, gradient
- High performance TLC, instrumentation, *see* individual types of equipments
 - — —, quantitation, *see* Quantitation
 - — —, sorbents, *see* individual sorbent types
- History of chromatography 184, 327(review)
- Hydrophobicity 11, 192, 285, 337, 341, 544
- Immunoaffinity chromatography 322
- Immunostaining, *see* Detection and detectors, immunostaining
- Impregnation with ammonium sulfate 56
 - — anions, different 545
 - — cadmium(II) 572
 - — cobalt(II) 572
 - — copper(II) 572
 - — EDTA 276
 - — hydrocarbon 128, 129, 573, 574
 - — inorganic salts 500
 - — iron(II) 572
 - — manganese(II) 572
 - — nickel(II) 572
 - — polymers 356
 - — tri-*n*-butylamine 475
 - — tri-*n*-butylphosphate 475
- Information theory 361
- Instrumentation 5-7, 185, 487
 - see also* Detection and detectors
- Ion and ion-pair chromatography 19, 43, 575
- Laser induced fluorescence, *see* Detection and detectors, fluorescence
- Lipophilicity, determination 9, 145, 191
- Method development 193, 342
- Micellar mobile phase 124
 - paper chromatography 3
- Mobile phase, optimization 2, 43, 252, 272, 316, 335, 338, 349, 484, 494
 - see also* Optimization
 - —, water-in-oil microemulsion 403
- Modelling 334, 409, 484
- Multidimensional TLC (two-dimensional) 44, 97, 181, 194, 200, 240, 534

- Optimization 2, 43, 86, 221, 272, 281, 307, 316, 338, 349, 361, 484, 494
 see also Mobile phase, optimization
- Overpressured layer chromatography (OPLC) 19, 187, 219, 242, 262, 291, 293, 332, 438, 451, 487, 493, 553, 583, 591
— — —, combination with MS 438
— — —, comparison with TLC 291, 330
- Paper chromatography, applications 36, 65, 105, 106, 370, 415(review), 498
— — —, two-dimensional 498
— fixed on polymer film 194
- Partition coefficient 190
- Peptide mapping, see structural studies in individual entries in the List of Types of Compounds Chromatographed
- Perlite as sorbent 198
- pH effect 43
- Plates cleaning 483
—, pretreatment 483
- Polyamide 479, 492
- Polycolumn plates 193
- Preparative TLC 6, 178, 287-289
- Quantitation 115, 158, 195, 201, 277, 278, 286, 309, 364, 439, 519(review), 601
—, densitometry 128, 129, 154, 197, 200, 573, 574
- Quantitative structure-activity relationships (QSAR) 156, 192, 445
- Quantitative structure-retention relationship (QSRR) 104
- Radioactive labelled compounds, techniques for ¹⁴C 596
- Radiochromatography, see Detection and detectors, radioactivity
- Reagents for detection, see Detection and detectors, reagents
- Relation between mobility (R_F , R_M) and mobile phase composition 28, 186, 341, 349, 369, 503, 543, 579
— — — and structure in TLC 3, 4, 104, 190, 191, 338, 339, 340(review), 503, 544
- Retention mechanism 339, 478, 543
— prediction 260, 334, 349
- Reversed phase(s) 9, 11, 71, 134, 192, 270, 283, 285, 334, 338, 339, 341, 360, 369, 431, 445, 473, 542, 584
- Review(s), advances in TLC 477
—, application to various fields of science and technology 25, 49, 51, 79, 89, 91, 102, 133, 135, 136, 143, 174, 298, 301, 326, 405, 476, 519, 578, 590, 626
—, blotting 383
—, detection 196, 343
—, detection FTIR 328, 351
—, history 327
—, hyphenated techniques 203
—, paper chromatography 415
—, quantitation 519
—, relation between mobility and structure in TLC 340
—, rotation planar chromatography 209
 see also reviews under individual entries
- Rotation planar chromatography 209(review)
- Salting-out TLC 569
- Sample application 324
— concentration 5, 206, 283, 331
— preparation 221, 225, 244
- Scanners, see Detection and detectors, scanning
- Silica gel, chemically modified with mercaptopropyltrimethoxysilane 346
- Silver-ion TLC 230
- Solid-phase extraction 15
- Sorbents, activation, see individual types of sorbents
—, AIO, see Alumina
—, bonded phases, see Reversed phase(s) and individual types of sorbent
- Sorbents, characterization 344
—, diol-bonded silica 542, 543, 579
—, general aspects, see individual types of sorbents
—, modified with metal ion complexes 418
—, molecularly imprinted 598
—, polyacrylonitrile 570, 571
—, polymr 17
—, silica gel, modified, see individual types of modification
- Staining procedures, see Detection and detectors, visualization and reagents
- Temperature effect 207
- Theory of chromatography 480, 481
- TLC, combination with AAS (atomic absorption spectrometry) 179
—, — — coulometric titration 458
—, — — electrophoresis
—, — — FTIR, see Detection and detectors, FTIR
—, — — GC 40
—, — — HPLC 14, 482, 538
—, — — MALDI (matrix-assisted laser desorption/ionization) 333
—, — — mass spectrometry 12, 29, 121, 142, 202, 203(review), 205, 562, 587
—, — — Raman spectroscopy 204, 259, 350, 485
—, comparison with capillary electrophoresis 551
—, — — HPLC 26, 32, 52, 93, 111, 177, 183, 220, 297, 330, 362, 395, 437, 442, 444, 466, 473, 505, 536, 551, 558, 565
—, — — OPLC (overpressured layer chromatography) 291
—, instrumentation, see Instrumentation
- Topological index 337
- Trapezoidal TLC 348
- Two-dimensional HPTLC, see Multidimensional TLC (two-dimensional)
- UV spectra 153
- Validation 87, 159, 432, 443, 470, 597
- Video documentation 197, 302
- Volcanic tuff 347
- Zeolite as stationary phase 345
- Zinc silicate 410
- Zirconium molybdophosphate silica gel G 251

Gel Electrophoresis

- Acridine orange/toluidine blue staining 1421
- Affinity electrophoresis 26(review), 43, 50(review), 102, 734(review), 996(review), 1244, 1611, 1634
- — —, two-dimensional 100
- — —, see also Immunoaffinity electrophoresis
- Affinoblotting, see Blotting techniques; Electroblotting; Immunoblotting
- Agarose, containing bisbenzimidazole-PEG 626
- gel, continuous superporous 728
- — —, small-pore gels 1388
- Agarose-polyacrylamide matrices 19
- Ammonia-silver staining method, see Silver stain procedures
- Automation 63, 729, 1257, 1275, 1303, 1382, 1393, 1503, 1549(review)
- Band broadening 714, 1973
- Biosensors 723
- Blotting techniques 17(review), 47, 53, 57, 61, 75, 87, 89, 113, 117, 118, 122, 129, 149-152, 158, 160, 163, 166, 167, 169, 171-173, 177, 179, 191, 192, 195, 202, 204, 223, 225, 228, 235, 251, 261, 269, 276, 280, 284, 286, 289, 290, 293, 300, 303, 306, 309, 314, 320, 323, 324, 334, 337, 341, 348, 363, 374, 385, 386, 396, 398-400, 404, 406, 411, 416, 423, 429, 432, 440, 441, 445, 460-463, 465, 468-473, 475-477, 479, 481, 483, 484, 486-491, 494-498, 500-502, 504-508, 512-514, 517-519, 522, 524, 526-528, 531-538, 541, 543, 546, 548, 562, 564, 572, 578, 580, 582, 598, 600, 633, 634, 643, 652, 653, 655, 656, 665, 672, 682, 712(review), 749, 780, 815, 819, 839, 914, 954, 1001, 1006, 1108, 1117, 1133, 1299, 1385, 1460, 1488, 1491, 1492(review), 1565, 1643, 1656, 1658, 1698, 1712, 1784, 1885, 1910, 1959, 1962, 1964, 2320, 2364, 2393, 2420
- — —, see also Electroblotting; Immunoblotting
- Books (and symposia proceedings) on electrophoresis 1
- Comet assay 551, 623, 698, 1177, 1191(review), 1260, 1940, 1994(review), 1997, 2016, 2017
- — —, see also Single cell gel electrophoresis
- Computerization 588, 937, 1257, 1530, 2189, 2276
- — —, see also Database; Modeling
- Continuous electrophoresis 730
- — —, see also Preparative electrophoresis
- Counteracting chromatographic electrophoresis 741
- Crossed immuno-electrophoresis, see Immunochemical techniques in electrophoresis
- Crossed-field electrophoresis 1148
- Cross-flow electrophoresis 31
- Data analysis 253, 1406, 1410, 1502, 1976, 2189, 2276
- Database 801(review), 926, 1548, 1586, 1727, 1738, 1761, 2190, 2191, 2194, 2352(review), 2478
- — —, see also Computerization; Two-dimensional electrophoresis, database
- Densitometry, see Detection and detectors, densitometric
- Detection and detectors, autoradiographic 62, 115, 169, 191, 196, 281, 283, 301, 305, 307, 314, 350, 355, 389, 424, 464, 470, 487, 493, 498, 504, 505, 507, 513, 540, 586, 635, 636, 651, 1383, 1726
- Detection and detectors, densitometric 37, 42, 44, 71, 133, 134, 150, 207, 341, 410, 420, 443, 464, 471, 478, 512, 599, 722
- — —, fluorescence 191, 381, 510, 724
- — —, — — —, laser induced 39, 1268
- — —, — — —, fluorography 176, 415
- — —, — — —, laser based 8
- — —, — — —, see also Detection and detectors, fluorescence, laser induced
- — —, — — —, light scattering 8, 9, 848
- — —, — — —, scanning 37, 42, 44, 133, 134, 150, 207, 341, 410, 443, 464, 471, 478, 512, 599, 722
- — —, — — —, zymography 416, 422, 423, 429, 1492(review)
- DGGE, see Gradient gel, denaturing
- Dielectrophoresis 30
- DNA-fingerprinting, see structural studies in individual entries in the List of Types of Compounds Chromatographed
- Documentation of gel 539
- Electroblotting 52, 149, 181, 1474
- — —, see also Blotting techniques; Immunoblotting
- Electrofiltration 2195
- Electrophoresis, combination with HPLC 733
- — —, — — — MALDI (matrix-assisted laser desorption/ionization mass spectrometry) 93, 929, 1476, 1501, 1773, 2251, 2309
- — —, — — — MS 25, 967, 986, 1379, 1468, 1479(review), 1482, 1489, 1508, 1706, 1708, 2062, 2192, 2249, 2251, 2254(review)
- — —, — — — MS/MS 2192
- — —, — — — PC 775, 2239, 2241, 2242
- — —, — — —, comparison with capillary electrophoresis 748, 806, 881, 1612
- — —, — — — ELISA 2168
- — —, — — — HPLC 744, 783, 1699, 2168, 2174, 2251
- — —, — — —, coupling with HPLC 2164
- Electrophoretic methods, transferability 878
- — — mobility, see Mobility, electrophoretic
- — — shift assay 432, 451, 454, 459, 513, 516, 552, 567, 633, 636, 656, 668, 959, 1080, 1119, 1444, 1630
- Electrophoretic transfer, semi dry, see Electroblotting
- Ethidium-bromide as detection reagent 478, 485, 492, 515, 519, 526, 535, 547, 614, 617, 815
- Extraction from gel 579, 1157, 1494
- Field-inversion electrophoresis (selected references only) see Pulsed field electrophoresis and references under nucleic acids in the List of Types of Compounds Chromatographed
- Fingerprinting, see Peptide mapping and structural studies in individual entries in the List of Types of Compounds Chromatographed
- Fluorophore assisted carbohydrate electrophoresis (FACE) 34, 36(review), 39, 1415, 2209
- Footprinting, see Nucleotide mapping and structural studies in individual entries in the List of Types of Compounds Chromatographed
- Formaldehyde gel electrophoresis 467
- Free flow electrophoresis 8
- — —, see also Capillary electrophoresis and electrokinetic chromatography section
- Gel casting 289
- — — preparation, apparatus for 720

- Gel structure 2792
 Gold staining 289
 Gradient(s), gel(s) 36(review), 58, 62, 63, 65, 68, 182, 300, 412, 596, 685, 763, 992, 2172
 —, —, denaturing 32(review), 97(review), 610, 615, 618(review), 519, 681, 731, 1153, 1271, 1430, 1897, 1929, 1964, 2092, 2102, 2175
 —, —, nondenaturing 380, 1232
 —, —, pore 111(review)
 —, —, voltage 1279
 —, pH, immobilized 1389, 1394, 1395, 1404, 1410, 1739, 2301
 —, temperature, see Temperature gradient gel electrophoresis
 Image analysis 14
 Imidazole-zinc staining 1509, 2185
 Immunoblotting 42, 53, 60, 66, 68, 106, 116, 131, 148, 176, 186, 204, 217, 234, 247, 263, 284, 291, 294, 296, 313, 322, 337, 350, 357, 367, 379, 383, 392, 414, 463, 472, 528, 530, 659, 811, 815, 831, 840, 893, 968, 976, 980, 1149(review), 1439, 1487(review), 1565, 1735, 1756, 1804, 2180, 2229, 2298, 2367
 see also Blotting techniques; Electroblothing
 Immunochemical techniques in electrophoresis 75, 197, 268, 421, 1384, 2268
 Immunoelectrophoresis 327, 2367, 2414, 2477
 —, counter 1652
 —, rocket 205, 206, 209
 Immunofixation 211
 Isodalt technique, see Two dimensional electrophoresis
 Isoelectric focusing, applications 42, 44, 51(review), 105(review), 109, 208, 209, 256, 357, 403, 735, 736, 806, 888, 982, 1028, 1356, 1402, 1422, 1637(review), 1678, 1705, 1726, 1735, 1782(review), 1808, 1811, 1819, 2188, 2361, 2433, 2563, 2888
 see also Gradient(s), pH
 — —, combination with electrophoresis 2563
 — —, comparison with capillary electrophoresis 748
 — —, — — HPLC 2888
 — —, coupling with MS 736, 2329
 — —, detection 2188
 — —, gradient-electric field 1392
 — —, instrumentation 715
 — —, matrix 2187
 — —, preparative 27, 2301
 Lectin-affinity electrophoresis 43
 Liquid scintillation counting, see Detection, radioactivity
 Mathematical methods, see Computerization; Modeling
 Media for electrophoresis 19-23, 621, 704
 see also Gel(s)
 Membrane-confirmed electrophoresis 1381
 Metal chelation staining 2186
 Microchannel electrophoresis 1496
 Microplate-array diagonal-gel electrophoresis 740, 2042(review)
 Miniaturization in electrophoresis 510
 see also entries under Capillary electrophoresis and electrokinetic chromatography section
 Mobility, electrophoretic 9, 625, 645, 1361, 1364, 1369, 1371, 2029
 —, shift, see Electrophoretic mobility shift assay
 Modeling 3, 732, 2029, 2184
 see also Computerization
 Multichannel flow electrophoresis 732
 Multilocus enzyme electrophoresis 1077, 1149(review), 2335
 Nitrocellulose transfer technique, see Blotting techniques
 Nonequilibrium pH gel electrophoresis (NEPHGE) 1403
 Northern blotting, see Blotting techniques; Immunoblotting
 Nucleotide mapping, see structural studies in individual entries in the List of Types of Compounds Chromatographed
 Optimization 1307
 Orthogonal field alternation gel electrophoresis, see Field inversion electrophoresis and other types of field inversion
 Paper electrophoresis 78, 196, 453, 1456, 2883
 Peptide mapping, see structural studies in individual entries in the List of Types of Compounds Chromatographed
 PhastSystem 63, 2075, 2268
 PhosphorImager 153, 522, 1730
 Polyacrylamide gel, review 726
 Polyacrylamide-urea gel 321, 1493
 Polymerase chain reaction see List of Types of Compounds Chromatographed, polymerase chain reaction
 Preparative density gradient electrophoresis 2180
 — electrophoresis 24(review), 27, 119, 729, 730, 863, 888, 929, 1230, 1391, 1503, 1518, 1773, 2572
 see also Continuous electrophoresis; Isoelectric focusing, preparative
 Preseparation derivatization 743, 2255
 Pulsed field (gel) electrophoresis, applications 5, 188, 544, 548, 553, 554, 561, 573, 574, 591, 605, 643, 648, 651, 702, 706, 1164, 1173(review), 1204(review), 1207, 1208, 1251, 1264, 1304, 1363, 1624, 1882, 1911, 1975, 1978, 1981, 1996, 2021, 2056, 2060, 2066, 2078, 2116, 2680, 2712, 2732, 2771, 2843
 Review(s), affinity electrophoresis 26, 50, 734, 996
 —, applications to various fields of science and technology 2, 35, 36, 46, 50, 51, 90, 96, 97, 103, 224, 318, 425, 446, 503, 689, 708-710, 755, 757, 801, 808, 970, 1051, 1301, 1368, 1372, 1373, 1434, 1441, 1473, 1481, 1486, 1487, 1492, 1495, 1500, 1529, 1531, 1549, 1560, 1696, 1734, 1781, 1782, 1799, 1807, 1866, 1962, 2001, 2055, 2058, 2081, 2087, 2137, 2166, 2167, 2170, 2178, 2183, 2254, 2256, 2259, 2263, 2300, 2457, 2476, 2610, 2689, 2707, 2804, 2851, 2884
 —, automation 1549
 —, blotting 17, 712, 1492
 —, comet assay 1191, 1994
 —, coupling with MS 1479, 2254
 —, database 801, 2352
 —, detection 1492
 —, fluorophore-assisted carbohydrate electrophoresis 36
 —, gradient(s), gel 35
 —, —, —, denaturing 32, 97, 618
 —, —, —, pore 111
 —, immunoblotting 1149, 1487
 —, isoelectric focusing 51, 105, 1637, 1782
 —, microplate array diagonal gel electrophoresis 2042
 —, multilocus enzyme electrophoresis 1149
 —, polyacrylamide gel 726
 —, preparative electrophoresis 24
 —, pulsed field (gel) electrophoresis 1173, 1204
 —, sample solubilization 1407, 1478
 —, silver staining 801, 823
 —, single cell gel electrophoresis 1191, 1994
 —, staining procedures 17
 —, two dimensional electrophoresis 26, 29, 94, 110, 311, 737, 801, 804, 823-825, 1390, 1407, 1473, 1475, 1478, 1531, 1560, 1654, 1696, 2086, 2179, 2263, 2346, 2352

- RNA mapping, *see* structural studies in individual entries in the List of Types of Compounds Chromatographed
- Sample application 11
— solubilization 1407(review), 1478(review)
- Semi-dry electrotransfer, *see* Blotting techniques
- Silver stain procedures 76, 122, 159, 180, 192, 241, 246, 248, 258, 299, 347, 380, 385, 440, 577, 670, 801(review), 823(review), 831, 891, 1386, 1476, 1928, 1989, 2264
- Simulation, *see* Modeling
- Single cell gel electrophoresis assay (SCGE) 556, 585, 603, 609, 623, 698, 1176, 1177, 1191(review), 1223, 1273, 1282, 1352, 1974, 1994(review), 2005, 2016, 2024, 2030, 2070, 2088, 2726, 2766
see also Comet assay
- Software, *see* Computerization
- Southern blotting, *see* Blotting techniques
- Stacking gel 1436
- SSCP (single-strand conformation polymorphism) electrophoresis
- Staining procedures, mixed dye 16
— —, review 17
see also Silver stain procedures and other staining procedures
- Staircase electrophoresis 1923
- Starch gel 1229, 2413
- Steady-state electrolysis 1378
- Temperature effects 630, 686
- Temperature gradient gel electrophoresis (TGGE) 595, 1143, 1880, 1917, 2172, 2321, 2839
- Theory of electrophoresis 4, 31, 1376, 1377, 1380
- Thermal velocity 1380
- Thin-layer electrophoresis, silica gel 74
- Transfer techniques, *see* Blotting techniques; Electroblothing; Immunoblotting
- Transverse dextran gradient 102
- Tricine-SDS-PAGE 82
- Tris-tricine-SDS-PAGE 747
- Two dimensional electrophoresis 28, 80, 81, 87, 108, 119, 161, 162, 192, 194, 203, 214, 216, 221, 227, 230, 249, 258, 262, 287, 295, 738, 739, 762, 763, 767, 779, 797, 807, 809, 818, 849, 853, 855, 866, 873, 877, 904, 918, 926, 929, 937, 939, 944, 947, 950, 973, 986, 988-991, 1147, 1154, 1197, 1201, 1256, 1379, 1383, 1384, 1386, 1387, 1393-1406, 1408-1411, 1432, 1461, 1467, 1468, 1472, 1474, 1476, 1477, 1484, 1485, 1489, 1497-1499, 1504, 1512, 1520, 1521, 1524, 1525, 1530, 1533, 1543, 1548, 1552-1554, 1556, 1568, 1570-1573, 1578, 1580, 1582, 1586, 1587, 1589, 1591, 1594, 1596, 1601, 1603-1605, 1609, 1613, 1614, 1618-1620, 1622, 1623, 1629, 1641, 1642, 1645, 1662, 1668, 1671, 1673, 1686, 1687, 1691, 1693, 1700, 1701, 1706, 1708, 1713, 1714, 1722, 1723, 1726, 1730, 1733, 1735, 1738-1740, 1757, 1760, 1761, 1763, 1766-1769, 1771, 1773, 1775, 1776, 1805, 1840, 1906, 1979, 2000, 2012, 2068, 2085, 2174, 2179, 2181, 2190-2194, 2208, 2247, 2249-2252, 2255, 2257, 2258, 2264, 2276, 2281, 2293, 2307, 2314, 2318, 2323, 2324, 2348, 2349, 2351, 2373, 2391, 2418, 2438, 2442, 2444, 2478, 2481, 2493, 2683, 2825, 2897
- Two dimensional electrophoresis, affinity 100
— — —, automated 1393
— — —, combination with MALDI (matrix-assisted laser desorption/ionization mass spectrometry 929, 1773
— — —, — — MS 1706, 1708, 2192, 2249, 2251
— — —, — — MS/MS 2192
— — —, data analysis 253, 1406, 2189, 2276
— — —, database 801(review), 926, 1548, 1586, 1727, 1738, 1761, 2190, 2191, 2194, 2352(review), 2478
— — —, instrumentation 716
— — —, preparative 1518, 1773, 2185
— — —, reviews 26, 29, 94, 110, 311, 737, 801, 804, 823-825, 1390, 1407, 1473, 1475, 1478, 1531, 1560, 1654, 1696, 2086, 2179, 2263, 2346, 2352
- Ultrathin layer electrophoresis 1166, 1268, 1298, 2150, 2793, 2794
- Urea-polyacrylamide gel, *see* Polyacrylamide-urea gel
- Urea-acetic acid-Triton X-100 gel electrophoresis 210
- Western blotting, *see* Blotting techniques; Immunoblotting
- Zinc-imidazol negatively staining 452
- Zinc-ion stains 15
- Zymography, *see* Detection and detectors, zymography

Capillary Electrophoresis and Electrokinetic Chromatography

- Advances in capillary electrophoresis 6, 1156
- Affinity electrophoresis, capillary 115(review), 116, 117(review), 118(review), 119, 188, 269, 290, 329, 355, 484(review), 599, 600, 743, 759, 853, 973, 1029, 1036(review), 1037(review), 1038, 1077(review), 1387, 1441, 1497, 1613
- — —, coupling with microdialysis 1387
- — —, enantiomer separation 1443
- Automation 48, 1182, 1201, 1388, 1398
- Baseline determination 19(review)
- Books (and symposia proceedings) on capillary electrophoresis 7, 9, 530, 1622
- Capillaries 61, 68, 626, 1326, 1354, 1364, 1367
- Capillary array electrophoresis, general 352, 356, 776(review), 783, 1188, 1200, 1201, 1534, 1536, 1537
- — —, chip 1200
- — —, detection 1188, 1536
- — —, instrument 1188, 1537
- — —, multiple 52, 53
- , coated, stripping 69
- , coating 54, 87, 88, 91, 92, 140, 188, 302, 360, 557, 576, 766, 1080, 1087, 1136, 1181, 1190, 1345
- Capillary chromatography, micellar, comparison with CZE 469, 851, 872, 1164, 1232, 1263, 1511
- — —, — — — gas chromatography 470
- — —, — — — liquid chromatography (HPLC) 28, 160, 442, 824, 1244, 1552
- — —, see also Capillary liquid chromatography in the Liquid chromatography section
- — —, — — — UV spectroscopy 442
- — —, counterbalanced flow 1467
- — —, coupling with MS, see Electrophoresis, coupling with MS
- — —, — — — (supercritical fluid extraction (SFE) 829
- — —, critical micelle concentration 1365
- — —, detection, see Detection and detectors
- — —, dispersion 528
- — —, enantiomer separation, see Enantiomer separation
- — —, injection effect 581
- — —, instrumentation, see Capillary zone electrophoresis, instrumentation
- — —, ligand-exchange 1210
- — —, microemulsion, see Microemulsion electrokinetic chromatography
- — —, modeling 1372
- — —, nonaqueous 1340
- — —, see also Nonaqueous capillary electrophoresis
- — —, optimization 89, 93, 190, 237, 379, 408, 431, 460, 585, 804, 806, 864, 867, 1104, 1106, 1234, 1331, 1337, 1569
- — —, pH effects 89, 342, 379, 460, 581, 867, 1104, 1331
- — —, precolumn derivatization 241, 1112
- — —, pressure influence 31
- — —, reversed flow 1020
- — —, reviews 17, 18, 46, 205, 209, 218, 231, 412, 472, 524, 525, 593, 684, 866, 931
- — —, see also Reviews, applications to various fields of science and technology
- Capillary chromatography, micellar, sample concentration, on-line 1064
- — —, — — — stacking 658, 1341
- — —, — — — surfactant effect 988
- — —, — — — temperature effect 431, 581, 727, 1337
- — —, — — — theory 40, 1372
- — —, — — — thermodynamics 543
- — —, — — — validation 446, 822
- — —, — — — voltage effect 581, 867
- — —, — — — with acetonitrile 159, 446, 727, 1104, 1106, 1252, 1271
- — —, — — — bile acids (salts) 671
- — —, see also various bile salts
- — —, — — — Brij-35 1580
- — —, — — — calixarenes 581
- — —, — — — cetyltrimethylammonium bromide (CTAB) 431, 1106
- — —, — — — CHES 431, 442, 511
- — —, — — — cholate 159, 334, 408, 410, 1112, 1232, 1464
- — —, — — — cyclodextrin 190, 406, 409, 698, 1018, 1074, 1107, 1114, 1596
- — —, see also Cyclodextrin(s)
- — —, — — — hexadimethrine bromide (Polybrene) 899
- — —, — — — 1,2-hexanediol 527
- — —, — — — methanol 159, 338, 804, 1019, 1106
- — —, — — — mixed micelles 1628
- — —, — — — organic modifiers 35, 156, 664, 975, 1020, 1331, 1346
- — —, — — — polyallylamine 1019
- — —, — — — polyethyleneimine 93, 1366
- — —, — — — polymeric dye 577
- — —, — — — poly(sodium 10-undecylenate) 1368
- — —, — — — 2-propanol 35
- — —, — — — resorcarene-octacarboxylic acids 233
- — —, — — — starburst dendrimer 89
- — —, — — — surfactants, comparison 237
- — —, — — — —, Gemini 379
- — —, — — — —, polymeric 108, 579, 662
- — —, — — — —, tetradecylammonium ions 820
- — —, — — — —, tetradecyltrimethylammonium ions 698
- — —, — — — —, Triton X-100 747
- — —, — — — —, TTAB (teradecyltrimethylammonium bromide) 1106, 1234
- — —, — — — —, urea 408, 747
- — —, — — — —, zone sweeping 981
- Capillary chromatography, microemulsion, see Microemulsion electrokinetic chromatography
- electrochromatography 27, 42, 118(review), 120-127, 173(review), 187, 191, 411, 428(review), 429, 430(review), 588, 601, 602(review), 603-620, 621(review), 622-627, 663, 692, 710, 812, 814, 840, 847, 1006, 1044, 1068, 1097, 1180, 1254, 1255, 1343, 1388-1390, 1391(review), 1395-1399, 1400(review), 1401-1404, 1430, 1483, 1484, 1563
- — —, automated 1388, 1398

- Capillary electrochromatography, bubbles formation 1039
 — —, columns 95(review), 121, 125, 127, 606, 610, 617, 618, 626, 710, 812, 1012, 1048, 1254, 1343, 1354, 1369, 1563
 — —, comparison with capillary electrophoresis 403, 840, 848, 851
 — —, — — HPLC 403, 840, 847, 1403
 — —, coupling with capillary electrophoresis 622
 — —, — — flow-injection analysis 614
 — —, — — MS 607, 1484
 — —, — — MS/MS 1398
 — —, — — NMR 611, 848
 — —, electroosmotic flow 620, 626, 1039, 1041, 1397
 — —, enantiomer separation 122, 608, 710, 1059, 1408
 — —, fritless 617
 — —, gradient elution 611, 614, 1043, 1050
 — —, immunoaffinity 622
 — —, instrumentation 623, 625, 1039
 — —, mobile phase optimization 1047, 1180, 1255, 1389
 — —, modelling 122
 — —, nonaqueous 583
 — —, open tubular 1369
 — —, optimization 122, 127, 187, 429, 1047, 1180, 1255, 1389
 — —, pH effect 187, 620, 1180
 — —, stationary phases 601, 604, 610, 615, 618-620, 627, 1040, 1043, 1045, 1046, 1048, 1049, 1059, 1254, 1390, 1392, 1395, 1398, 1399, 1400(review), 1402, 1404, 1408
 — —, temperature effect 1180
 — —, voltage effect 1180
 — —, theory 411, 612, 1042
 — electrophoresis, see Capillary zone electrophoresis
 — —, affinity, see Affinity electrophoresis, capillary
 — —, chip, see Chip electrophoresis
 — —, gradient 986
 — —, instrumentation, see Capillary zone electrophoresis, instrumentation
 — —, ligand-exchange 256, 1473, 1476
 — —, nonaqueous, see Nonaqueous capillary electrophoresis
 — —, on chip, see Chip electrophoresis
 — —, reviews, see Review(s) section
 — gel electrophoresis, applications 205(review), 284(review), 332, 348, 350, 357, 362, 370, 767, 774, 790, 793, 883(review), 902, 956(review), 1014, 1179, 1185, 1186, 1243, 1523, 1526, 1527, 1531
 — — —, detection see Detection and detectors
 — — —, enantiomer separation see Enantiomer separation
 — — —, entangled polymer 424, 773, 789
 — — —, see also Capillary zone electrophoresis, background electrolyte, with entangled polymer
 — — —, gradient 575
 — — —, instrumentation, see Capillary zone electrophoresis, instrumentation
 — — —, media, for non-crosslinked gels, see Capillary zone electrophoresis
 — — —, optimization 346
 — — —, Pluronic gel 33, 94, 346, 363, 781, 1186
 — — —, polyacrylamide (PAA) 292, 1632
 — — —, poly(ethylene glycol) 1081, 1179
 — — —, poly(ethylene oxide) 1533
 — — —, replaceable gels 368
 — — —, theory 779
 — — —, with SDS 229, 292, 488
 — — —, with acetone 268, 688, 884, 1150
 — — —, — —, — — albumin 1605
 — — —, — —, — — amino acids 419
 — — —, — —, — — antibiotic 134
 — — —, — —, — —, macrocyclic 648
 — — —, — —, — —, *n*-benzylcinchonine 666
 — — —, — —, — —, Brij 302
 — — —, — —, — —, carbamate 637
 — — —, — —, — —, cetyltrimethylammonium bromide (CTAB) 86, 913, 1305
 — — —, — —, — —, CHES 511, 860
 — — —, — —, — —, chondroitins 1410
 — — —, — —, — —, crown ether 21 (review), 648, 921(review)
 — — —, — —, — —, 18-crown-6-tetracarboxylic acid 1121, 1131
 — — —, — —, — —, cyclodextrin (and modified cyclodextrins) 96, 132, 133, 135-138, 141, 142, 148, 149, 240, 248, 278, 281, 295, 343, 393, 414, 416, 432, 436, 437, 451-453, 455, 457, 458, 518, 550, 632-635, 638(review), 641-647, 648(review), 854, 870, 951, 1060, 1061, 1131, 1211, 1212, 1573
 — — —, — —, — —, see also Cyclodextrin(s)
 — — —, — —, — —, — —, cyclofructan 1310
 — — —, — —, — —, — —, cyclohexapeptides 636
 — — —, — —, — —, — —, dendrimers 245, 298, 811
 — — —, — —, — —, — —, dextran 299
 — — —, — —, — —, — —, 1,3-diaminopropane 680
 — — —, — —, — —, — —, entangled polymer 424, 773, 1530
 — — —, — —, — —, — —, see also Capillary gel electrophoresis
 — — —, — —, — —, — —, hexadimethrine bromide (Polybrene) 327
 — — —, — —, — —, — —, hexamethrine 260
 — — —, — —, — —, — —, hexafluoro-2-propanol-urea 1123
 — — —, — —, — —, — —, hydroquinone 978
 — — —, — —, — —, — —, hydroxyethyl cellulose 748, 1199, 1525
 — — —, — —, — —, — —, hydroxypropyl-methyl cellulose 1150
 — — —, — —, — —, — —, ion-pairing reagents 671, 1557
 — — —, — —, — —, — —, isoelectric buffers 748, 1143, 1371, 1503
 — — —, — —, — —, — —, macrocyclic dioxopolyamine 1639
 — — —, — —, — —, — —, methanol 268, 388, 870, 873
 — — —, — —, — —, — —, organic modifiers 688, 714, 751, 1211, 1447
 — — —, — —, — —, — —, see also various modifiers (e.g. acetonitrile, methanol)
 — — —, — —, — —, — —, pentosan polysulfate 651
 — — —, — —, — —, — —, Pluronic F128, see Capillary gel electrophoresis
 — — —, — —, — —, — —, polyacrylamide, linear 312, 359, 368

- Capillary zone electrophoresis (CZE), background electrolyte, with polyamines, macrocyclic 392, 1446
- — —, — — —, — polydiallyldimethylammonium chloride 299
 - — —, — — —, — poly(dimethylacrylamide) 86
 - — —, — — —, — poly(ethyleneglycol) 691
 - — —, — — —, — polyethylene oxide 200, 772, 1531
 - — —, — — —, — polymer content 332, 368, 377, 378, 774
 - — —, — — —, — *see also various polymers*
 - — —, — — —, — — —, replaceable 1601
 - — —, — — —, — polysaccharides 648
 - — —, — — —, — polyvinylpyrrolidone 1601
 - — —, — — —, — *iso*-propanol 860
 - — —, — — —, — *n*-propanol 222
 - — —, — — —, — protein 648
 - — —, — — —, — putrescine 740
 - — —, — — —, — rimantadine 418
 - — —, — — —, — spermidine 234, 864, 884
 - — —, — — —, — seawater, artificial 1315
 - — —, — — —, — surfactant 693
 - — —, — — —, — tetraalkylammonium ions 96
 - — —, — — —, — triethylamin (TEA) 860
 - — —, — — —, — Tween-20 632
 - — —, — — —, — vancomycin 246
 - — —, — — —, — buffers, *see* Capillary zone electrophoresis, background electrolyte
 - — —, — — —, — capillaries, coated 131, 276, 278, 289; 302, 378, 388, 418, 423, 426, 576, 726, 953, 1080, 1087, 1136, 1181, 1190
 - — —, — — —, — *see also* Capillary, coating
 - — —, — — —, — — —, dynamic 286, 303
 - — —, — — —, — comparison coated-uncoated 131, 278
 - — —, — — —, — *see also* Capillary
 - — —, — — —, — chip, *see* Chip electrophoresis
 - — —, — — —, — column switching 1417
 - — —, — — —, — combination, *see* Electrophoresis, combination
 - — —, — — —, — comparison with capillary chromatography, micellar 469, 851, 872, 1164, 1232, 1263
 - — —, — — —, — electrochromatography 403, 840, 848
 - — —, — — —, — isoelectric focusing, capillary 679
 - — —, — — —, — HPLC 272, 705, 1076, 1092, 1152, 1170, 1173, 1212, 1214, 1294
 - — —, — — —, — planar gel electrophoresis 1150
 - — —, — — —, — complexation, on-capillary 1635
 - — —, — — —, — coupling, *see* Electrophoresis, coupling; Electrophoresis, combination
 - — —, — — —, — with capillary isotachopheresis, *see* Isotachopheresis, capillary, coupling with capillary zone electrophoresis
 - — —, — — —, — electrochromatography 622
 - — —, — — —, — derivatization, *see* Postcolumn derivatization; Precolumn derivatization
 - — —, — — —, — detection, *see* Detection and detectors
 - — —, — — —, — electroosmotic flow 5(review), 726
 - — —, — — —, — control 252, 972, 1328
 - — —, — — —, — gradient 584
 - — —, — — —, — reversed, *see* Capillary zone electrophoresis, reversed polarity
 - — —, — — —, — electrophoretic mobility 32, 544, 576, 750
 - — —, — — —, — enantiomer (and diastereomers) separations, *see* Enantiomers (and diastereomers), separation
 - — —, — — —, — ion-pairing 299
 - — —, — — —, — miniaturization, *see* Chip electrophoresis
- Capillary zone electrophoresis (CZE), mobile phase, *see* Capillary zone electrophoresis, background electrolyte
- — —, — — —, — modeling 452, 1010
 - — —, — — —, — non-aqueous, *see* Nonaqueous capillary electrophoresis
 - — —, — — —, — non-gel sieving, *see* Capillary non-gel sieving
 - — —, — — —, — optimization 132, 136, 210, 217, 219, 222, 224, 246, 278, 353, 449, 454, 461, 495, 529, 695, 699, 714, 726, 749, 863-865, 870, 873, 913, 976, 990, 1141, 1173, 1211, 1216, 1275, 1322, 1380, 1476, 1601, 1606
 - — —, — — —, — organic solvent modifiers, *see* Capillary zone electrophoresis, background electrolyte
 - — —, — — —, — peak broadening 1125
 - — —, — — —, — postcolumn reactor 707
 - — —, — — —, — potential gradient 1022
 - — —, — — —, — precolumn derivatization 667, 672, 673, 708, 709
 - — —, — — —, — preparative (and micro-preparative) 100
 - — —, — — —, — reversed polarity 88, 279, 461, 838, 940, 1087, 1317, 1653, 1654
 - — —, — — —, — reviews and books, *see* Review(s) and Books (and symposia proceedings) on electrophoresis
 - — —, — — —, — sample binding 1125
 - — —, — — —, — — —, enrichment 630
 - — —, — — —, — stacking, *see* Sample stacking
 - — —, — — —, — simulation, *see* Capillary zone electrophoresis, modeling
 - — —, — — —, — solid-phase extraction, *see* Solid-phase extraction
 - — —, — — —, — stacking *see* Sample stacking
 - — —, — — —, — system peaks 1321
 - — —, — — —, — temperature effects 449, 495, 1141, 1447, 1495
 - — —, — — —, — — —, subzero 32
 - — —, — — —, — theory 584
 - — —, — — —, — thermodynamics, *see* Thermodynamic of electrophoresis
 - — —, — — —, — troubleshooting, *see* Troubleshooting
 - — —, — — —, — validation 449, 754, 831, 1272
 - — —, — — —, — voltage effects 210, 449, 495, 974
- Chemometric 1599
- Chip electrophoresis 101, 500, 551, 552, 599, 655(review), 657(review), 660(review), 780, 791, 872, 883(review), 1005, 1065, 1200, 1355, 1416, 1420, 1421, 1425, 1523, 1634
- — —, — — —, — coupling with MS 1421, 1425
 - — —, — — —, — detection 71
 - — —, — — —, — isotachopheresis 130, 629
 - — —, — — —, — optimization 791
 - — —, — — —, — sample preparation, coupled 1523
 - — —, — — —, — two-dimensional 151
- Clean column end 1343
- Clean-up 1422
- Cloud point extraction 1405
- Complexation 1310, 1635
- Computerization 101, 1021-1025, 1327
- — —, — — —, — *see also* Modeling
- Continuous electrophoresis 1370
- — —, — — —, — *see also* Preparative electrophoresis
- Counter-current capillary electrophoresis 144, 258
- Cyclodextrin(s) 96, 97, 103, 132, 133, 135-138, 141, 142, 148-150, 175, 190, 240, 248, 278, 281, 295, 343, 393, 406, 409, 414, 416, 432, 436, 437, 451-453, 455, 457, 458, 518, 550, 632-635, 638(review), 641-647, 648(review), 684(review), 698, 711, 725, 730, 854, 857, 870, 892, 951, 1018, 1058, 1060, 1061, 1063, 1074, 1099, 1107, 1111, 1114, 1131, 1211, 1212, 1232, 1249, 1250, 1253, 1256, 1451, 1458, 1469, 1471, 1472, 1547, 1548,

- 1573, 1579, 1585, 1594, 1596, 1601
 Data analysis *see* Computerization
 Derivatization, fluorescence 179, 285, 707-709, 1166
 —, in column 78, 247, 255, 293
 see also Chiral derivatization; Precolumn derivatization
 Detection and detectors, amperometric 164, 177, 572, 697, 701, 703, 821, 877, 998, 1265, 1353, 1357, 1360, 1428, 1567, 1607, 1636
 see also Detection and detectors, electrochemical
 — — —, biosensors 1003
 — — —, capillary vibration 570
 — — —, chemiluminescence 71, 77, 559, 564, 888, 1009, 1361
 — — —, conductivity 63, 64, 70, 219, 348, 513, 1002, 1005, 1015, 1329, 1359, 1591, 1630, 1651
 — — —, electrochemical 50, 55, 81, 83, 137, 162, 221, 254, 450, 565, 567(review), 568, 569, 571(review), 598, 811, 814, 882, 1001, 1103, 1546
 see also Detection and detectors, amperometric
 — — —, — array 66
 — — —, fluorescence 68, 73, 84, 257, 386, 391, 508, 573, 707, 1078, 1109, 1413
 — — —, —, correlation spectroscopy 80
 — — —, —, indirect 223
 — — —, —, laser induced 34, 50, 72, 79, 98, 104, 166, 176, 194, 196, 200, 244, 247, 257, 287, 293, 321, 337, 345, 357, 362, 369, 378, 385, 415, 462, 465, 489, 698, 708, 709, 716, 717, 720, 790, 792, 832, 836(review), 862, 884, 891, 1026, 1032, 1091, 1113, 1120, 1184, 1191, 1197, 1206, 1215, 1356, 1437, 1458, 1462, 1465, 1478, 1488, 1497, 1501, 1506, 1540, 1542, 1562, 1615, 1626
 — — —, —, — — —, indirect 497, 1007, 1598
 — — —, Fourier transform 1358
 — — —, indirect 70, 193, 213, 215, 219, 223-225, 497, 503, 506, 513, 561(review), 562, 683, 693, 718, 842, 899, 912, 913, 932, 954, 1007, 1010, 1110, 1116, 1225, 1305, 1322, 1348, 1445, 1447, 1452, 1474, 1598, 1609, 1647, 1650
 — — —, laser based 541, 570, 928, 1000, 1188
 see also Detection and detectors, fluorescence, laser induced
 — — —, light scattering 1393
 — — —, luminiscence 995, 1000
 — — —, photodiode array 67, 157, 313, 460, 745, 750, 865, 887, 1161, 1275, 1469, 1616
 — — —, photothermal 1581
 — — —, PIXE (particle-induced x-ray emission) 887
 — — —, potentiometric 75, 556, 1004, 1222, 1353
 — — —, radioactivity 890, 1267
 — — —, refractive index 1645
 — — —, review (general) 923
 — — —, thermal lens 62(review), 76, 250
 — — —, thermionic detector, nitrogen-selective 566
 — — —, thermo-optical absorbance 868, 1396, 1450
 — — —, Z-cell 999
 Detection limit 65, 843(review), 985, 1006
 Dielectrophoresis 153
 DNA-fingerprinting, *see* structural studies in individual entries in the List of Types of Compounds Chromatographed
 Electrochromatography, *see* Capillary electrochromatography
 —, thin-layer 1419
 Elektokinetic chromatography, *see* Capillary chromatography, micellar; Microemulsion electrokinetic chromatography
 Electroosmotic flow 5(review), 620, 1039, 1041, 1344, 1397
 Electroosmotic flow, control 252, 626, 972, 1328
 — — —, reversed 88, 1450
 — — —, modifier 86
 Electrophoresis, combination with field-flow fractionation 110, 985, 1033
 —, — — fluorescence spectroscopy, synchronous 1157
 —, — — graphite furnace atomic absorption 100
 —, — — HPLC 260, 1491
 —, — — immunoassay 1032
 —, — — MALDI (matrix-assisted laser desorption/ionization mass spectrometry) 678, 729
 see also Electrophoresis, comparison with MALDI
 —, — — TLC 394
 —, comparison with GC 410, 470, 815(review), 1235
 —, — — gel electrophoresis, plain 178, 1150, 1168
 —, — — ion chromatography 1554
 —, — — HPLC 28, 106, 160, 253, 214, 247, 272, 276, 282, 351, 399, 403, 410, 428(review), 430(review), 442, 635, 705, 713, 719, 740, 815(review), 824, 840, 847, 883, 889, 1076, 1092, 1152, 1163, 1170, 1173, 1212, 1214, 1218, 1244, 1251, 1259, 1274, 1279, 1287, 1294, 1376, 1380, 1403, 1426, 1433, 1460, 1469, 1524, 1552, 1555
 —, — — MALDI (matrix-assisted laser desorption/ionization mass spectrometry) 1442, 1490
 —, — — other analytical techniques 1586
 —, — — photometric determination 239
 —, — — temperature gradient electrophoresis, temporal 796
 —, — — UV spectroscopy 442
 —, coupling with AES (atomic emission spectrometry) 1373
 —, — — enzyme immunoassay 74, 285
 —, — — flame photometric detection 114, 1011
 —, — — flow injection 475, 589, 614, 665, 1374, 1648
 —, — — HPLC 38, 729, 985
 —, — — immobilized metal-ion affinity chromatography 1479
 —, — — MALDI (matrix-assisted laser desorption/ionization mass spectrometry) *see* Electrophoresis, combination with MALDI
 —, — — membrane preconcentration 273
 —, — — microdialysis 243, 590, 598, 837(review), 1387, 1475
 —, — — MS 34, 102, 103, 105, 106, 108, 109, 111-113, 145, 172, 189, 195, 206, 226, 261, 273, 283, 291, 300, 313, 324, 326, 327, 384(review), 388, 396, 414, 420, 499, 501, 522(review), 534, 587(review), 588, 591(review), 592, 593(review), 594-596, 607, 640, 721, 734, 746, 768(review), 787, 809, 828, 864, 865, 869, 978, 997(review), 1027(review), 1028, 1030, 1031, 1034, 1035, 1122, 1124, 1126, 1130, 1132, 1133, 1137, 1152, 1167, 1223, 1233, 1259, 1268, 1281, 1308, 1311, 1324(review), 1375(review), 1376, 1378-1381, 1383, 1385(review), 1386, 1421, 1425, 1448, 1479, 1484, 1509, 1545
 —, — — MS/MS 274, 289, 768(review), 874(review), 933, 1382, 1398, 1481, 1486, 1496
 see also Isoelectric focusing
 —, — — NMR 103, 453, 522(review), 611, 848, 1377(review), 1384
 —, — — Raman fluorescence 522(review)
 —, — — spectroscopy 586
 —, — — solid-phase extraction 289, 335, 597, 624, 845, 912, 1457, 1496
 —, — — — reactor 370
 —, — — supercritical fluid extraction 105, 829
 Electrophoretic mobility, *see* Mobility, electrophoretic
 Electrophoretic mobility shift assay, capillary 798, 802, 1543

- Enantiomers (and diastereomers), separation 21(review), 96, 103, 122, 131-142, 143(review), 144-146, 147(review), 148-150, 246, 248, 252, 256, 258, 281, 381, 383, 393, 430(review), 432, 436, 437, 447, 451, 452, 455, 550, 594, 608, 632-637, 638(review), 639-647, 648(review), 649-652, 666, 684(review), 710, 711, 725, 730, 839(review), 841, 850, 854, 857, 859, 867, 874(review), 875, 1057-1063, 1069, 1088, 1111, 1114, 1121, 1131, 1212, 1214, 1245, 1249-1251, 1253, 1254, 1257, 1261, 1262, 1370, 1408, 1409(review), 1410, 1411(review), 1412, 1413, 1414(review), 1415(review), 1443, 1459, 1466, 1471-1473, 1475, 1476, 1547, 1548, 1551, 1555, 1573, 1578, 1579, 1582, 1584, 1585, 1589, 1593-1595, 1603, 1605, 1612
- Fingerprinting, see Peptide mapping and structural studies in individual entries in the List of Types of Compounds Chromatographed
- Fluorophore assisted carbohydrate electrophoresis (FACE) 183, 194
- Footprinting, see Nucleotide mapping and structural studies in individual entries in the List of Types of Compounds Chromatographed
- Free flow electrophoresis 653(review), 733(review), 914(review), 915(review), 1025, 1165
see also Capillary zone electrophoresis
- solution electrophoresis 390, 1544
see also Capillary zone electrophoresis
- History of electrophoretic methods 4
- Hummel-Dreyer method 759
- Hydrogen-bonding interaction-assisted capillary electrophoresis 531(review)
- Immunoaffinity capillary electrochromatography 622
— —, electrophoresis 735, 973
- Immuno-electrophoresis, capillary 275, 1278
- Instrument comparison 24
- Instrumentation for electrophoresis 48-57, 58(review), 59, 66, 499, 551-559, 623, 625, 654, 659, 661, 793, 794, 991-994, 1039, 1182, 1188, 1352-1355
see also appropriate entries under Capillary zone electrophoresis; Detectors, new types
- Isoelectric focusing, capillary 8(review), 37(review), 205(review), 264, 284(review), 301, 333, 679, 914(review), 931(review), 969(review), 1167, 1338, 1418
— —, —, comparison with CZE 679
— —, —, coupling with MS 1167
- Isotachopheresis, capillary 284(review), 472(review), 582, 588, 628, 855, 903(review), 908(review), 914(review), 931(review), 956(review), 1005, 1051, 1052, 1054, 1055, 1056(review), 1101, 1118, 1222, 1240, 1273, 1320, 1455, 1591
— —, —, chip 1005
— —, —, coupling with capillary zone electrophoresis 128, 345, 728, 1052, 1057, 1175, 1226
— —, —, micellar partition 631
— —, chip 130, 629
- Ligand-exchange capillary electrophoresis 256, 1473, 1476
- Liquid membrane extraction 1406
- Liquid scintillation counting, see Detection, radioactivity
- Liquid-liquid extraction 106, 1485
- Liquid-liquid-liquid microextraction 1422
- Mathematical methods, see Computerization; Modeling
- Microchannel electrophoresis 702
- Microemulsion electrokinetic chromatography 616, 669, 825, 984, 1018, 1498, 1577
- Miniaturization in electrophoresis see Chip electrophoresis
- Mobility, electrophoretic 32, 44, 262, 280, 537, 544, 548, 576, 750, 853, 1300, 1339, 1450
— —, shift, see Electrophoretic mobility shift assay
- Modeling 101, 122, 262, 452, 539, 547, 548, 1010, 1022, 1025, 1327, 1330, 1348, 1372, 1492, 1580
see also Computerization; Retention prediction
- Multicapillary capillary electrophoresis 1181
see also Capillary array electrophoresis
- Multichannel flow electrophoresis 1016
- Multidimensional electrophoresis 151
- Neural networks 540
— —, artificial 529, 769, 1023, 1333
- Nonaqueous argentation electrophoresis 580
— capillary electrophoresis 3(review), 15(review), 85, 98, 152, 207, 223, 235, 568, 580, 583, 613, 649, 686, 803, 804, 842, 867-870, 873, 930, 977, 1099, 1132, 1219, 1246, 1248, 1260, 1276, 1340, 1362, 1445, 1447, 1587, 1617
— —, —, enantiomer(s) separation 150
- Nucleotide mapping, see structural studies in individual entries in the List of Types of Compounds Chromatographed
- On-capillary complexation 1307, 1635
- Open-tubular electrophoresis 1412
- Optimization 89, 93, 122, 127, 132, 136, 152, 187, 190, 196, 210, 217, 219, 222-224, 237, 246, 278, 301, 346, 353, 379, 408, 429, 431, 449, 454, 460, 461, 495, 529, 534, 560, 585, 695, 699, 714, 726, 736, 749, 791, 792, 804, 806, 846(review), 863-865, 870, 873, 892, 913, 976, 984, 990, 1023, 1047, 1063, 1104, 1106, 1141, 1173, 1180, 1191, 1211, 1216, 1228, 1234, 1246, 1255, 1275, 1322, 1331, 1337, 1342, 1380, 1389, 1476, 1569, 1587, 1601, 1602, 1606
see also pH effects
- Patch clamp detection 30
- Peak broadening 294, 546(review), 1599
- Peptide mapping, see structural studies in individual entries in the List of Types of Compounds Chromatographed
- pH effects 87, 89, 127, 132, 187, 219, 224, 246, 278, 342, 379, 421, 460, 495, 576, 581, 620, 665, 676, 714, 726, 750, 863, 864, 867, 873, 874, 892, 990, 1104, 1173, 1180, 1211, 1275, 1322, 1331, 1334, 1380, 1476, 1601, 1621, 1637
see also Capillary zone electrophoresis, background electrolyte, pH effect
- Planar chip technology, see Chip electrophoresis
- Postcolumn complexation 508
see also On-column complexation
- derivatization 285
— reactor 71, 563, 565, 573, 707
- Precolumn complexation 496, 937, 1305, 1306
— derivatization 61(review), 179, 185, 186(review), 188, 190, 196, 200, 241, 243, 249(review), 250, 252, 254, 292, 362, 667, 672, 673, 708, 709, 1032, 1067, 1079, 1091, 1099, 1104, 1112, 1120, 1166, 1435, 1540
- Preparative (and micro-preparative) electrophoresis 100, 369, 582, 678
see also Capillary zone electrophoresis, preparative; Continuous electrophoresis; Isoelectric focusing, preparative
- Pressure influence 31
- Quantitative structure-activity relationship (QSAR) 1441, 1580
- Reaction, in-capillary, enzyme 334
- Repeatability 1332
see also Validation
- Retention prediction 208(review)

- Review(s), advances 6
- , affinity electrophoresis, capillary 115, 117, 118, 484, 1036, 1037, 1077
 - , applications to various fields of science and technology 2, 11-13, 16, 20, 22, 26, 46, 165, 171, 173, 180, 186, 192, 203, 205, 208, 209, 211, 218, 231, 232, 238, 249, 265, 284, 297, 316, 341, 361, 366, 367, 375, 384, 400, 401, 404, 412, 427, 428, 430, 434, 438, 440, 464472, 479, 480, 483, 484, 494, 507, 517, 519-526, 546, 684, 733, 768, 815, 835-837, 843, 844, 846, 866, 874, 883, 903, 904, 909, 911, 914, 915, 918-921, 923, 931, 934, 949, 954-956, 959-963, 965-968, 1086, 1128, 1138, 1140, 1142, 1147, 1183, 1241, 1280, 1292, 1297, 1299, 1325, 1434, 1493, 1570, 1588, 1623, 1643, 1644
 - , baseline determination 19
 - , capillary array gel electrophoresis 776
 - , — chromatography, micellar 17, 18, 46, 205, 209, 218, 231, 412, 472, 524, 525, 593, 684, 866, 931
 - , — electrochromatography see Review(s), electrochromatography
 - , — gel electrophoresis 205, 284, 883, 956
 - , — isoelectric focusing see Review(s), isoelectric focusing
 - , — isotachopheresis see Review(s), isotachopheresis
 - , — zone electrophoresis see various review(s) sections
 - , chip electrophoresis 655, 675, 660, 883
 - , combination with microdialysis 837
 - , comparison with GC 815
 - , — — HPLC 428, 430, 815
 - , — —, —, capillary 10
 - , coupling with MS 384, 522, 587, 591, 593, 768, 997, 1027, 1324, 1375, 1385
 - , — — MS/MS 768, 874
 - , — — NMR 522, 1377
 - , — — Raman fluorescence 522
 - , cyclodextrins 638, 648, 684
 - , detection 923
 - , —, electrochemical 567, 571
 - , —, fluorescence, laser induced 836
 - , —, indirect 561
 - , —, thermal lens 62
 - , — limit 843
 - , electrochromatography 95, 118, 173, 428, 430, 602, 1391, 1394, 1400
 - , electroosmotic flow 5
 - , enantiomer separation 21, 143, 147, 430, 638, 648, 684, 839, 874
 - , free-flow electrophoresis 653, 733, 914, 915
 - , history of electrophoretic methods 4
 - , hydrogen-bonding interaction-assisted capillary electrophoresis 531
 - , instrumentation 58
 - , isoelectric focusing (capillary) 8, 37, 205, 284, 814, 931, 969
 - , isotachopheresis (capillary) 284, 472, 903, 908, 915, 931, 956, 1056
 - , nonaqueous capillary electrophoresis 3, 15
 - , optimization 846
 - , peak shape 546
 - Review(s), pH effect 874
 - , precolumn derivatization 61, 186, 249
 - , retention prediction 208
 - , sample application 532, 920
 - , — enrichment 525, 983
 - , — preparation 23, 168, 684
 - , — pretreatment 843
 - , — stacking 931
 - , single cell electrophoresis 918
 - , solid-phase extraction 171, 173
 - , theory of electrophoresis 10, 41, 546, 961, 964
 - , troubleshooting 25
 - , validation 1, 99, 846
 - , zeta potential 41
 - see also reviews in the individual entries of this index
 - RNA mapping, see structural studies in individual entries in the List of Types of Compounds Chromatographed
 - Sample application (injection) 59, 532(review), 920(review), 991, 1065, 1268, 1327, 1342, 1423, 1638
 - enrichment 525(review), 630, 983(review), 1064, 1420, 1571
 - injection, multiple 387
 - matrices 970
 - preparation 23(review), 168(review), 239, 288, 372, 684(review), 1406, 1422, 1523
 - pretreatment 843(review), 973, 1405
 - stacking 38, 129, 154, 155, 172, 374, 471, 500, 588, 658, 860, 931(review), 957, 973, 989, 1018, 1318, 1341, 1407, 1427, 1609
 - volume 234, 462, 581, 873
 - Simulation, see Modeling
 - Single cell electrophoresis assay 918
 - Solid-phase extraction 106, 171 (review), 173(review), 335, 344, 391, 458, 1236, 1258, 1462
 - —, coupling with capillary electrophoresis 289, 335, 597, 624, 845, 912, 976, 980, 994, 1457, 1496
 - microextraction 1336
 - Software, see Computerization
 - SSCP (single-strand conformation polymorphism) electrophoresis 537
 - Steady-state electrophoresis 36
 - Structure-activity relationship assay 1441, 1580
 - Structure-retention relationship 43, 266
 - Temperature effects 196, 431, 449, 495, 581, 727, 1141, 1180, 1228, 1337, 1447, 1495
 - see also Capillary zone electrophoresis, temperature effects
 - , subzero 32
 - Theory of electrophoresis 10(review), 40, 41(review), 43, 411, 533, 535, 538, 546(review), 584, 612, 779, 961(review), 964(review), 1042, 1328, 1363, 1372
 - see also Capillary zone electrophoresis, theory
 - Thermodynamic of electrophoresis 543-547
 - Troubleshooting 25(review), 1243, 1326
 - Validation 1(review), 99(review), 402, 446, 449, 754, 778, 822, 831, 846(review), 867, 905, 1196, 1272, 1480
 - Voltage effect 210, 449, 495, 581, 867, 974, 1180, 1228
 - Zeta potential 41