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Titolo	Environmental Contaminants : Measurement, Modelling and Control // edited by Tarun Gupta, Avinash Kumar Agarwal, Rashmi Avinash Agarwal, Nitin K. Labhsetwar
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Descrizione fisica	1 online resource (XXII, 431 p. 140 illus., 97 illus. in color.)
Collana	Energy, Environment, and Sustainability, , 2522-8374
Disciplina	628.4
Soggetti	Pollution Environmental engineering Biotechnology Bioremediation Chemistry, Technical Cogeneration of electric power and heat Fossil fuels Environmental Engineering/Biotechnology Industrial Chemistry Fossil Fuel
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part I Measurement -- Challenges in Detection of Antibiotics in Wastewater Matrix -- A Comprehensive review on various analytical methods for the determination of inorganic and organic arsenic in Environmental samples -- PAHs in Gas and Particulate phases: Measurement and Control -- Study of environmental particle levels, its effects on lung deposition, and relationship with human behaviour -- Bioaerosols over the Indo-Gangetic Plain: Influence of biomass burning emission and ambient meteorology -- Particulate matter dispersion in Indian non-coal opencast mines -- Measurement and Removal of Endosulfan from Contaminated Environmental Matrices -- Part II Modelling -- Groundwater Contamination Problems and Numerical Simulation -- A Systematic Development of Uncertainty Modelling in

the Assessment of Health Risk to Environmental Contaminants -- Stable Carbon Isotope and Bulk Composition of Wintertime Aerosols from Kanpur -- Indoor air quality assessment as related to household conditions in rural houses during winter season -- Effects of biomass burning emissions on air quality over the continental United States: a 3-year comprehensive evaluation accounting for sensitivities due to boundary conditions and plume riseheight -- Part III Control -- A Review on Membrane Fouling in Membrane Bioreactors: Control and Mitigation -- Eco-friendly Treatment Strategies for Wastewater Containing Dyes and Heavy Metals -- Common Mistakes in Planning of Sewer Networks and STPs -- Waste Containment System to Limit Landfill Gas Emission – Mechanism, Measurement and Performance Assessment -- Effect of emerging contaminants from Paper mill industry into the environment and their control -- Thermal Pollution: Mathematical Modelling and Analysis.

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#### Sommario/riassunto

This book addresses the measurement of environmental contaminants in water, air, and soil. It also presents modifications of and improvements to existing control technologies for remediation of environmental contaminants. It covers improved designs of wastewater systems and innovations in designing newer membranes for water treatment. In addition, it includes two separate sections on the modelling and control of different existing and emerging pollutants. It covers major topics such as: pharmaceutical wastes, paper and pulp waste, poly aromatic hydrocarbons, mining dust, bioaerosols, endosulphan, biomass combustion, and landfill design aspects. It also features chapters on environmental exposure and modelling of aerosol deposition within human lungs. The content of this book will be of interest to researchers, professionals, and policymakers whose work involves environmental contaminants and related solutions.

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