

Contents

Preface — v

1	The principle of environmental pollution control — 1
1.1	The basic theory — 1
1.2	Environmental pollution control targets — 4
1.3	Pollution control technology — 8
1.4	High-technology outlook — 13
2	Water pollution control technology — 17
2.1	Introduction — 17
2.2	Physical method — 19
2.3	Chemical method — 26
2.4	Physicochemical method — 34
2.5	Biological method — 51
2.6	Technique process and reuse of wastewater — 64
2.7	Summary and outlook — 72
3	Air pollution control technology — 73
3.1	Introduction — 73
3.2	Air pollution control technology for stationary source — 75
3.3	Air pollution control technology of mobile source — 86
3.4	Summary and outlook — 96
4	Solid waste pollution control technology — 99
4.1	Introduction — 99
4.2	Solid waste treatment and disposal technologies — 100
4.3	Industrial solid waste treatment and disposal technology — 122
4.4	Hazardous waste treatment and disposal technology — 124
4.5	Summary and outlook — 136
5	Physical pollution control technology — 139
5.1	Introduction — 139
5.2	Sound source control technology — 142
5.3	Noise control technology — 169
5.4	Noise pollution control planning and management — 177
5.5	Other physical pollution prevention technologies — 181
5.6	Summary and outlook — 187

6	Ecological recovery technology — 191
6.1	Introduction — 191
6.2	Ecological engineering design — 193
6.3	Ecological engineering technology — 202
6.4	Ecological engineering technology optimization — 222
6.5	Summary and outlook — 245
7	Regional environmental systems engineering and technology — 247
7.1	Introduction — 247
7.2	Environmental system information technology and simulation model — 247
7.3	Regional/watershed planning technology — 271
7.4	Summary and outlook — 285
Postscript — 287	
Acknowledgments — 289	
About the authors — 291	
Index — 293	