Index

A
air pollution 85, 263, 338, 340-341, 391
Alternative Carbon Sources 398-399
asphaltenes 5, 53-58, 63, 65, 67-68, 72-73, 75-76
Autoxidation 51

B
Best Available Techniques (BAT) 340, 377
Biocatalyst Immobilization 403-404
Bioreactor Design 402, 406, 408
Biosurfactants 407, 409-411
bitumens 53-54, 56-58, 63, 67-68, 70-73, 75-76

C
Ca 347, 352, 354-357, 361, 377, 379
carbonaceous materials 53, 55, 58, 72, 75
Carbon nanomaterials 154, 159-161
Chitosan 196-197, 285, 308-309, 311-316, 318-320
Circulating Fluidized Bed (CFB) 230, 233, 238
coals 53-55, 57-58, 63, 71-73, 75-76, 353
combustion process 181, 338, 345, 361
Corrosion 1-2, 4, 6, 35, 130-131, 339, 341, 345, 360-361, 391
Cost-effective Culture Media 394

D
Density Functional Theory (DFT) 197, 219, 238, 318
desulfurizing bacteria 385-387, 403

E
Emulsifiers 406, 408, 411
Environmental Legislation 338, 354

F
Flue Gas Desulfurization (FGD) 362, 377
Fluid Catalytic Cracking (FCC) 238
Flux 22-23, 51, 60, 143, 408

G
Growing Cells 395, 402-403

H
HDS catalysts 84, 104, 240-241, 245, 249-250, 252, 256-257
Hydrogenolysis 11, 51, 86, 89, 93, 181, 238, 284, 288
hydrogen sulfide 16, 130, 144, 163, 283-284, 294, 379

I
immobilization 183, 185-187, 192, 200, 384, 386, 397, 403-405, 408-409, 428, 432, 436-438
### Index

| Ionic Liquid 15, 32, 51, 185, 188-190, 197, 430-431, 446-447, 449 |
| K kerogens 53, 55-58, 62-63, 67-73, 75-76 |
| M Magnesium Oxide 346, 352 magnetite 182, 186, 409, 437 Mechanism, 162, 345 Molecularly imprinted polymers 196, 281, 285, 295, 308, 311 Mutagenic 8, 51 |
| T Thermogravimetric Analysis (TGA) 239 thiirane 97, 100-101, 105, 112, 114 trimetallic 240, 242-245, 248-251, 255, 257 |
| U Ultra Low Level Sulfur 51 ultra-low sulfur diesel 94, 154, 241, 264, 406, 440 |
| W Wet FGD 338, 343, 346, 349, 352, 362, 377 |