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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 Compounds 3.1 Introduction and Nomenclature; 3.1.1 Polyfluorinated Sulfonamides (FSAs); 3.1.2 Fluorotelomer Alcohols (FTOHs); 3.1.3 Perfluoroalkylsulfonic Acids/Perfluoroalkylsulfonates (PFSA); 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
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3.5.5 Analysis via Gas Chromatography-Mass Spectrometry; 3.5.6 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 PFSA and PFCAs; 3.7.3 Sources of PFSA 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
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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.
