

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910788625003321 |
| Titolo | Waste gas treatment for resource recovery // edited by Piet N.L. Lens [and three others] |
| Pubbl/distr/stampa | London : , : IWA Publishing, , 2006 |
| ISBN | 1-78040-531-6 |
| Descrizione fisica | 1 online resource (510 p.) |
| Collana | Integrated environmental technology series |
| Disciplina | 628.53 |
| Soggetti | Waste gases - Environmental aspects Air quality management Resource recovery facilities Natural gas - Environmental aspects Air - Pollution Air quality - Standards |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Description based upon print version of record. |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Cover; Copyright; Contents; Preface; Contributors; Part I: Socio-economic aspects of gas pollution and gas recovery; Section IA: Gas: pollutant or resource?; 1. Introduction on air pollution: the emission-effect relation; 1.1. Introduction: What is air pollution?; 1.2. Overview of the emission effect relations; 1.3. Emissions; 1.4. Formation of aerosols; 1.5. Lifetimes of pollutants; 1.6. Ambient concentration of pollutants; 1.7. Conclusion; References; 2. Transboundary particulate matter pollution in Europe; 2.1. Introduction; 2.2. European aerosol patterns and trends 2.3. Air pollution observation: existing networks 2.4. Modelling ambient PM transport; 2.5. Conclusions; References; 3. Abatement strategies for air pollution; 3.1. Introduction; 3.2. Origin and fate of emissions; 3.3. Abatement strategies; 3.4. Outlook; References; Section IB: Pollution control policy; 4. Dealing with waste gas in enhancing sustainable development: the role of the Kyoto mechanisms; 4.1. Introduction; 4.2. Defining sustainable development; 4.3. Waste gas recovery under the CDM; 4.4. Kyoto-based case studies of waste gas capture projects; 4.5. Conclusions; References |

5. Implementation of the European Solvent Directive (1999/13/EC)5.1. Introduction; 5.2 Information exchange platform as a part of the implementation of the EU Solvent Directive; 5.3 Decision support through mass and energy flow management in the sector of vehicle refinishing; 5.4. Further use of mass and energy flow models; 5.5. Conclusion; References; 6. Integration of biological techniques for air pollution control into sustainable development; 6.1. Introduction; 6.2. VOC control, the case for avoiding unnecessary CO₂ emissions; 6.3. High-rate biotrickling filters for H₂S control
6.4. Concluding remarksReferences; Part II: Characterization of waste gases; Section IIA: Waste gases analysis; 7. Characterization of pollutants in gases; 7.1. Introduction; 7.2. Characterizing atmospheric pollutants; 7.3. Monitoring and analysis; 7.4. Effects; 7.5. Conclusions; References; 8. Isotope characterization of gaseous pollutants; 8.1. Introduction; 8.2. Isotope abundance variations; 8.3. Isotope mass balance; 8.4. Conclusion; References; 9. Use of NMR to study in situ bioconversion of gaseous formaldehyde; 9.1. Introduction
9.2. In situ NMR study of bioconversion of gaseous compounds9.3. NMR study of formaldehyde bioconversion; 9.4. Conclusion; References; Section IIB: Waste gases characteristics; 10. Heavy metal release in waste incineration processes; 10.1. Introduction; 10.2. Thermodynamic study; 10.3. Characterisation of ultimate residues; 10.4. Kinetics of HM vaporisation; 10.5. Conclusion; References; 11. Functional interpretation of gas composition; 11.1. Introduction; 11.2. Sources of volatile organic compounds; 11.3. Analysis of NMVOCs; 11.4. NMVOC emission rates
11.5. Differentiating processes using the NMVOC profile
