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Titolo	Persistent organic pollutants [[electronic resource] /] / edited by Stuart Harrad
Pubbl/distr/stampa	Hoboken, NJ, : Wiley, 2010
ISBN	1-282-45541-9 9786612455414 0-470-68412-7 0-470-68413-5
Descrizione fisica	1 online resource (291 p.)
Altri autori (Persone)	HarradStuart <1962->
Disciplina	577.278
Soggetti	Organohalogen compounds - Toxicology Organohalogen compounds - Environmental aspects Fireproofing agents - Toxicology Fireproofing agents - Environmental aspects Persistent pollutants - Bioaccumulation Persistent pollutants - Environmental aspects Electronic books.
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	Persistent Organic Pollutants; Contents; Contributors; 1 Beyond the Stockholm Convention: An Introduction to Current Issues and Future Challenges in POPs Research; References; 2 Brominated Flame Retardants; 2.1 Introduction; 2.2 Sources; 2.3 Overview of Measurement Techniques; 2.4 Physicochemical Properties and Their Influence on Environmental Fate and Behaviour; 2.5 Overview of Toxicology; 2.6 Environmental Levels - Present, Past and Future Temporal Trends; 2.7 Human Exposure - Magnitude and Relative Significance of Pathways; 2.8 Summary and Conclusions; Acknowledgements; References 3 Perfluoroalkyl Compounds3.1 Introduction and Nomenclature; 3.1.1 Polyfluorinated Sulfonamides (FSAs); 3.1.2 Fluorotelomer Alcohols (FTOHs); 3.1.3 Perfluoroalkylsulfonic Acids/Perfluoroalkylsulfonates (PFSAs); 3.1.4 Perfluorocarboxylic Acids/Perfluorocarboxylates (PFCAs);

3.1.5 Fluorotelomer Carboxylic Acids/Fluorotelomer Carboxylates; 3.1.6 Fluorotelomer Sulfonic Acids/Fluorotelomer Sulfonates; 3.1.7 Fluorinated Polymers; 3.1.8 Uses of PFCs; 3.2 Manufacturing and Production; 3.2.1 Electrochemical Fluorination; 3.2.2 Telomerization; 3.2.3 Production; 3.3 Overview of Toxicology
3.3.1 Toxicology of PFSAs and PFCAs3.3.2 Toxicology of FTOHs and FSAs; 3.3.3 Toxicology of FTCAs/FTUCAs; 3.4 Physical Chemical Properties and Environmental Fate; 3.4.1 The Influence of Fluorine; 3.4.2 Water Solubility; 3.4.3 Vapour Pressure; 3.4.4 Henry's Law Constants; 3.4.5 Sorption; 3.4.6 Bioaccumulation; 3.4.7 Other Partitioning Properties; 3.4.8 Persistence of PFCs in the Environment; 3.5 Overview of Measurement Techniques; 3.5.1 Background Contamination; 3.5.2 Sampling Techniques; 3.5.3 Extraction and Clean-up Methods; 3.5.4 Analysis via Liquid Chromatography-Tandem Mass Spectrometry
3.5.5 Analysis via Gas Chromatography-Mass Spectrometry3.5.6 Analysis via Nuclear Magnetic Resonance; 3.5.7 Total Fluorine Analysis; 3.5.8 Analytical Challenges; 3.6 Human Exposure; 3.7 Sources of PFCs to the Environment; 3.7.1 Sources of FSAs and FTOHs; 3.7.2 Sources of PFSAs and PFCAs; 3.7.3 Sources of PFSAs and PFCAs to the Arctic; 3.8 Environmental Measurements; 3.8.1 Atmosphere; 3.8.2 Precipitation; 3.8.3 Groundwater; 3.8.4 Surface Waters; 3.8.5 Sediments; 3.8.6 Wildlife; 3.8.7 Temporal Trends; References; 4 Chirality as an Environmental Forensics Tool; 4.1 Introduction
4.2 Classes of Chiral Legacy and Persistent Organic Pollutants4.2.1 Organochlorine Pesticides; 4.2.2 PCBs and Their Metabolites; 4.2.3 Pyrethroids; 4.2.4 Polycyclic Musks; 4.2.5 Brominated Flame Retardants; 4.3 Measuring and Quantifying Enantiomer composition of POPs; 4.3.1 Measurement of Chiral POPs; 4.3.2 Metrics for Expressing Enantiomer Composition of POPs; 4.4 Chirality to Characterize Environmental Biochemical Processes; 4.4.1 Enantiomer-Specific Microbial Biotransformation of Chiral POPs; 4.4.2 Enantiomer-Specific Transformation and Processing of Chiral POPs by Biota
4.5 Chirality to Quantify Rates of Biotransformation

Sommario/riassunto

Persistent organic pollutants (POPs) are organic compounds that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of living organisms and are toxic to humans and wildlife. The Stockholm Convention on POPs is a global treaty to protect human health and the environment from POPs which came into force in 2004. Currently, twelve substances or substance groups are included under the Stockholm Convention, but there is a case for including new and emerging POPs such as brominated flame retardants and perfluorinated substances.

2. Record Nr. UNINA9910616360403321

Titolo	Groundwater and Water Quality : Hydraulics, Water Resources and Coastal Engineering / / edited by Ramakar Jha, Vijay P. Singh, Vivekanand Singh, L.B. Roy, Roshni Thendiyath
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ISBN	3-031-09551-0
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (402 pages)
Collana	Water Science and Technology Library, , 1872-4663 ; ; 119
Disciplina	628.114 551.49
Soggetti	Earth sciences Physical geography Water Hydrology Natural disasters Earth Sciences Earth System Sciences Natural Hazards Hidrologia d'aigües subterrànies Qualitat de l'aigua Canvi climàtic Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Identification of the parameters to estimate the capillary rise from shallow groundwater table using field crop experiments -- Study of Groundwater Table fluctuation in the command area of Bhagwanpur Distributary of the Eastern Gandak Project -- Assessment of heavy metals in sediments from exploratory wells for riverbank filtration sites impacted by extreme environmental conditions using principal component analysis -- Simulation of re-aeration coefficient using ANFIS and ARIMA models -- Identification of unknown number of

clandestine groundwater pollution source locations and their release flux histories - by Anirban Chakraborty and Om Prakash. .

Sommario/riassunto

This book deals with topics of current interest, such as climate change, floods, drought, and hydrological extremes. The impact of climate change on water resources is drawing worldwide attention these days, for water resources in many countries are already stressed and climate change along with burgeoning population, rising standard of living, and increasing demand are adding to the stress. Further, river basins are becoming less resilient to climatic vagaries. Fundamental to addressing these issues is hydrological modelling which is covered in these books. Further, integrated water resources management is vital to ensure water and food security. Integral to the management is groundwater and solute transport. The books encompass tools that will be useful to mitigate the adverse consequences of natural disasters. This book provides many new and innovative methods to assess groundwater and estimate water pollution. Groundwater recharge, solutetransport, ground water modelling are some of the important variable used to estimate the groundwater movement, hydraulic gradient and pollution movement. The water quality is another important variable of river Ganga and its tributaries in India and other rivers over the globe. .