

## INDEX

- Acidfraction 56  
 Acidification 495  
 Advection 440, 979  
 Adsorption 16, 469, 811, 819, 821, 882,  
 918, 919, 944, 1005, 1075, 1067  
 Agriculture 155  
   practice 35  
 Air pollution (see pollution)  
 Air stripping 276, 277  
 Aldicarb 507, 509, 941, 942, 943, 946,  
 947, 949, 950, 951  
 Aliphatic chlorohydrocarbons 452  
 Alkalinity 225, 227, 229  
 Alkylbromide 517  
 Analysis, correlation 773  
   gas 1045, 1046  
   gas-chromatographic 1022  
   isotopic 1024, 1025  
   methods of 549  
   program 621  
   regression 773, 793, 796  
   sensitivity 998  
   statistical 618, 793  
   systems 2  
 Anaerobic breakdown 546  
 Anthropogenic depression 87  
 Aromates chloro-nitro 557, 563  
   nitro 557, 562  
 Aromatics 352  
 Artificial recharge 601  
 Arsene 217, 218, 291, 292, 293, 439, 548  
 Atmosphere contents 483  
   soil 482  
 Atrazine 141, 144  
 Aquifer cell 609  
   parameter 361  
   pollution 985, 986, 988  
   protection 1080, 1089  
   reclamation 834  
   saline 1099  
   stratified 761  
   superimposed 755
- Bacteria 96, 427, 511  
   iron 1075  
   manganese 1075  
   sulphate reducing 552  
 Bacterial counts 401  
   growth 881  
   survival 513  
 Bacteriological contamination 86  
 Bankfiltration 501, 533, 557, 558, 565,  
 569, 574, 601  
 Barium 539, 541
- Benzenes, chlorinated 571  
 Bicarbonate 255, 618  
 Bioaccumulation 1038, 1039  
 Biodegradation 439, 645  
 Black box 660, 808, 809, 813, 814, 815,  
 818, 821  
 Black list 1038  
 BOD 107, 110  
 Boron 249, 762  
 Boundary conditions 1008  
 Boussinesq's equation 985, 986  
 Brackish groundwater 688  
 Breakthrough 16, 436, 554, 602, 961  
   curves 530, 552, 947, 956, 957, 967  
 Brine 359, 361, 364, 374, 387, 389, 404,  
 417, 419, 422, 423, 424  
 Bromide 650  
 Brominated hydrocarbons 517
- Cadmium 263  
 Calibration 729, 825, 955  
 Camphor 475  
 Caprock 366, 368, 691  
 Carbon 14, 701  
   dioxide 1061  
   isotope 695  
   retreated 276  
 Carcinogen 1070  
 Carcinogenic 1038  
 Catchment area 618, 1111  
 Cattlefarming, intensive 341  
 Cavities, underground 421  
 Chalk 868, 869  
 Characteristics, method of 828, 829, 850  
   853, 954, 957, 958, 970  
   of sources 208  
 Chelating complex 85  
 Chemical contamination 147  
   parameters 750  
   volatile organic 517  
   waste 349  
 Chloride contents 688, 691  
 Chlorinated benzene 466, 517  
 Chloro alkanes 467  
   anilines 563  
 Chlorobenzene 350, 352, 356, 442  
 Chloroform 275, 442  
 Chlorohydrocarbons 451  
 Chloronitrobenzene 560, 563  
 2- Chlorophenols 350, 352, 356, 601  
 Chromium 268, 269  
   hexavalent 239  
 Cl/Br ratio 694  
 Classification, hydrogeological 204, 743

- Clayey matrix 767
- Clear-cutting 60
- Clogging effect 294
- Cluster wells 312, 314
- Coal cleaning refuse 319
  - fired power plants 261
  - , heavy metals in 261
  - mines 691
- Coll-E 429
- Columns 502, 597, 602
  - study 489, 502, 539, 545, 563, 569, 597
- Complex potential 839
- Compound, dangerous 1110
  - nitrate 84
- Comptability testing 407
- Computerprogram FLOP 845
- Connate water 23, 697, 1078
- Conservative behaviour 258
- Continuity equation 992
- Control leachate 1081
  - pollution 1098, 1100, 1119
- Convection 808, 809, 964
  - dispersion equation 980
  - system 3
- Convective transport 825, 826, 829, 830, 1012
- Conversion processes 9, 11
  - subsystem 2
- Copper, mobility of 545
- Covariance matrix 889
- Crude oils 456
- Crystalline materials 491
  - rock 672
- Cups, porous ceramic 343
- Cutons black and brown 491
- Cyanide 107, 213, 269, 539, 540, 1039
  - determination of 523
- Cycle diffuse 517
  
- Danger zone 334
- Darcy's law 827, 837, 846, 850, 910, 918, 934, 955, 980, 992
- Data acquisition 725
  - bank 617
  - collection 617, 725
  - collection, frequency of 793, 802
  - collection, chemical aspects 725
- Dating of groundwater 620
- DBCP in subsoil 169
  - sample handling 170
  - persistence of 171
- Decay constant 827
- Decontaminating 463
- Deadend pore 892, 893
- Degradability of organic compounds 470
- Delay time 1110
- Denitrification 879, 883
- Density 219, 452, 482
  - contract 241, 243
  - flow 7, 254, 257, 259, 620
- Desinfectants 601
- Detergents 77
- Depth, effects of 166
- Description process 16
- Deuterium 150
- Deviation 584
- Diagrams, cummulative 344
  - stability field 293
- Dialkyl sulfides 517
  - 1.4 - Dichlorobenzene 566
  - 2.4 - Dichlorophenol 601
  - 1.2 - Dichloropropane 566
- Dichlorotoluene 563
- Dieldrin 282, 1069
- Differences, finite 818, 821
- Diffuse sources 207
- Diffusion 809, 810, 880, 893, 958, 960, 1007, 1046
  - advection equations 1007
  - coefficient 921
  - molecular 1005
- Diffusive transport 6
- Digestion techniques 496
- Dimensions 1107
- Directives 1110
- Discretisation 969, 985
- Dispersion 257, 366, 440, 619, 708, 711, 808, 809, 815, 828, 850, 887, 891, 892, 893, 947, 951, 954, 964, 979, 980, 983, 1005, 1010, 1011
  - coefficient 650, 707, 1007, 1012, 1013, 1015
  - convection equation 807, 812
  - hydraulic 704
  - hydrochemical 707
  - hydrodynamical 694, 825, 826, 827, 830, 918, 985, 986, 1005, 1011, 1012, 1013, 1015
- Dispersive transport 6, 829
- Dispersivity 650, 652, 653, 828, 880, 883, 920, 921, 982, 983, 1005
- Disposal, improper 482
- Dissolved organic carbon 565, 567
- Distribution coefficient 860, 862, 919, 921, 979
  - of polluted water 347
  - vertical 64
- Domain, quality 9
- Domestic sewage 231
- Drainage adits 114, 803
- Drainreclamation, zone of 803
- Dredged materials 279
- Drilling, effects of 610, 620
- Dug wells 148
- Dump site 1034
- Dune-infiltration 557
- Dynamic equilibrium 210
  
- Earth worms 188
- Earthquake 377, 378
- Ecosystem 865
- Effluent, industrial 265, 266, 268

- Effluent, phenolic 1079
  - radio-active 424
  - tannery 287, 289
- Electrical change of soil 767
  - conductivity 417, 419
  - resistivity measurements 153, 154, 155, 159
- Electromagnetical measurements 253, 255, 259
- Electron impact mass spectrometry 718
- Electro osmosis 768
- Elements finite 1020
  - trace 86, 107, 110, 270, 617
- Elimination capacity 299
- Emission in atmosphere 263
  - inventory 195, 196
- Encrustation 1076
- Eosin 650
- Ethylamine 361
- Evaporite 10
- Evapotranspiration 963, 964, 966
- Evolution, reconstruction of quality 23
- Equation, diffusion - convection 1074
- Equilibrium, chemical 876
- Exchange, base 124
  - process 964, 966
- Fatty acids 545, 546
- Fenchone 475
- Fertilizer 50, 72, 157, 158, 160, 181, 191, 857, 861, 862, 1055, 1066, 1079, 1099, 1115, 1116, 1119
- Field survey systems 622
  - techniques 785
- Filtration 298, 602
- Fingering 812
- Finite difference method 828, 829, 850, 851, 855, 961
  - element 509, 818, 821, 828, 838, 840, 850, 915, 933, 979
- Fissures 1090, 1091, 1092, 1095
- Flow density 7
  - line pattern 11
  - meter 1020
  - mode 611
  - oblique 14
  - short circuit 619
  - short current 255, 259
  - tube 14, 620
- Fluctuations, seasonal 132
- Flue gas wash 291
- Fluid immiscible 451
  - resistivity methods 335, 336
- Fluoresceine 704
- Fluorescent tracer 703, 704, 705
- Fluoride 663, 664, 736, 794
- Fly ash 263
  - disposal 857
- Formation groundwater 666
- Fresh water lens 22
- Freundlich isotherme 964
- Frequency of measurement 684
- Frequency of observation 156
- Fulvic acids 568
- Galerkin 979, 980
  - finite element method 934, 1000
  - procedure 829
- Gas migration 460
  - ometry 801
  - permeameter 699
  - transfer, coefficient of 882, 883
- Gastro enteritis 511
- Geobotanical methods 797
- Geochemical sampling 413
- Geo-electrical method 336
- Geophysical methods 334
- Geophysics 798
- Geothermal 335, 1041
- Glacial bacteria 199, 202, 593
- Gob 324
- Gravity discharge 422
  - injection 396
- Grey box 660, 808, 809, 813, 815, 819, 821
- Grey list 1038
- Groundwater brackish 688
  - contamination 824, 826, 834, 852, 855, 917, 979, 1029, 1031
  - flow 703
  - map 1032, 1080
  - protection 928, 930, 1032, 1035
  - temperature 417
  - types of 65, 66, 268, 793, 805
  - quality management 928, 929, 930
- Guidelines 1109
- Half life times 472, 484
- Halogenated alkanes 474
  - benzenes 474
  - compounds 467, 517
- Hardness 618
  - triangle 150
- Hazardous activities, classification of 786
- HCH 350, 352, 356
- Health, hazard 119, 139
  - impact 305
- Heavy metals 59, 213, 225, 228, 276, 279, 282, 297, 298, 299, 320, 324, 352, 489, 529, 545, 777, 857, 858, 1067
  - in coal 261
- Herbicide 1066
- Hermitian basis functions 933, 935
  - conductivity 415, 416, 419
- Heterogeneous soil 959
- Hydraulic fracturing 394
  - loading 204
  - short cuts 14
- Hydrocarbon 193, 194, 467, 471, 474, 557, 587, 797, 1045, 1047, 1060, 1061, 1062

- Hydrocarbon, background level 798
  - chlorinated 579
  - pollution 1059, 1061-
- Hydrochemical regime 122
- Hydrochemical zonation 122, 124
- Hydro convective mode 6
- Hydrodynamical dispersion 694
- Hydrophilic compounds 567
- Hydrophobic behaviour 441
  
- Identification of contaminants 335
- Impact, environmental 22
- Improvement of quality 245, 295
- Incident, hazardous waste 468, 1032
- Incineration 1068
- Infiltration area 558, 618
  - model 574
  - rate 233
  - study 558
  - surface 533
- Inhomogeneties of a porous medium 709, 710
- Injection 387, 389, 396, 404
  - capacity 1075
  - deepwell 374, 378, 379, 382
  - of liquid waste 361, 369
  - of waste water 359, 369
  - silicate gel 225
  - well 292, 294, 361, 375, 380, 389, 390, 393
  - 406, 682, 1076
  - well act 404
  - zone 387, 388, 392, 393
- Inorganic salts 315
- Insecticide 941, 1066
- Instrumentation, downhole 411
- Interception well 1087, 1088
- Interface 974, 975, 976, 977, 978
  - fresh-salt 24, 390, 392
- Interpretation of data 617
- Intrusion 974, 1099
  - saline 697
  - salt water 22, 1066
  - sea water 16
- Inverse problem 814, 818
- Irrigation 70, 71, 72, 297
- Isochrones 955
- Isoconcentration map 753
- Isotherm 469
- Isotopic dating 417, 582
- Ion exchange 24, 398, 400, 811, 1005, 1067
- Ionic composition 132
  - ratios 757
- Iron 400
- Iron bacteria 1075
  
- Karst 1024, 1025
- Karstic 1102, 1104
  - area 809
  - aquifer 231
- Karsticity 682
  
- Laboratory tests 452, 803, 805
- Land application 580
- Landfill 217, 253, 239, 539, 545, 574, 997, 1078
  - leachate 495, 545
  - municipal 578
  - sanitary 1066
- Landuse 341
- Lateral variations 617, 618
- Latrines 200
- Leachate 1067, 1070, 1091, 1092, 1093, 1094
  - acid 319
  - control 1081
  - migration 255
  - synthetic 548, 545
  - quality of 258
- Leakage 482
- Leaks 577
- Lead, mobility of 545
- Legislation 47, 48, 112
- Lens, fresh water 22
- Lithology 234
- Local variations 618
- Long term changes 621
- Long term exposure 575
  
- Macro-dispersion 828
  - elements 253
- Mapping chemical 631
  - hydrogeochemical 332
- Manganese bacteria 400, 1075
  - migration 597
- Manure 72, 341
- Marsh-gas 1046
- Mise-a-la-masse method 336
- Material monogranula 711
- Matter subsystem 2
- Measurements, remedial 116
- Mercury 501
  - accumulation 502
  - extration 504
- Methane 1045, 1046, 1047
- Methylbromide 466
- Microbiological activity 297
  - degradation 460
- Micro crystalline materials 491
- Micro-organism 188
  - allochthonic 428
  - autochthonic 428
- Migration, all sided 254, 259
  - leachate 255
- Mineral oil 451, 1022, 1023, 1039
- Mineralisation 122, 131, 330, 676, 803, 872
- Mineralised water 700
- Mini-screens 255, 619
- Mining effects 111
- Mixing zone 162, 755
- Mode, flow 6, 11
  - hydroconvective 6

- Model calibration 826, 829, 830
  - conceptual 830, 831
  - contaminated 632
  - dispersion 273
  - experiments 539, 545
  - groundwater flow 1005
  - groundwater quality 38, 39
  - mathematical 283, 807, 813, 814, 883, 897, 898, 899, 900, 917, 966, 1008, 1084
  - mixing cell 953, 957
  - numerical 1005, 1020, 1023
  - of pollution 759
  - prediction dose 858
  - quality 953
  - solute transfer 954
  - statistical 609
  - study 558
  - transient hydraulic 507
  - transport 427
- Molecular weight distribution 567
- Monitoring 35, 46, 46, 55, 155, 181, 185, 310, 379, 381, 382, 389, 390, 392, 450, 617, 761, 797, 798, 1042, 1044, 1060, 1061, 1092, 1098, 1099, 1100, 1118
  - costs 635
  - devices multi-level 273, 274
  - network 14, 619, 620, 801, 826, 835, 929
  - program 715, 716, 717, 720
  - system 378, 620, 629, 630, 749
  - wells 253, 620, 716
- Multi-level monitoring 217, 219
- Multi-stage sampling 738
- Mutagenic 1038
  
- Nematicide 941
- Network 55, 310
- Nickel, mobility of 545
- Nile Delta 95
- Nitrate 46, 60, 105, 107, 250, 752, 874, 1023, 1039, 1082, 1084, 1085, 1086, 1087,
  - compounds 84
  - concentrations 27, 37, 38, 126, 136, 330, 346
  - leaching 1116
  - level 27
  - natural sources 117
  - normal background 186
  - pollution 89, 155, 158, 204, 1082, 1115, 1116, 1118
  - prediction model 161
  - profiles 30, 31, 39
  - reduction 1085
  - seasonal variations 36
  - sources 127, 139
  - vertical transport model 32
- Nitrification 879, 883, 919
- Nitriolotriacetic acid 529
- Nitrobenzene 560
- Nitrogen balance 249
  - compounds 102, 879, 883, 884
  - cycle 186, 1115
  - sources of 28
- Nitrotoluene 560
- Nonpolar surface 565
- Numerical methods 828
- Numerical model 1020, 1023
  
- Observation network 900, 989
  - number 751
  - wells 311
  - wells multiple depth 312, 314
- Octanol 571
- Oil 587
  - constituents 460
  - mineral 1022, 1023, 1039
  - pollution 1079
  - pools 590
  - on site measurements 726
  - spilt 1022
  - surveillance methods 799
- Organic carbon content of aquifer 439
  - chemicals 274
  - chlorine 557, 560
  - contaminants 439 465
  - content 225, 228
  - compound 469, 471, 477, 577
  - decomposition 316
  - halogen 310, 352, 356, 619
  - matter, soluble 249
  - micropollutants 253, 259, 557, 617
  - pollutants 565
    - non polar 574
  - solute 439
  - volatile 274
- Organo-chlorine compounds 557
- Organohalogen 1038
- Organophosphorous 1038
- Oxidizing conditions 293, 294
  - agent 294
- Oxydation and reduction 1073
- Oxygen -18 150
  
- Parameter estimation 830
- Pathogen germs 1110
- Pathogenic micro-organism 427
- Pathogen survival 306, 511
- Peclet number 881, 960, 961, 919, 1008, 1010
- Pedological half time 860, 862
  - profiles 72, 74
- Perchloro-ethylene 481, 566, 570, 194
- Perforation technique, In situ 764
- Permeability 619, 991
  - heterogeneity 203
  - variations 241, 1018
- Persistence 1038, 1039
- Persistency of organic compounds 465, 467
- Perturbation 993

- Pesticide 279, 282, 1023, 1055, 1069, 1070  
 Pesticidal substance 951  
 Phenols 601 -  
 Phosphate 16, 249, 281, 282, 563  
 Photographic infrared 797  
   conventional 797  
 Phthalates 560, 563  
 Pilot plant 529  
   trench 591  
 Piper diagram 150, 743, 744  
 Plumes of contamination 482  
 Point discharge 195  
 Polarity 767  
 Pollutants hazardous 706  
 Pollution air 132, 332, 467, 619  
   bacteriological 200  
   by drilling 259  
   continental 43, 48  
   control 1098, 1100, 1119  
   farming 333, 334  
   hazard 1080  
   hydrocarbon 1059, 1061  
   incidents 465  
   index 345  
   industrial 289  
   line 43  
   local 42, 329, 331  
   nitrate 204, 1082, 1115, 1116, 1118  
   non-point 42, 48, 141, 181  
   organic 575  
   plume 210, 243, 249, 255, 267, 291, 294  
   regional 42, 48  
   sources of 164, 346  
   oil 1079  
 Polycarbonate 728  
 Polysulfide 361  
 Pore clogging 20  
   systems 767  
 Precipitation 48, 49, 57, 175, 177, 178, 180, 181, 182, 332  
 Preconcentration techniques 729  
 Presentation of data 743  
 Prevention of pollution 92, 617  
 Probe scavenger 592  
 Protecting circles 1061  
 Protection 42, 44, 164, 212, 329, 331, 332, 335, 704, 761, 785, 797, 1103, 1104, 1107, 1109, area 705, 706, 1017, 1018, 1019, 1021, 1023, 1024, 1025, 1060, 1062  
   dimensioning of 1017  
   mineral water 1061  
   natural 91  
   system 1110  
   zone 427, 813, 821, 843, 1080, 1110  
 Pumping, double 592  
 Pumping test 1020  
 Pulse stimulus 443  
 Pyrite oxidation 326  
 Quality changes 84  
   classification of 773  
   diagram 743  
   domain 9  
   testing, in situ continuous 739  
   trend of 618  
   variation 63  
 Radio-active decay 811, 918, 979  
   effluents 424  
   isotopes 1012  
   substance 1040  
   waste 917, 1040  
 Radionuclides 595, 917, 928, 929, 960  
 Rainwater 466, 468, 620, 778  
 Recharge artificial 439, 529, 557, 558, 579  
   area 1109  
 Reclamation 320, 322  
 Reconstruction of the quality evolution 23  
 Recovery procedures 461  
   recharge system 278  
 Redox buffer 549  
   conversion 16  
   potential 546, 548, 1074  
 Reducing conditions 292  
 Reduction and oxydation 1073  
 Regeneration 297  
 Rehabilitation 317  
 Renovation 219, 273, 275  
 Representativity 619  
 Residence time 937  
 Retardation factor 439, 919  
 River-groundwater infiltration 565  
 River infiltration 501  
 Rock salt 342, 691, 694  
 Rural centres 342  
 Saline mine water 1080  
   water 359  
 Salinity 663, 666, 691, 694, 898, 899  
   sources of 758  
   variations 976  
 Salmonella typhi/typhimurium 429  
 Salt application 81  
 Salt dome 691  
 Salt layers 691  
 Salt water intrusion 22, 813, 960  
 Sample collection 725, 726, 727  
 Sampling detailed 246, 343, 549, 619  
   frequencies 621, 749  
   handling 260, 617  
   program 612  
   site specific 310  
   storage 728  
 Sanitation 199, 483, 1109

- Sandfilter 604  
 Scale, time 2, 23, 812, 814, 887, 892  
 Scheme, regional classification 18  
 Seepage, upward 22, 211, 245, 428, 618  
     827, 830, 850, 980, 983  
 Sem-edxra 489  
 Sensitivity test 831  
 Septic system 579  
 Sewage 69, 75, 103, 246, 298  
 Simulation, mathematical 977  
     model 825, 826, 830, 880  
 Sinters, ironhydroxide 533, 537  
 Site, assessment 1031, 1032  
     dump 1034  
     landfill 1078  
 Sludge disposal 305  
     disposal designs 306  
 Slug injection 888, 891, 892, 893  
 Snow 777  
 Soil type classification 788  
     use 618  
 Solubility of organic compounds 469  
 Solvents, organic 481  
 Sorption 439, 569, 571, 1060  
 Spillage 482  
 Spills 587  
 On the spot method 801  
 Spring 667  
 Stability field diagram 293  
 Stalactites 537  
 Standards 1109  
 Statistic methods 329  
 Statistical models 754  
 Step stimulus 443  
 Stimulus-response experiments 448  
 Stochastical description 991  
 Storage improper 482  
 Stratification, of pollutants 255, 277  
 Stream functions 837, 838, 840, 841, 912  
     lines 843, 845  
     tubes 676  
 Streptococci faecal 250  
 Subrosion 364  
 Sulfone 941, 942, 943, 944, 946, 947,  
     948, 949, 950, 951  
 Sulfoxide 941, 942, 943, 944, 946, 947,  
     948, 949, 950, 951  
 Sulfur compounds, volatile 517  
 Sulphate 778  
 Sulphite liquors 378  
 Superposition 846  
 Surveillance 797  
 Survey, national 466  
 Synthetic organic chemicals 575, 576  
 System, analysis 2  
     control 3
- 2, 4, 5, - T 350, 352  
 Tanneries, waste water from 165  
 TCCD 352  
 Technogetic activity 329
- Temik 507  
 Temperature measurements 253, 260  
 Temporal variations 574, 618  
 Test comptability 407  
     deepborehole 413  
     hydrogeological 413  
     interaquifer flow 739  
     laboratory 452  
     packer 699  
     partial penetration 699  
     percolation 503  
     pumping 699, 1020  
     recharging 1020  
     tracer 1021, 1025  
 Tetrachloroethylene 467, 517, 563  
 Tetrachloromethane 467  
 Textile mill waste water from 166  
 Thermal waters 368  
 Thio cyanate 540  
 Three characteristic point method 599  
 Time scale 2, 23  
 Toluene 570  
 Town planning 83, 84  
 Toxicity 1039  
 Trace elements 86, 107, 110, 253, 270,  
     529, 617, 728  
     elements analysis 495  
 Tracer 12, 246, 249, 650, 653, 703, 704,  
     812  
     conservative 12  
     dye 246, 250  
     experiments 703  
     fluorescent 703, 704, 705  
     radio-active 380, 396  
     test 888, 891, 1021, 1025  
 Transcient flow 2  
 Transfer coefficient 1013, 1015  
 Transition zone 812  
 Transport contaminated 807, 809, 814  
     diffusive 6  
     dispersive 6  
     -solute equation 827, 828, 830, 849, 918  
     solute model 826  
     subsystem 2  
 Transversal dispersivity 957  
 Travel time 232, 843, 845  
 Treatment, methods 277  
     subterranean 740, 1074, 1076  
 Trend of quality 618  
 Trial and error 1021  
 Trichloro-ethene 481, 1083, 1085  
     ethylene 193, 194, 466, 481, 517, 566  
     methane 467  
 Tritium 12, 31, 33, 39, 253, 255, 259, 260,  
     368, 620, 663, 672, 701, 1015  
 Types of groundwater 65, 66, 268, 793  
     of water 330, 793
- Ultra-violet irradiation 524, 526  
 Underground cavities 421  
 Unpolar substances 481

- Unsaturated zone 200
- Upward seepage 22, 211, 245, 428, 618
  - 827, 830, 850, 980, 983
- Upwelling 22
- Uranium 581, 650
  - concentrations 581, 584
  - ore 593
  - sources of 581
  - thorium analysis 701
  - vertical distribution 584
- Urban areas 51, 52
  - influence 79, 80
- Urbanization 101, 131, 163
  
- Variance 611, 612
  - chemical 73
  - frequent 749
  - monthly 751
  - patterns 751
- Variations permeability 1018
  - in quality 794
- Vertical profile 241
  - variations 347
- Virus 199, 202, 250, 427, 511, 1021, 1022, 1110
  - isolation 512
  - survival 513
- Viscosity 453, 827
  - of organic compounds 470
- Volatile organics 718
- Vulnerability maps 43, 44
  - to pollution 1102
  
- Waste caustic 378
  - chemical 349, 1068, 1069
  - chrome 239, 637
  - coal 1078, 1082
  - disposal (site) 9, 253, 359, 364, 421, 422, 495, 619, 634, 841, 855, 874, 884, 998, 1005, 1029, 1081, 1089, 1090, 1091, 1093, 1094, 1095
  - domestic 540
  - dump 349, 468
  - hazardous 239, 273, 277, 379, 405, 715, 824, 1031, 1032, 1033, 1066, 1069
  - industrial 102, 105, 110, 210, 241, 392, 393, 466, 577
  - liquid 244, 385, 404, 422, 831, 832, 1028, 1066
  - management, solid 715
  - mine 211
  - nuclear fuel 410
  - organic chemical 406, 546
  - pond 1028, 1030
  - radio-active 368, 596, 921, 1040
  - solid disposal 1067
  - toxic 422
  - urban solid 1066
  - water leakage 517
    - reclaimed 579
- Waste water from sugar refineries 315
- Waterborn disease 511
- Watertable rebound 112
- Weathering 865, 876
- Wells, cluster 312, 314
  - deep 359, 364
  - design 762
  - disposal 364, 379
  - injection 292, 294, 361, 375, 380, 389, 390, 393, 416, 1076
  - location 724
  - monitor 588
  - observation 685
  - recharge 395, 396
  - reference 259
  - recovery 277, 590, 592
  - screens 621
- Wine 643
  
- Zeta potential 768
- Zinc, mobility of 545
- Zone filtration 557, 563
- Zone of drain reclamation 803
- Zoning with protection area 1109