

SUBJECT INDEX

- Ab–Ag interaction, 93
 absorbance, 250
 accelerated solvent extraction, 141, 276, 343, 386, 519, 625, 709
 acceptability of methods of analysis, 81
 acceptable daily intake, 259
 accreditation, 77, 79
 accreditation criteria, 79, 86
 acetylcholinesterase inhibitors, 258
 acoustic transduction, 108
 acrylamide, 705
 activated carbon, 525
 activated carbon sorbent, 469
 active food contact materials and articles, 50
 active packaging, 740
 acute mycotoxicosis, 376
 acute reference dose, 378
 additives from plastics, 755, 756
 adequate intake, 572
 adhesives, 759
 adsorbent materials, 416
 adsorption, 662
 adsorption chromatography, 524
 adsorption columns, 276
 adsorption stripping voltammetry, 578
 adulteration of food, 92
 adverse reactions, 316
 aflatoxin, 42, 367, 376, 381, 402
 agents, 41
 agrochemicals, 458
 AhR nuclear translocator, 463
 ALARA, 378
 aldrin and dieldrin, 495
 alert system for food and feed, 4
 algae, 429
 aliphatic dialkyl nitrosamines, 656
 aliphatic molecules, 783
 alkaline, 578
 alkaline saponification/solvent extraction, 624
 alkaloid biotoxins, 10
 alkyl diazonium, 655
 alkylureas, 673
 alkylureas and alkyl nitroso ureas, 678
 allyl trenbolone, 41
 alumina, 525
 ambient mass spectrometry, 20, 202
 aminoglycoside drugs, 308
 amnesic shellfish poisoning (ASP) toxins, 430, 442
 anabolic steroids, 341
 analysis of PAHs, 602
 analysis of DSP toxins, 435
 analysis of HAs, 690
 analysis of veterinary drug residues, 320
 analyte detectability, 182
 analyte protectants, 193
 analytical methodology, 782
 analytical methods, 512, 659
 analytical procedure for metal determination, 573
 analytical procedures, 782
 analytical strategy, 785
 analytical tolerance, 763
 ANC precursors (ANCP), 670
 androgenic, 41
 androgenic steroids, 342
 animal drugs, 307
 anodic stripping voltammetry, 578
 anthelmintic, 41, 312
 anti isomers, 656
 antibiotics, 308
 antibiotic resistance, 317
 antibody, 92, 100
 antibody based methods, 93
 antibody production, 99
 anticoccidials, 41
 antigens, 96, 100
 anti-inflammatory drugs, 313
 antioxidants, 756
 antiserum, 93
 antithyroid, 41
 Antithyroid agents, 341
 APCI, 346
 approaches to overcome matrix effects, 192
 aquaculture, 315
 aromatic, 783
 aromatic amines, 788
 aromatized wine-based drinks, 58

- aromatized wine-product cocktails, 58
- aromatized wines, 58
- articles, 46
- articles intended to come into contact with foodstuffs, 50
- arylhydrocarbon receptor, 463
- assay development, 100
- assay optimization, 100
- asses the safety, 783
- assessment of consumer exposure, 782
- assessment of food safety, 2
- assessment of unlisted substances migrating from the FCM into the food, 777
- ATBC, 756
- atherosclerosis, 463
- atmospheric or vacuum distillation, 661
- atmospheric pressure chemical ionization, 195, 293, 345, 780
- atmospheric pressure ionization, 346
- atmospheric pressure photoionisation, 780
- atomic absorption spectroscopy, 581, 779
- atomic emission, 581
- atomic fluorescence spectroscopy, 581, 583
- attenuated total reflectance, 746
- automated dioxin clean-up instrument, 526
- automated liner exchanger, 193
- automated SPE system, 526
- automatic on-line FI-ETAAS, 587
- avermectins, 312
- azaspiracids, 440
- azaspiracid poisoning (AZP) toxins, 430, 439

- bacteriostatic agents, 308
- BADGE, 756
- banned substances, 340
- basic alumina, 469
- beauvericin, 414
- benzimidazoles, 312
- beta-agonists, 40, 342, 347
- BFDGE, 758
- bioactivity-directed identification, 15
- bioassays, 19, 489, 785
- biochemical or biological rapid screening methods, 22
- biological agent, 65
- biological assay, 689
- biological detoxification, 416
- biological mechanisms, 602
- biological safety, 42
- biological techniques, 489
- biomarkers, 356
- biomimics, 113
- (bio)nanotechnology, 20
- biosensors, 107, 122, 318, 330, 355, 399

- Biotech Food Labeling, 70
- bioterrorism, 65
- 2,2-bis(4-hydroxyphenyl)propane bis(2,3-epoxypropyl) ether, 50
- bis(hydroxyphenyl)methane bis(2,3-epoxypropyl)ethers, 50
- bisphenol A, 755
- bisphenol-A diglycidyl ether, 785
- blue copper phthalocyanine trisulfonate, 690
- board, 759, 782
- boldenone, 344, 345
- boronic acids, 720
- boronic esters, 346
- brevetoxins, 448
- brominated flame retardants (BFRs), 8, 507, 509
- bromomethane, 33
- BSE, 43
- bubble cell, 250

- ¹³C-labelled PBDEs, 541
- cadmium, 42, 759
- caffeine complexation, 625
- calibration standard, 780
- CALUX, 489
- cans, 782, 784
- capillary based separation techniques, 231, 252
- capillary chromatographic electro-separation, 241
- capillary columns, 232, 233, 280
- capillary electrochromatography, 119, 175, 232
- capillary electrokinetic chromatography, 232
- capillary electrophoresis, 201, 232, 239, 395, 431, 697
- capillary electrophoresis with UV detection, 445
- capillary electroseparation techniques, 235
- capillary format, 232
- capillary liquid chromatography, 232, 233
- carbamates, 41, 258
- carbon, 33
- carbon tetrachlorid, 33
- carcinogenic, 786
- carcinogenic mycotoxins, 378
- carcinogenic potency of PAHs, 610, 606
- carcinogenicity, 462
- carcinogenicity of PAHs, 609
- carcinogenicity of selected PAHs, 609
- card, 398
- carrier protein, 96
- catalysts, 44
- catalytic adsorptive stripping voltammetry, 587
- categories of wine, 59
- cathodic stripping voltammetry, 578
- cattle, 315

- CE, 239, 253
- CE marking, 48
- CEC, 239, 241
- cell based assays, 489
- CE-MS, 202
- certification, 79
- characterisation of materials, 746
- charge state, 313
- chemical binding, 93
- chemical methods, 417
- chemical migration, 734
- chemical nature, 258
- chemical substance", 67
- chemiluminescence, 319
- chemiluminescent magnetic immunoassay – CMIA, 106
- chloracne, 463
- chloramphenicol, 316
- chloramphenicol residues, 324
- chlormequat, 297
- chloroesters, 714, 721
- chloropropanols, 714, 716
- chromatographic resolution, 177
- chromatographic separation, 513
- chromatographic techniques, 175
- chromatography, 691
- chromophore, 313
- ciguatoxins, 430
- citroviridin, 374
- citrinin, 372
- classes of mycotoxins, 367
- classical gas chromatography, 470
- clean-up, 274, 386, 523, 750, 751
- clean-up methods, 661
- closed-loop stripping, 134
- coatings, 756
- coccidiostats, 311
- Codex Alimentarius, 78
- cohort of concern, 786
- cold vapour atomic absorption spectroscopy, 582, 585
- cold vapour, 581
- collaborative study, 662, 722
- collisionally activated dissociation, 780
- colorants, 44
- colourimetric phosphatase inhibition assays, 435
- columns, 469
- column chromatography, 143, 624, 626, 628
- combination of GC with TOF-MS, 206
- combination with GC, 780
- common agricultural policy, 56
- compact disk (CD)-based microarray system, 122
- compensation for matrix-induced response, 193
- competitive assays, 95
- compliance, 741
- compliance of migrants, 744
- comprehensive 2D chromatography, 189
- comprehensive instrumental analysis methods, 23
- comprehensive survey, 559
- comprehensive two dimensional (GC × GC) techniques, 206, 530, 779, 785
- comprehensive two-dimensional gas chromatography (GC × GC), 208, 470
- concentration of the migrant, 780
- confirmation of analytical methods, 343
- confirmation of identity, 319
- confirmatory procedures, 318
- conformity assessment, 48
- conjugates characterization, 98
- conjugation method, 97
- consumer, 32, 70
- consumer product, 63
- Consumer Product Safety Act, 63
- containers, 577
- contaminants, 14, 15, 30, 42
- contamination of foodstuffs, 548
- contamination problems, 248
- continuous full filling, 244
- control on the food chain., 79
- control systems, 31
- conventional 3D ion trap, 212
- conventional and fast GC, 206
- conventional compliance testing, 776
- cooking practices to reduce the formation of heterocyclic amines, 699
- co-polymeric sorbent, 277
- corticosteroids, 345
- coupled with MS, 628
- coupling the extraction and clean-up steps, 469
- creatine, 674, 686
- critical control points hazard analyses (HACCP), 6, 31–32
- cross-reactivity, 95
- cyanides, 33
- cyclic boronic derivatives, 349
- cyclopiiazonic acid, 373

- daily intake, 640, 656
- dairy cows, 315
- dairy products, 320
- dansylation method, 665
- DART (direct analysis in real time), 21, 204
- database of BFR levels in food, 562
- DDT, 495
- dead volumes, 233
- decabrominated diphenyl ethane, 540

- decomposition of nitrosamines, 662
- decontamination procedures, 416
- degradation products of monomers and additives, 778
- degree of conjugation, 98
- dentification and quantitative determination, 274
- derivatization, 291, 314, 343, 346, 538
- derivatization procedure, 789
- designation of origin, 58, 59
- designations of origin and geographical indications of agricultural products, 58
- desorption electrospray ionisation (DESI), 20
- destruction of organic matter, 574
- destructive clean-up, 524
- detection limit, 764
- detection limit of the instrument, 780
- detection, 314, 386, 513, 691
- detection. T, 530
- determination, 750
- determination of individual HBCD, 513
- detoxification pathway of PAHs, 606
- deuterated internal standards, 319
- diabetes, 463
- dialkylnitrosamines, e.g. N-nitrosodimethylamine (NDMA), and cyclic nitrosamines, 654
- diarrhetic shellfish poisoning (DSP) Toxins, 432, 430
- diastereoisomers and TBBP-A, 513
- dienestrol, 340
- dietary exposure, 555
- dietary exposure assessment, 381
- dietary exposure to HBCDs, 556
- dietary intake, 548, 556, 677
- dietary intake in Europe and Asia, 548
- dietary intakes of PBDEs, 542
- diethylstilbestrol, 340
- difficult matrix injection, 193
- diffusion, 735
- diffusion constants, 784
- 1,1-dimethylhydrazine, 654
- dinophysistoxins, 432
- diode array detection, 292
- dioxaborolane/dioxaborinane derivatives, 720
- dioxin responsive element, 463
- dioxins, 42, 495
- dioxolane/dioxane derivatives, 720
- dip-stick, 398
- direct sample introduction, 193
- Directive for trace metals in food, 588
- dispersive solid phase extraction, 143, 154
- distribution of PAHs in the environment, 602
- disulphide, 33
- domoic acid, 442
- donor-acceptor complex chromatography, 627
- double-focusing magnetic-sector, 204
- DR-CALUX[®], 8, 19
- drinking water, 60
- DSP toxins, 435
- dry ashing, 575, 576
- dyes, 41
- dynamic headspace, 134
- dynamic headspace GC-MS, 784
- earth-alkaline metals, 578
- ECD, 530
- echo peak technique, 196
- effects of low doses of mycotoxins, 377
- effects on humans, 609
- effects on reproduction, 462
- EFSA, 32
- eggs, 315
- EI mode, 530
- EI-LRMS, 533
- EI-MS in the selected ion monitoring (SIM) mode, 630
- EKC, 239, 241
- electroanalytical techniques, 578
- electrochemical detection, 351
- electrochemical immunosensor, 400
- electrochemical transduction, 108
- electron capture, 319
- electron capture detectors, 314
- electron capture negative ionisation, 530, 534
- electron ionisation, 530
- electroosmotic flow, 236
- electrospray, 314
- electrospray ionization, 195, 204, 293, 780
- electrospray ionization mass spectrometry, 785
- electrospray mass spectrometric, 250, 251
- electrothermal atomic absorption spectroscopy, 581
- electrothermal atomisation atomic absorption spectrometry, 585
- elimination of active sites, 192
- ELISA, 102, 355, 446
- emerging contaminants, 7
- emerging risk, 7
- enantiomeric separations, 244
- endocrine disruptors, 9
- endogenous NOC, 655
- enhance analyte ionization, 194
- enhancement, 193
- enniatins, 414
- enzymatic assays, 489
- enzyme immunoassay, 443

- enzyme linked immunoassay, 318
- enzyme-based immunoassays (EIAs), 102
- enzyme-linked immunosorbent assay, 349, 397
- epidemiological studies, 687
- epoxidised soybean oil, 756
- epoxidised triglycerides, 756
- epoxy and polyester based coating, 785
- ergot alkaloids, 10
- ergot, 371
- ergotism, 364
- ESI, 346
- essential and non-essential elements, 572
- estimated long-term human daily intake, 464
- estimates of dietary intake, 555
- ethylene vinyl acetate copolymer, 784
- EU, 29
- EU legislation, 31
- EU standards, 31
- European food policy, 79
- European food safety legislation, 78
- European legislation on FCMs, 776
- European legislation, 736
- European Mycotoxin Awareness Network, 416
- evaluation of analytical data, 780
- evanescent electromagnetic field, 111
- exogenous NOC, 655
- exposure assessment, 381, 700, 766
- exposure of the population to OTA, 403
- extension of the rules, 777
- extracted with organic solvents, 690
- extraction, 274, 343, 386, 467, 513, 612, 746, 750, 754
- extraction technique, 513
- factors affecting migration, 782
- fast chromatographic separation, 176
- fast gas chromatography with short megabore columns, 182
- fast gas chromatography with short microbore columns, 181
- fast gas chromatography, 178
- fast high-temperature liquid chromatography, 187
- fast liquid chromatography, 184
- fast liquid chromatography using monolithic columns, 185
- fast liquid chromatography using small particle sizes, 185
- fast temperature programming, 178
- federal agencies, 63
- Federal Food, Drug and Cosmetic Act, 68
- Federal Water Pollution Control Act, 71
- field amplified stacking, 240
- Fish, 327
- flame atomic absorption spectroscopy, 581
- flame ionization detector (FID), 630
- flame photometric detection, 351
- Florisil[®], 525
- flow-injection immunoassay (FIIA), 107
- fluorescence, 106, 250, 583, 628
- fluorescence detector, 291, 314, 628, 785
- fluorescence immunoassay, 105
- fluorescence polarization immunoassay (FPIA), 105, 397
- fluorimetric derivatisation of DA, 443
- fluorimetry, 345
- food additives, 67
- Food and Veterinary Office, 79
- food business operators, 32
- food chain, 3
- food consumption data, 766
- food contact materials, 733, 740, 741, 776
- food contamination, 30
- food flavors, 697
- food irradiation, 67
- food law, 32
- food legislation, 734
- food packaging, 733, 736
- food-packaging interactions, 44
- food packaging usage, 767
- food quality, 2, 56, 68
- Food Quality Protection Act, 30, 63
- food safety, 2, 6, 29, 32, 31, 56, 63, 78
- Food Safety Act, 63, 65
- Food Safety and Inspection Service, 30
- food safety hazards, 782
- food safety incidents, 4
- food safety legislation, 63
- food safety responsibility, 63
- food simulants, 744, 778
- foodstuffs, 741
- formulation of materials, 736
- fourier transform infrared photo-acoustic spectroscopy, 401
- fourier transform infrared spectrometer, 746
- fourier transform ion cyclotron resonance (FTICR) MS systems, 204, 205, 222
- fourier transform mass spectrometer, 780
- fractionation, 513, 525
- fragmentation pathways of azaspiracids, 440
- fresh fruits, 59
- fumonisin, 370, 381
- functional group assay, 788
- fungicides, 258
- furan, 722
- fusaproliferin, 376
- fusarium-toxins, 42, 381, 411

- fused-core, 185
- fusion, 575, 576
- future developments in legislation
 - on FCMs, 777
- gas chromatographic mass spectrometric, 789
- gas chromatography (GC), 175–176, 201, 204, 212, 280, 314, 389, 469, 585, 628, 779
- gas chromatography (GC) with detection by thermal energy analysis (TEA), 661
- gas chromatography and mass spectrometry, 471
- gas chromatography combustion isotope ratio mass spectrometry, 344
- gas chromatography-isotope dilution-time-of-flight mass spectrometry, 209
- gas chromatography-mass spectrometry, 512
- gas-chromatographic analysis, 346
- GC analysis, 538
- GC -MS, 720
- GC -MS analysis, 720
- GC separation, 528
- GC technique, 630
- GC using nitrogen-phosphorus detection, 351
- GC with flame ionization, 319
- GC(ECNI-MS), 535
- GC(HRMS), 538
- GC(MS), 527
- GC/ion trap MS, 476
- GC/MS, 281
- GC/MS with SIM, 281
- GC × GC modulators, 189
- GC-C-IRMS, 346
- GC-electron capture detection, 662
- GC-ID-HRMS, 209, 485
- GC-ID-QIST-MS/MS, 209, 485
- GC-MS, 319, 343, 345, 349, 351, 445, 661, 663, 692, 710, 717, 721, 723, 724, 755, 785
- GC-MS/MS, 351
- GC-TEA, 662, 663, 664
- GC-TEA of hydroxyalkylnitrosamines, 667
- GC-TEA of methyl esters of nitrosamino acids, 665
- GC-TOF-MS, 631
- GC × GC coupled to sector high resolution mass spectrometry, 488
- GC × GC coupled to time-of-flight mass spectrometry, 481
- GC × GC-IDTOFM, 485, 488
- GC × GC-QqQ-M/MS, 212
- gel permeation chromatography, 164, 278, 468, 523, 754
- generic comprehensive instrumental screening methods, 22
- genetically engineered (GE) foods, 70
- genetically modified organisms (GMO), 12
- genotoxic compounds, 378
- genotoxic profiles of PAHs, 606
- genotoxicity, 786
- geographical area, 59
- geographical indication, 58
- gestagenic action, 41
- glass, 782
- gliotoxin, 373
- GLP, 79, 85
- GLP principles, 86
- gonadic steroid, 344
- Good Laboratory Practice, 77
- good manufacturing practices, 6
- Good Practice Guides, 30
- GPC, 761
- graphite furnace atomic absorption spectroscopy, 582
- graphite furnace atomic absorption spectroscopy, 587
- growth hormone, 355
- growth promoters, 11, 339
- hair, 343
- halogen anions, 578
- hapten density, 98
- hapten derivatives, 99
- hapten immunochemistry, 99
- hapten, 96, 97
- harmonized protocols, 82
- Havery's HPLC-TEA method for all types of NOC, 669
- Hazard Analysis and Critical Control Point (HACCP), 30, 92
- hazard characterization, 376, 765
- hazard identification, 376
- HBCDs, 510, 511, 535
- headspace (HS) sampling, 723
- headspace gas chromatography, 779
- headspace gas-chromatography mass-spectrometry, 746
- headspace sorptive extraction, 136
- headspace techniques, 133
- head-space, 664, 751, 761
- health effects, 602
- heart-cutting techniques, 188
- heavy metals, 42, 586
- heptafluorobutryl (HFB) ester derivatives, 717
- herbicides, 258
- heterocyclic amines, 685, 687
- hexa-BB, 509
- hexabromocyclododecanes, 508

- hexachlorobenzene, 495
- hexestrol, 340
- high acquisition speed (HSTOF)., 206
- high performance liquid chromatography, 387
- high resolution and accurate mass, 204
- high resolution mass spectrometers, 204, 344, 780
- high-lipid content matrices, 520
- high-performance LC, 349
- high-potency carcinogenicity, 786
- high-resolution (HR) analysers, 206
- high-resolution GC with capillary column, 630
- homogeneity, 573
- homogenization of the matrix in an organic solvent, 520
- honey, 315, 325
- HPLC, 351, 628
- HPLC coupled with fluorescence spectrometry, 628
- HPLC-MS, 663, 783, 785
- HPLC-photolysis-TEA of nitrosamides, 675
- HPLC-photolysis-TEA of non-volatile NOC, 669
- HPLC-TEA of nitrosamino acids, 665
- HPLC-TEA, 665
- HRGC-HRMS, 539
- HRMS, 533, 539
- HRTOF, 206
- HSSE, 138
- HS-SPME, 664
- HSTOF-MS, 206, 208
- human aflatoxicosis, 377
- human exposure to POPs, 458
- human health risk assessment, 561
- hybrid quadrupole time-of-flight, 440
- hybridoma, 99
- hydride generation atomic absorption spectroscopy, 582
- hydride generation, 581
- hydrogen cyanide, 33
- hydrogen phosphide, 33
- hydrophilic- lipophilic balanced, 277
- hygiene, 48
- hygiene of foodstuffs, 32
- hygiene practices, 32
- hygiene standard, 32
- hypertension, 463

- IC50, 100
- ICP-AES, 582, 589
- ICP-MS, 587, 589
- identification, 59
- identification and evaluation of possible structural alerts, 786
- identification of constituents, 746
- identification of DSP toxins, 439
- identification of migrating compounds, 780
- identify non-target compounds, 783
- immune response, 96
- immunization procedures, 100
- immuno-affinity chromatography, 107
- immunoaffinity columns, 386
- immunoassay formats, 95
- immunoassays, 92, 93, 94, 96, 122, 489
- immunochemical technologies, 101
- immunogen, 96
- immunosensors, 107
- in silico prediction approach, 17
- individual PAHs in fish, meat and dairy products, 639
- inductively coupled plasma mass spectrometry, 585
- inductively coupled plasma, 779
- industrial substances, 458
- information for the consumer, 79
- infrared, 349
- injection techniques for PBDEs and PBBs, 527
- injection, 469
- ink substance, 759
- inks, 736
- innovative ionization methods, 202
- inorganic, 258
- inorganic substances, 759
- inorganic tin, 42
- insect growth regulators, 258
- insecticides, 258
- instrumental determination methods, 578
- insuline-like growth factor, 11
- intake of *Fusarium* toxins., 411
- intake of mycotoxins, 382
- intake of patulin, 412
- intelligent data analysis software, 17
- intelligent food contact materials, 50
- interlaboratory studies, 542
- inter-laboratory validation, 81
- internal laboratory quality control., 83
- internal market, 50
- internal quality-control practice, 83
- internal standards, 541, 612
- international dimension, 79
- international standard, 80
- International Standardisation Organisation, 77
- in-tube extraction, 134
- in-tube headspace extraction, 136
- ion trap, 204, 211, 344
- ion trap detectors, 345, 440

- ion-exchange, 313
- ion-exchange chromatographies, 234
- ion-selective electrodes, 578
- ion-trap mass spectrometers, 212
- ion-trap MS, 535
- 2-isopropyl thioxanthone, 736
- Isocyanates, 736
- isoelectric focusing, 240
- isotope labelled standard, 708
- isotopic dilution technique, 478
- isotopically labeled internal standards, 192, 195
- IT instruments, 283
- ITD, 212
- ITD-MS, 538
- ITDs, 295
- ITEX, 137

- Joule-heating, 236, 238

- Kuderna-Danish, 661, 662

- β -lactam antibiotic, 308
- labeling, 70
- labeling of complex, unclear information, 70
- labelling of foodstuffs, 56
- laboratory contamination, 576
- laboratory on a chip, 124
- laboratory requirements, 577
- large-volume injectors, 469
- lateral flow device, 398
- LC, 204, 212, 234, 292, 345, 346, 351, 538, 761
- LC separations, 188
- LC with UV detection, 345
- LC \times LC, 779
- LC-APCI-MS, 783
- LC-FLD, 435, 443, 446
- LC-GC, 188
- LC-MS, 202, 319, 343, 346, 349, 445, 694, 755, 782, 176
- LC-MS(-MS), 176
- LC-MS/MS, 351, 696, 712
- LC-MSⁿ, 346
- LC-QqQ-MS/MS, 211
- LC-UV, 443
- lead, 42, 759
- legislation, 29, 51, 560
- legislation of non-target compounds, 782
- legislation on food contact materials, 776
- levamisole, 312
- levels of HBCDs and TBBP-A in food, 556
- levels of PAHs found in vegetable oils, 639
- levels of PBDEs, 542, 548
- levels of total HBCDs, 556
- 4th list of priority chemicals in Europe, 561
- limit for the residual content, 777
- limit of decision, 492
- linear ion trap, 211, 213, 215
- linker or spacer arm, 96
- liquid chromatography (LC)-MS, 175, 201, 290, 343, 435, 779
- liquid chromatography coupled with mass spectrometry, 293
- liquid chromatography mass spectrometry, 394, 513, 747
- liquid chromatography using fluorescence, 319
- liquid chromatography with fluorimetric detection, 431
- liquid chromatography with mass spectrometric detection, 431
- liquid chromatography with UV detection, 319
- liquid matrices, 520
- liquid products, 44
- liquid/liquid extraction, 386
- liquid/liquid partition, 386
- liquid-liquid extraction, 148, 149, 275, 467, 520, 612, 624
- liquid-liquid extraction with pH adjustment, 313
- liquid-solid extraction, 520, 521
- LIT, 204
- LIT-Orbitrap, 205
- live animal bioassays, 435
- LLE, 522
- localised surface plasmons, 20
- loop-type injection, 469
- low limits, 764
- low-pressure gas chromatography, 289
- low-pressure (LP) GC-MS, 183
- low resolution mass spectrometry, 344
- Low resolution MS, 530
- lowest observed adverse effect level, 464
- LTQ Orbitrap, 222

- macrolides, 310
- major and minor classes of mycotoxins, 367
- major elements, 578
- major mycotoxins, 367
- major sources of PAHs in foods., 640
- management of packaging, 47
- mandatory labeling, 70
- manufacturers, 70
- marine environments, 562
- marine microalgae, 429
- market baskets, 548
- masked, 14

- masked contaminant, 14
- masked mycotoxins, 394
- mass accuracy, 205
- mass analyzers, 202
- mass resolution, 205
- mass spectrometric detection, 530
- mass spectrometry (MS), 201, 281, 319, 656, 692, 780
- mass spectrometry analyzers, 204
- mass spectrometry with LC, 780
- materials, 50
- matrix based standards, 319
- matrix composition, 780
- matrix effects, 101, 191, 761
- matrix interference, 101
- matrix-induced response enhancement, 192
- matrix solid phase dispersion, 142, 277, 520-521
- matrix-matched standards, 192, 195
- maximum allowable pressure, 48
- maximum residual quantity per surface area, 777
- maximum residue levels, 273, 318
- maximum tolerable intake, 466
- maximum tolerable level, 383
- 3-MCPD, 42
- MCPD-esters, 721
- meat sauce extract, 281
- medium volatiles, 754
- membrane-based immunoassay, 398
- mepiquat, 297
- mercaptoimidazole analogues, 341
- mercury, 42, 585 759
- metabolomics approach, 17
- metals, 572
- metal speciation, 10
- method ruggedness, 182
- method validation, 80
- methods for mycotoxins analysis, 385
- methylguanidine, 674
- metrological traceability, 83
- micellar EKC, 242
- micro- and nano-ESI ion sources, 202
- micro/nanosprayers, 202
- microbial inhibition tests, 318
- microbore columns, 182
- microdot, 122
- microelectrospray (μ ESI), 251
- microemulsion EKC, 242
- microscopic filamentous fungi, 364
- microwave assisted extraction, 468, 519
- microwave assisted solvent extraction, 141
- microwaves, 386
- migration, 44, 46, 735, 767
- migration experiments, 778
- migration processes, 734
- migration tests, 763
- miniaturisation, 232
- Minor Mycotoxins, 371
- MIP-based sensors, 120
- MIPs, 119
- mixed-mode solid phase extraction, 313
- mode of action of dioxins, 463
- model analytes, 783
- model systems, 688
- molecular imprinted polymers, 118
- molecular properties, 313
- molecularly imprinted polymer (MIP), 113, 387, 668
- molecularly imprinted solid-phase extraction, 119
- moniliformin, 373, 414
- monitoring exercises, 727
- monitoring of BFRs throughout the food chain, 561
- monitoring programs, 329
- monoclonal antibodies, 93, 99
- monolithic stationary phases, 241
- monomers, 44
- mouse bioassay, 431, 449
- MRLs, 33
- MS, 345, 349, 351, 663
- MS detection, 351
- MS methods for brevetoxins, 449
- MS techniques, 201
- MS/MS, 346, 349
- multianalytical GC-MS method, 762
- multiclass, 274
- multi-class mass spectrometry methods, 318
- multi-class methods, 332
- multifunctional solid phase extraction, 386
- multi-fusarium toxins, 412
- multilayers, 759
- multi-mycotoxin methods, 394
- multiple immunoassays, 124
- multiresidue methods, 274
- multi-sorbent clean-up procedure, 469
- muscle meat, 315
- mutagenic activity, 686
- mutagenic effect, 687
- mutagenic substances, 686
- mutagenicity of selected PAHs, 606
- mutation, 685
- mycotoxin regulation, 383
- mycotoxins, 41, 42, 364
- N-alkylamides, 657
- nanoelectrospray (nESI), 251
- nanoparticles, 13, 20

- nanotechnology, 20, 124
- National Milk Drug Residue Database, 330
- national plans, 358
- natural androgens, 341
- natural precursors, 686
- natural progestagen, 342
- natural thyrostats., 341
- near- and mid-infrared spectroscopy (, 401
- Negative ion chemical ionization mass spectrometry, 630
- neonicotinoids, 259
- neural system damage, 463
- neurotoxic shellfish poisoning, 430
- neurotoxin shellfish poisoning, 430, 448
- neutron activation analysis, 583, 584
- new BFRs, 540
- new modes of detection, 535
- nitrates, 42
- 3-nitropropionic acid, 375
- nitrofuran residues, 325
- nitrofuran, 316
- nitrosamides as ANC, 673
- nitrosamines, 654, 656, 676
- nitrosamino acids, 670, 677
- nitrosothiols, 672
- nitrous acid, 657
- N-nitroso compounds (NOC), 654
- N-nitrosodialkanic acids, 667
- N-nitrosomethylurea (NMU), 655, 673
- N-nitrosopyrrolidine (NPYR), 654
- no observed adverse effect level, 259
- NOC, 657, 660, 661, 677
- NOC analysis, 660
- NOGE., 758
- “nominal volume”, 45
- “nominal weight”, 45
- non volatiles organic substances, 754
- non-competitive immunoassays, 95
- non-covalent imprinting, 118
- non-destructive clean-up, 523
- non-intentionally added substances, 776
- non-moving quad-jet dual stage thermal modulator, 189
- non-polar substances, 741
- non-steroidal anti-inflammatory drugs, 41, 313
- non-target analysis, 778
- non-target compounds, 776
- non-targeted extraction, 746
- non-volatile nitrosamines, 665
- non-volatile or thermally labile compounds (NVOCS), 133
- normal phase, 234
- North and South America, 542
- not detectable, 764
- novolac glycidyl ethers, 50
- NPRO, 671, 673
- nuclear magnetic resonance, 585, 656
- number of migrants, 779
- nutrition labelling, 56
- NVOCS, 138
- 1-octene, 754
- occupational exposures, 458
- occurrence, 411, 697, 768
- occurrence of PAHs in vegetables, 632
- occurrence of aflatoxins, 403
- occurrence of fumonisins in foods, 411
- occurrence of fusaproliferin, 415
- occurrence of matrix effects, 538
- occurrence of TBBP-A, 556
- ochratoxin A, 42
- ochratoxins, 368
- oestradiol 17 α , 41
- of superheated water, 187
- official controls, 33, 763
- olid phase microextraction, 751
- oligomers, 44, 778
- omics, 18
- OML, 777
- ompliance of food contact materials, 744
- on-column injection, 469, 527
- on-going monitoring programs, 560
- on-line clean-up processes, 526
- on-line combination of LC, GC and MS, 631
- on-line control methods, 398
- on-line procedures, 632
- on-line/in-capillary coupled, 251
- open-tubular stationary phases, 242
- optical transduction, 110, 400
- optical waveguide lightmode spectroscopy (OWLS), 110
- optimal immunoreagent concentration, 100
- optimum general assay conditions, 100
- optimum trace metal level for the diet, 572
- orbitrap, 780
- orbitrap mass analyzer, 222
- organic acids, 578
- organic compounds., 258
- Organisation for Economic Co-operation and Development, 77
- organochlorine compounds, 41
- organochlorine pesticides, 461462
- organochlorines, 258
- organophosphorated, 258
- organophosphorus compounds, 41, 281
- orthogonal selectivity, 189
- OTA, 368, 381, 403
- overall limit on the migration, 51

- overall migration, 744
- overall migration limit, 764, 777
- overall migration testing - plastics, 747

- packages, 70
- packaging, 44, 48, 70
- packaging waste, 47
- packed capillary columns, 233
- PAHs, 42
- palladium(II), 587
- palytoxins, 430
- paper, 759, 782
- paper and board, 782
- paralytic shellfish poisoning, 430
- partial filling technique, 248
- partitioning, 274
- patulin, 42, 371, 381, 412
- Paul trap, 212
- PBBs., 510
- PBDD/Fs, 539, 559
- PBDD/PBDFs, 510
- PBDE congeners, 528
- PBDE levels in food, 548
- PBDE levels in food and dietary intake, 542
- PBDEs, 509, 528
- PBDEs and PBBs, 527
- PCBs, 41, 42, 142, 458
- PCDD/PCDFs, 458
- PCDDs and PCDFs, 461
- pectenotoxins, 432
- penicillic acid, 375
- penicillin, 308
- peptide, 11
- peptide antibiotics, 312
- perfluorinated compounds (PFCs), 8
- perfluorinated organic substances (PFOS), 8
- permeation chromatography, 624
- persistent organochlorine pollutants, 457
- pesticide, 33, 257
- pesticide regulation, 63
- pesticide residues, 33, 258, 259
- pesticides of new generation, 297
- PET, 783, 784
- phenol-based resole, 784
- phosphides, 33
- photo ionization detector (PID), 630
- photoinitiators, 759
- phycotoxins, 430
- physical and chemical properties and use of POP, 460
- physical methods, 416
- phytoplankton, 429
- piezoelectric immunosensors, 108, 400
- plastic additives, 783
- plastic FCMs, 777
- plastic laminates, 784
- plastic materials, 46
- plasticisers, 755-756
- platinum group metals, 586
- platinum(II), 586
- PLE, 526
- polar substances, 741
- polarity, 313
- polarized light, 106
- poly clonal antibodies, 99
- poly(ethersulphone) and poly(4-methyl-pent-1-ene), 784
- poly(ethylene terphthalate), 784
- polyacrylonitril, 784
- polyadipates, 756
- polyamide, 784
- polyamide cooking utensils, 784
- polybrominated dibenzo-dioxins and furans, 509
- polybrominated diphenyl ethers, 508
- polyclonal abs, 93
- polycyclic aromatic hydrocarbons, 599
- polycyclic ether toxins, 448
- polymeric nanoparticles, 244
- polymers, 782-783
- polyolefin bottles, 784
- polyolefins, 784
- polystyrene, 784
- POP contamination level, 458
- POPs, 460
- porcine somatotropin, 11
- post column reaction detectors, 319
- potent or highly toxic, 786
- potential for migration, 734
- potential human exposure to PAHs, 600
- potential sources of error, 540
- potentiometric stripping analysis, 578, 580
- poultry, 315, 325
- preconcentration, 513
- prepackaged liquids, 45
- prepackages, 44
- preparation/preconcentration techniques, 119
- presence of mycotoxins in a food, 365
- presence of mycotoxins in foods and feeds, 402
- pressurized fluid extraction, 468
- Pressurized Liquid, 141
- pressurized liquid extraction, 276, 468, 519
- primary aromatic amines, 736, 759
- priority substances for environmental monitoring, 601
- private domestic, 32
- producer, 32

- production standards, 51
- products, 46
- proficiency testing, 83
- proficiency tests, 80, 714, 722, 727
- progesterone, 41
- programmable temperature vaporizer, 469
- programmed temperature vaporization, 527
- programmed temperature vaporizing, 182
- protein growth promoters, 11
- protein phosphatase assay, 435
- proteins, 96
- provisional tolerable daily intake, 378
- provisional tolerable weekly intake, 378
- pseudostationary phases, 248
- PTV, 527
- public health security, 65
- purge-and-trap, 134
- purge and trap sampling techniques, 751
- purification, 343, 513
- purity requirements, 777
- PVC, 784
- PVC plasticisers, 756
- PVDC, 784
- pyrethroids, 41, 259
- pyrrolizidine alkaloids, 10

- QA/QC, 22
- Q-linear traps, 211
- QM limit, 763
- QMA, 763, 777
- QqQ with GC, 211
- QqQ, 204
- QqTOF, 204, 205
- QTrap-MS, 535
- quadrupole, 215
- quadrupole electron impact (EI) mass spectrometry (MS), 630
- quadrupole time-of-flight mass spectrometer, 219
- quadrupole-time of flight, 211
- qualitative characterisation, 746
- quality, 78
- quality assurance, 79, 80, 83, 540
- quality assurance schemes, 79
- quality assurance unit, 86
- quality assurance/quality control, 540
- quality control (QC) activities, 540
- quality in the laboratory, 80
- quality measures, 763
- quality of analytical measurement, 83
- quality of food, 92
- quality systems, 77, 86
- quantification of migrating compounds, 780
- quantifying in foods, 741
- quantitative evaluation of human exposure, 379
- quantity in a material, 761
- quantum dots, 20
- quartz crystal microbalance, 109
- QuEChERS method, 143
- quinolones, 41, 311

- radioactive contamination, 36
- radioimmunoassay, 355, 349, 443
- radioimmunoassays (RIAs), 102
- radioimmunology, 345
- radiotracer method, 783
- random selection., 573
- rapid methods, 396
- rapid screening methods for DSP toxins, 435
- rapid screening methods for YTXs, 446
- RASFF, 4, 5
- reaction, 778
- reagents, 577
- receptor binding assay, 431
- recombinant antibody, 93
- recombinant somatotropins, 355
- recommendations, 572
- recommended dietary allowance, 572
- recycled, 48
- recycling industry, 782
- regenerated cellulose film, 47
- registration of bovine animals., 59
- regular analysis of a reagent and procedural blank, 540
- regulations, 701
- regulatory control, 782
- regulatory requirements for irradiating foods, 67
- regulatory/safety aspects, 560
- release, 740
- repeatability, 763
- representative or selective sampling, 573
- reproducibility, 763
- residual content, 761
- residue analysis, 273
- residue monitoring plans, 358
- residue monitoring program, 330
- residues of POPs, 495
- resorcylic acid lactones (RALs), 342
- resorcylic acid lactones, 41
- reversed phase chromatography, 234
- reversed-phase LC, coupled to
 - electrospray ionisation (ESI) or atmospheric pressure chemical ionisation (APCI) MS, 536
- reversed-phase, 313
- reverse-phase HPLC-TEA, 663

- rhodium(III), 587
- risk assessment, 2, 32, 561, 786
- risk assessment process, 376
- risk characterization, 379
- risk reduction measures, 560
- Roquefortine, 375
- rotation of molecules in solution, 106
- route of exposure, 259
- rules, 51, 57

- safe dose, 378
- safe dose unit measurements, 378
- Safe Water Drinking Act, 30
- safety, 92, 659
- safety assessment, 788
- safety assessment of migrants from FCM, 785
- safety assessment of unlisted migrants, 788
- safety standards, 63
- Salmonella, 43
- sample capacity, 177
- sample dissolution, 574
- sample extraction, 690
- sample homogenisation, 574
- sample preparation, 132, 386, 512, 720, 721, 724
- sample storage, 574
- sample work-up/pre-treatment, 779
- sampling, 132, 274, 383, 573
- sampling plan, 384
- sampling scheme, 573
- scavenging, 740
- screen printed electrodes, 400
- screening, 318, 343
- screening methods, 2, 396, 746
- screening tests., 744
- seafood poisoning toxins, 430
- secondary amines, 657
- sedatives, 41
- selected ion monitoring, 281, 726
- selected reaction monitoring (SRM), 538, 663
- selective detector, 280
- selective solvent extraction, 754
- selectivity of detection, 192
- semicarbazide, 778
- semi-volatile compounds (SVOCs), 133
- separation and concentration methods, 576
- separation of the migrants, 779
- separation time, 177
- several types of materials, 782
- SFE, 526, 662
- shake flask extraction, 140
- shellfish, 429
- shellfish waters,, 60
- SHS, 138

- signal suppression effect, 195
- significant new use rule, 560
- silica gel, 525
- simulants, 741
- simultaneous determination of various groups of polyether toxins, 440
- single quadrupole instruments, 294
- single-laboratory, 81
- size, 313
- size exclusion chromatography, 164, 627, 754, 785
- SML, 764, 777
- solid phase extraction, 148, 152, 275, 343, 386, 468, 612, 626, 662, 690, 755
- solid phase microextraction, 135, 156, 277, 522, 663, 711, 724
- solid-food simulant, 783
- solid-liquid adsorption chromatographic separations, 468
- solid-phase immunoassay, 108
- solvent, 761
- solvent-solvent partitioning,, 754
- somatotropin, 355
- Soxhlet, 140, 467, 709, 761
- spacer arm, 97
- SPE, 277, 709
- SPE cartridges, 626
- specific limits on the migration, 51
- specific migration limits, 747, 777
- specific migration, 744, 747, 750
- specificity for aromatic amines, 790
- spectrometric methods, 581
- spectrometry, 349
- spirit drinks., 57
- splitless, 527
- split injection, 182
- SPME, 664
- SPR, 124
- standard addition method, 192, 195
- standard methods, 60
- Standard Solutions, 724
- standardized methods, 81
- starting materials, 778
- static headspace, 134, 137
- stationary, 248
- sterigmatocystin, 373
- steroids, 41, 341–342
- stilbene derivatives, 40
- stilbenes, 340
- stilvenes, 40
- stir bar sorptive extraction, 157, 278
- structural classes, 786
- styrene, 1-octene, limonene, 751
- sulfonamides, 41, 308
- sulfuric acid silica, 468

- sulphuric acid treatment, 524
 supercritical fluid chromatography, 175
 supercritical fluid extraction, 140, 386, 467,
 520, 625, 662
 super-heated water extraction, 141
 supersonic molecular beam, 183
supported liquid-liquid extraction, 149
 surface plasmon resonance (SPR), 111
 surface plasmon resonance (SPR)
 biosensor, 8, 20
 surface water, 60
 SVOCS, 138
 swine, 315
 β -sympathomimetics, 347
 syn, 656
 synthesis of immunogens, 96
 synthesis, formation and decomposition of
 NOC, 657
 synthetic estrogens, 341
 synthetic nicotinoids, 259
 synthetic thyrostats., 341
- tandem mass spectrometry (MS/MS), 204,
 211, 284
 tandem MS, 211, 294
 tautomeric forms, 351
 TBBP-A, 510, 538
 TBBP-A and derivatives
 TCDD calibration, 490
 TEA, 673
 technical PBDE mixtures, 528
 TEFs, 464
 TEQs, 464
 test facilities, 79
 test migration, 744
 testosterone, 41
 tetrabromobisphenol-A, 508
 tetracyclines, 308
 tetradotoxins, 430
 the accuracy of analytical methods, 541
 The Clean Water Act, 71
 the dirty dozen, 458
 the linear ion trap(LIT)-Orbitrap, 204
 The Rapid Alert System for Food and Feed
 (RASFF), 4
 thermal stability, 313
 thermally stable compounds, 314
 thermoset polyester, 784
 thin layer chromatography (TLC), 175, 349,
 392, 626, 628
 thionamides, 350
 thiouracil analogues, 341
 threshold of regulation, 777, 786
 threshold of toxicological concern, 776
 threshold of toxicological concern task force,
 786
 threshold values for chemical groups,
 786
 thyreostatic drugs, 341
 thyreostats, 350
 thyroid-inhibiting compounds, 350
 thyrostatic, 40, 41
 time-of flight, 204, 289
 time-of-flight- mass spectrometer, 296
 time-of-flight mass spectrometry, 205, 631
 TLC, 351, 628
 TOF, 204
 TOF-MS combined with LC, 205
 TOF-MS systems, 205
 tolerable daily intake, 464
 tolerable maximum limit for mycotoxins in
 food, 383
 tolerable monthly intake, 466
 tolerable weekly intake, 466
 total ANC, 669, 678
 total diet study, 330
 total diet study samples', 642
 total internal reflection fluorescence
 (TIRF), 110
 total quality management, 92
 toxic effects of mycotoxins, 365
 toxic equivalency factors, 609
 toxic equivalents, 609
 toxic metals, 573
 Toxic Substances Control Act, 67
 toxicity equivalence, 463
 toxicity of DSP Toxins, 435
 toxicity of NDMA, 657
 toxicity studies, 259
 toxicity testing, 786
 toxicological aspects of BFRs, 510
 toxicological characteristics of
 substances, 786
 toxicological properties of dioxins, furans
 and PCBs, 463
 toxicological relevance, 780
 toxicology of non-volatile nitrosamines, 659
 toxin a tolerable weekly intake, 378
 toxin-bearing algae, 430
 trace elements, 572
 trace metal contamination, 572
 traceability, 51, 83
 tranquilizers, 313
 transmissible spongiforme
 encephalopathy, 43
 tremorgenic mycotoxins, 374
 triazines, 259
 trichothecenes, 369, 376, 411
 triphenylmethane dyes, 312, 327

- triple quadrupole, 211, 288, 294, 344, 345, 537
- tropane, 10
- TTC, 785
- TTC principle, 786, 788
- TTC principle to unlisted substances, 788
- TTC Task Force, 786
- TTC value, 788
- two-dimensional (2D) GC, 188
- two-dimensional chromatographic separation, 188
- two-dimensional gas chromatography, 189

- ultra performance liquid chromatography, 185
- ultra performance/fast LC systems, 346
- ultra-fast GC, 206
- ultra-high performance LC-MS/MS, 696
- ultrasonic extraction, 140, 143
- ultrasonic system, 386
- ultraviolet, 314
- unacceptable levels of migrants, 776
- unambiguous confirmation, 447
- United State Department of Agriculture (USDA), 30, 68
- universal extraction method, 274
- unknown bioactive, 15
- ureas, 259
- urine, 343
- USA, 29
- USA LEGISLATION, 63
- UV, 292, 351
- UV absorption, 656, 673
- UV cured inks, 736
- UV detection, 290
- UV irradiation, 662

- validation, 22, 101
- variability, 763
- vascular ocular changes, 463

- veterinary drugs, 313
- veterinary medicinal products, 40
- vinyl chloride, 46
- vinyl chloride polymers, 46
- visible, 314
- VOCS, 133
- volatile, 314, 761
- volatile analytes, 314
- volatile nitrosamines, 670, 676
- volatile organic compounds (VOCs), 133
- volatiles organic substances, 751
- volatility, 313
- voltammetric, 578
- voltammetric stripping analysis, 578
- volumes of the separation capillaries, 233

- Water Act, 71
- water boilers, 784
- water protection, 71
- water quality, 60
- wet and dry ashing, 575
- wet ashing, 575
- white paper on food safety, 78
- world organization for animal health, 78

- X-Ray Fluorescence, 583

- yessotoxins, 430, 433, 445
- yessotoxins using LC-MS and LC-MSⁿ methods, 447

- z-cell, 250
- z-score evaluation, 83
- ZEA, 412
- Zearalenone, 370
- zeranol, 41, 342
- zoonotic agents, 43