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Nota di contenuto	Personal Care Compounds in the Environment; Contents; Preface; Acknowledgments; List of Contributors; List of Abbreviations; 1 Introduction; 1.1 General Considerations; 1.2 Introduction to Sewage Treatment Plant Functions; 1.3 Enantioselective Analysis in Environmental Research; 1.3.1 Enantioselective Gas Chromatography Techniques; 1.3.1.1 Applications of Enantioselective Gas Chromatography; 1.3.1.2 New Developments; 1.3.2 Enantioselective HPLC; 1.3.2.1 Applications of Enantioselective HPLC; 2 Environmental Studies: Sources and Pathways; 2.1 Synthetic Fragrance Compounds in the Environment 2.1.1 Polycyclic Musk Fragrances in Sewage Treatment Plants 2.1.1.1 Experimental Background; 2.1.1.2 Mass Balance Assessment; 2.1.1.3 Multi-step Process Study on Polycyclic Musks; 2.1.2 Polycyclic Musk Fragrances in Diverse Sludge Samples; 2.1.3 Polycyclic Musk Fragrances in Surface Waters; 2.1.3.1 Experimental Methods; 2.1.3.2 Results and Discussion; 2.1.4 Polycyclic Musk Fragrances in the North Sea; 2.1.5

OTNE and Other Fragrances in the Environment; 2.1.5.1 Methods; 2.1.5.2 Results and Discussion; 2.1.6 Other Fragrances: Nitroaromatic Musks and Macrocyclic Musks 2.1.7 Behavior of Polycyclic and Other Musk Fragrances in the Environment 2.2 The Bactericide Triclosan and Its Transformation Product Methyl Triclosan in the Aquatic Environment; 2.2.1 Bactericides from Personal Care Products in Sewage Treatment Plants; 2.2.1.1 Materials and Methods; 2.2.1.2 Triclosan Balances in a Sewage Treatment Plant; 2.2.1.3 Triclosan in Multi-step Processes in Sewage Treatment Plants; 2.2.2 Triclosan in Sewage Sludge; 2.2.3 Triclosan in Surface Waters; 2.2.3.1 Estimation of Elimination Constants for Triclosan in a River 2.2.4 Discussion on Triclosan and Methyl Triclosan in the Environment 2.3 UV Filters/Sunscreens; 2.3.1 Endocrine Properties of UV Filters; 2.3.2 UV Filters in Aquatic Ecosystems; 2.3.3 Enantioselective Considerations for UV Filters; 2.4 Organophosphate Flame-retardants and Plasticizers; 2.4.1 Introduction; 2.4.1.1 Flame-retardants; 2.4.1.2 Organophosphate Plasticizers; 2.4.2 The Organophosphate Flame-retardant TCPP in a Sewage Treatment Plant; 2.4.2.1 Materials and Methods; 2.4.2.2 Mass Balance Assessment for TCPP in a Sewage Treatment Plant; 2.4.2.3 TCPP in Sludge Monitoring 2.4.2.4 Evaluation of the TCPP Data 2.4.3 Organophosphate Flame-retardants and Plasticizers in Multi-step Sewage Treatment; 2.4.3.1 Materials and Methods; 2.4.3.2 Results and Discussion; 2.4.3.3 Conclusions; 2.4.4 Organophosphorus Flame-retardants and Plasticizers in Surface Waters; 2.4.4.1 Materials and Methods; 2.4.4.2 Results and Discussion; 2.4.5 Organophosphates in Drinking Water Purification; 2.4.5.1 Materials and Methods; 2.4.5.2 Results; 2.4.5.3 Conclusions; 2.4.6 Organophosphates and Other Compounds in the North Sea and Lake Ontario: A Comparison; 2.4.6.1 Materials and Methods 2.4.6.2 Results and Discussion

Sommario/riassunto

Here, the most important classes of toxic chemicals from personal care compounds are systematically covered, from cosmetics to plastics additives to pharmaceuticals. For each substance, data on toxicity and bioaccumulation in various ecosystems are given. This first comprehensive treatment of personal care environmental toxins is rounded off by a discussion of strategies in wastewater treatment to control and remove these substances.
