

Subject Index

A

Adsorption, 305
 Airborne particles, test chamber, 75
 Air monitoring, 166
 Air sampling, experimental room, 75
 Air velocity
 field and laboratory emission cell, 98
 measurement, 225
 small test chamber, 23, 184
 test chamber, 112
 Analytical solutions, 279
 Appliances, particulate emissions, 34
 ASTM D 5116, 225
 ASTM E 981, 112
 ASTM E 1333, 200

B

Bioaerosols, 44
 characterization, 153
 static chamber, 87
 test chamber, 75
 Bioassay, 112
 Biocontamination, 44
 static chamber, 87
 Biological response models
 EPA, 321
 eye irritation reference scale, 350
 Biomonitoring, 166
 Biopollutants, characterization, 153
 Building design, screening and selecting
 products based on emissions, 376
 Building materials
 indoor climate labeling, 331
 priority ranking and characterization, 392
 screening and selecting products based on
 emissions, 376
 VOC emissions, 184
 VOC sink effect, 123

C

CEC COST 613, 211
 Chamber tests, 9, 23, 75, 112, 239
 comparison with field and laboratory
 emission cell, 98

static chamber, biocontamination, 87
see also Dynamic environmental test
 chamber; Small chamber
 Chemical emissions, characterization, 112
 Chemicals, surface and airborne, exposure
 estimation, 166
 Chlorpyrifos, 166
 Cleaning, effectiveness, 153
 Comfort evaluation, indoor climate labeling,
 331
 Commercial products, priority ranking and
 characterization, 392
 Compartmental modeling, 239, 279
 Concentrations, time-dependent, 279
 Consumer products
 continuously applied, 279
 priority ranking and characterization, 392
 Continuous application, 279
 CO₂ reference scale, eye irritation
 measurement, 350

D

Data analysis, exposure and risk assessment,
 367
 n-Decane, sink effect, 305
 Desorption, 305
 Diffusion, 294
 Diffusion coefficient, 294
 n-Dodecane, sink effect, 305
 Dusts, indoor surface, characterization, 153
 Dynamic environmental test chamber
 biocontaminant pollutant emission
 measurement, 44
 material emissions, 58
 particulate and VOC emissions, 34

E

Emission factors, estimation, 225
 Emission rate, 98, 392
 steady-state, 211
 Emissions testing, 9, 23
 bioresponse-based testing program, 321
 building materials, 376

indoor climate labeling of building materials, 331
 linoleum, 145
 protocol revision, 225
 Empirical models, 9
 Environmental Protection Agency, bioresponse-based testing program, 321
 Equilibrium polymer/air partition coefficient, 294
 Experimental room, 75
 Exposure, 367
 estimation, 166
 nonuniform mixing, indoor environments, 263
 Eye irritation, measurement, CO₂ reference scale, 350

F

Fiberboard, formaldehyde and VOC emission rates, 200
 Fiberglass, test chamber, 75
 Field and laboratory emission cell
 comparison with chamber tests, 98
 linoleum characterization, 145
 Fixtures, priority ranking and characterization, 392
 Floor wax, field and laboratory emission cell, 98
 Fluid flow, 23
 Formaldehyde emissions
 comparison of two small chamber test methods, 200
 mini-chamber, 67
 particleboard, 211
 Fungi, test chamber, 75
 Furnishings
 priority ranking and characterization, 392
 VOC emissions, 184

G

Gas-to-particle conversion, re-emitted matter, surfaces exposed to tobacco smoke, 134
 Glass fibers, test chamber, 75

H

Health risks, bioresponse-based testing program, 321

I

Identifiability, 239

Indoor air
 bioresponse-based testing program, 321
 contamination, 112
 impact of building materials, labeling system, 331
 nonuniform mixing, 263
 Indoor air quality, 184
 formaldehyde emission from particleboard, 211
 microbial growth, 87
 mini-chamber, 67
 modeling, 58, 239, 367
 priority ranking and characterization, 392
 screening and selecting building materials products based on emissions, 376
 test chamber, 75
 VOC sink effect, 123
 Indoor Air Source Characterization Project, 392
 Indoor pollutants, exposure and risk assessment, 367
 Indoor sinks, characterization methods, 9
 Indoor sources
 characterization methods, 9
 homogeneous, diffusion-controlled, characterization, 294
 testing protocol revision, 225
 Information distribution, 392
 Insect control agents, exposure estimation, 166
 Insulation, screening for emissions, 67

L

Labeling, indoor climate of building materials, 331
 Latex paint, field and laboratory emission cell, 98
 Linear systems, 239
 time-dependent, 279
 Linoleum, oxidative emission processes, 145

M

Mass transfer models, 9
 Material degradation, linoleum, 145
 Material emissions
 dynamic chamber, 58
 small chamber test, 184
 Mathematical modeling, 239, 279, 305
 Methods development, priority ranking and characterization, 392
 Microbalance, 294
 Microbiological testing
 dynamic chamber, 44
 static chamber, 87

Microorganisms, indicator, 153
 Mini-chamber, 67
 Mixing factor, 263
 Modeling
 homogeneous, diffusion-controlled indoor
 sources and sinks, 294
 VOC sink effect, 123
 see also specific types of modeling
 Mouse bioassay, 112
 Multicompartment model, 263
 Multivariate analysis, 145

N

Nonlinear estimation, 239
 N. trigeminus, 350

O

Office equipment, particulate emissions, 34
 Oxidation, linoleum, 145
 Oxidative emission processes, linoleum, 145

P

Particleboard, formaldehyde and VOC
 emission rates, 200, 211
 Particle emissions
 buildup caused by gas-to-particle
 conversion, 134
 dynamic chamber, 34
 test chamber, 75
 Particle filtered air, 134
 Polymer materials, homogeneous, diffusion-
 controlled indoor sources and
 sinks, 294
 Product selection, priority ranking and
 characterization, 392
 Protocols, 9
 revisions, emissions testing, 225

R

Redundancy, 239
 Reference scaling, 350
 Residues, dislodgeable, 166
 Risk assessment, 367
 Risk reduction, 392

S

Secondary source, surfaces exposed to
 sidestream smoke, 134
 Sensory irritation
 bioresponse-based testing program, 321
 characterization, 112
 Sink effect, VOC from building materials, 123

Sinks

 biopollutants, 153
 characterizing in small stainless steel test
 chamber, 305
 homogeneous, diffusion-controlled,
 characterization, 294
 surfaces exposed to sidestream smoke, 134
 Skin absorption, 166
 Small chamber, 184
 comparison of methods, 200
 formaldehyde emission from
 particleboard, 211
 priority ranking and characterization, 392
 protocol revision, 225
 screening and selecting building products
 based on emissions, 376
 stainless steel, 305

Smoke, sidestream, 134

Source

 biopollutants, 153
 characterization, 9, 112
 bioresponse-based testing program, 321
 eye irritation reference scale, 350
 emission models, 9
 exposure and risk assessment, 367
 modeling, 225, 367
 priority ranking and characterization, 392
 terms, 279

Specimens, size, 225

Static chamber, biocontamination, 87

Surfaces

 air velocity, 23
 exposed to sidestream smoke, 134

T

Test chambers, *see* Chamber tests
 Test protocols, 9
 Trace gas, dynamic chamber, 34
 Turbulence, small test chamber, 184

U

Uniform mixing, 263

V

VOC emissions

 air velocity and turbulence effects, 184
 characterization, 112
 comparison of two small chamber test
 methods, 200
 dynamic chamber, 34, 58
 homogeneous, diffusion-controlled indoor
 sources and sinks, 294
 indoor climate labeling, 331

406 INDOOR AIR POLLUTION AND RELATED SINK EFFECTS

- linoleum, 145
- mini-chamber, 67
- screening and selecting building materials
 - products based on, 376
- sink effect, building materials, 123
- small stainless steel test chamber, 307
- Volatiles, loss during sample preparation, 225

W

- Water emission, 23