Subject Index

A

Accreting soil layers, 29
Adriatic Coast, peaty soils, 226
Adsorption wastewater sludges, 74
Australia, Melbourne sand washing slimes, 293

B

Barrier layers, 91
Batch leaching tests, 123
Bentonite slurries, 137
Bulk density, 165, 243

C

Calcium carbonate, 351
California Bearing Ratio, 152
Cam-clay model, 48
Capping, 74, 91, 255, 309
C-CORE Shear Wave Profiling System, 243
Cement-stabilized waste sludge, 123, 152
Cement treated soils, 196
Cement, water, ratio, 196
Centrifugal force, 279
Centrifuge, geotechnical, 165
China, transformer station/dewatering system, 363
Chromium, 123
Clays, 91, 279
kaolin, 165
organic, 48
paper, 108
soft, 337
Compressibility, 3, 29, 74, 309
secondary, 48
Compression secondary, 226
soil, 375
unconfined, 152
Compressional wave velocity, 165
Concrete panels, precast, 337
Cone penetration, 152
Consolidation, 48, 209, 267, 375
dewatering, 64
effect evaluation, 255
large strain model, 29
peaty soil, 226
self-weight, 165, 324
settlement, 309, 351
waste, 181
wastewater sludges, 74
Creep, 48
CS4 piecewise-linear model, 29

D

Densitometer, 243
Dewatering, 3, 279
structures, 64
system, 363
Diaphragm wall, 363
Diked impoundment area, 3
Dredge spoils, 64, 243
Dredging plan, New York and New Jersey, 152
Drying rate, 196
Dual probe method, 137

E

Earth pressure at rest, 209
Earth, reinforced, wall stability, 337
Effective strength, 209
Embankments construction, 267
highway, 351
Eulerian coordinate system, 29
Excavation, deep, dewatering system for, 363

F

Field vane tests, 255
Finite element codes, 48
Flocs, 74
<table>
<thead>
<tr>
<th>G</th>
<th>Modeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden Horn river outlet, sediment dredging and disposal, 324</td>
<td>Cam-clay model, 48</td>
</tr>
<tr>
<td>Grain size, 64</td>
<td>large strain, 309</td>
</tr>
<tr>
<td>Granular backfill, 337</td>
<td>large strain consolidation, 29</td>
</tr>
<tr>
<td>H</td>
<td>nonlinear finite-strain numerical model, 309</td>
</tr>
<tr>
<td>Heat capacity, 137</td>
<td>piecewise linear, 3</td>
</tr>
<tr>
<td>Heat transfer prediction, 137</td>
<td>stress-strain-creep strain rate model, 48</td>
</tr>
<tr>
<td>Heave markers, 267</td>
<td>Moisture ratio, 196</td>
</tr>
<tr>
<td>Hydraulic conductivity, 3, 29, 181, 309</td>
<td>Mud-water treatment, 279</td>
</tr>
<tr>
<td>column leaching test, 123</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td></td>
</tr>
<tr>
<td>Inclinometers, 267</td>
<td>Needle probe method, 137</td>
</tr>
<tr>
<td>Infiltrometers, sealed double-ring, 91</td>
<td>Newark Harbor, 152</td>
</tr>
<tr>
<td>Instrumented settling column, 165</td>
<td>Nuclear density test, 152</td>
</tr>
<tr>
<td>J</td>
<td></td>
</tr>
<tr>
<td>Japanese status, sediment contamination, 123</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td></td>
</tr>
<tr>
<td>Landfill covers, 91, 255, 309</td>
<td>Paper mill sludge landfill covers, 255</td>
</tr>
<tr>
<td>Landfill isolation, 293</td>
<td>Paper sludge, 91, 108, 255</td>
</tr>
<tr>
<td>Leaching, 123</td>
<td>Peat, 137, 209, 226, 267</td>
</tr>
<tr>
<td>Lead, 123</td>
<td>subsidence, 375</td>
</tr>
<tr>
<td>Lime waste, 351</td>
<td>Permeability, 226, 293</td>
</tr>
<tr>
<td>Liquid exuding potential, 181</td>
<td>Permeameters, two-stage borehole, 91</td>
</tr>
<tr>
<td>Load increment ratio, 226</td>
<td>Piezometers, 267</td>
</tr>
<tr>
<td></td>
<td>Planetary rotation chambers, 279</td>
</tr>
<tr>
<td>M</td>
<td>Plasticity, 351</td>
</tr>
<tr>
<td>Malaysia, trial embankments, 267</td>
<td>Polychlorinated biphenyls, 309</td>
</tr>
<tr>
<td>Massachusetts landfill covers, 255</td>
<td>Pore fluid, 64</td>
</tr>
<tr>
<td>Melbourne sand mining, 293</td>
<td>Pore pressures, 48, 74, 165, 226, 351</td>
</tr>
<tr>
<td>Metals, heavy, 108, 123</td>
<td>Pore water pressure, 363</td>
</tr>
<tr>
<td>Mine tailings, 64</td>
<td>Power transformer station, excavation dewatering system, 363</td>
</tr>
</tbody>
</table>
INDEX 391

Pressure transfer, lateral earth, 209
Process tailings, 3
Profiling system, shear wave, 243

R

Reclamation, 3
Resilient modulus, 152
River outlet rehabilitation, Golden Horn, 324
Roadway embankment, 351
Rotation chambers, planetary, 279
Rowe cell, 226

S

Sand washing slimes, 293
Sediment, 64
dredged, 152
Seepage forces, 375
Settlement, 324
consolidation, 351
differential, 337
surface, 363
total, 337
Settling ponds, 64
Sewage, 74
Shear stiffness, small strain, 243
Shear strength, 74, 209, 255
paper mill landfill covers, 255
undrained, 243
Shear velocity, 243
Shear wave amplitude, 243
Sidewall liner, 293
Slimes, 293
Slope stability, 255
Sludge, 74, 137
capping, 309
cement-stabilized waste, 123, 152
landfill covers, 255
paper, 91, 108
waste, liquid exuded, 181
Slurry, 279
Slurry wall, 108
Small strain shear stiffness, 243
Soil, cement treated, 196
Soil compression, 375
Soil layers, accreting, 29
Soil moisture ratio, 196
Soil, soft, 48, 64, 243, 267
Solution chart, 29
Stability
channel, 324
dikes, 3
global, 337
reinforced earth walls, 337
slope, 255
Stabilization, soil, 123
Steel reinforcements, 337
Stiffness, 243
Strain, finite, 309
Strain, large, 29, 309, 324
Strain rate model, 48
Stress, effective, 91
Surface settlement, 363
Suspension theory, 165

T

Thermal conductivity, 137
Thermal diffusivity, 137
Trial embankments, 267

U

Undrained strength, 209, 243

V

Void ratio, 29

W

Walls, diaphragm, 363
Walls, reinforced earth, 337
Walls, slime cut-off, 293
Waste containment, slimes for, 293
Waste sludge
cement stabilized, 123
liquid exuded by, 181
Waste, 181
heat transfer, 137
soil-like, 3
solid, 137
Wastewater, 74, 181
sludge, 309
treatment, 108

Water-cement ratio,
196
Wave velocity, compressional,
165
Wells, pumping, 363
Wisconsin, 209
Madison Metropolitan
Sewerage District, 309
Wood chip/soil cap,
309