



Global Contamination Trends of Persistent Organic Chemicals

Edited by

Bommanna G. Loganathan • Murray State University, Kentucky, USA Paul Kwan-Sing Lam • City University of Hong Kong, Kowloon Tong

Environmental pollution by man-made persistent organic chemicals (POCs) has been a serious global issue for over half a century. Exposure to certain POCs may result in environmental and health effects including skin disorders, liver damage, birth defects, brain development, and certain types of cancers. Global Contamination Trends of Persistent Organic Chemicals provides comprehensive coverage of spatial and temporal trends of classical and emerging contaminants in aquatic, terrestrial, and marine ecosystems, including the Arctic and Antarctic ecosystems.

Compiled by an international group of experts, this volume covers:

- Spatial and temporal trends of polychlorinated biphenyls (PCBs), chlorinated pesticides, polychlorinated naphthalenes (PCNs), polychlorinated dibenzo-p-dioxins/furans (PCDD/DFs), polybrominated diphenyl ethers (PBDEs), hexabromocyclododecanes (HBCDs), perfluorinated compounds (PFCs), synthetic musks, polynuclear aromatic hydrocarbons (PAHs), and octyl- and nonylphenols
- Environmental and biological matrices used for the trend studies were atmosphere, water, soil, sediment, bivalve mollusks, fish, marine mammals, terrestrial mammals, and human breast milk
- Spatial and temporal trend studies were presented from Australia, Brazil, China, Estonia, Ghana, Hong Kong, India, Italy, Japan, Korea, Norway, Poland, Sweden, the United States, coastal and open ocean environments, and the Arctic and Antarctic regions

POCs have been the subject of an intensive local, regional, national, and international effort to limit their production and use, and to mitigate the disposal of these chemicals. Since POCs are prevalent in air, water, soil, and tissues of organisms (including wildlife and humans) throughout the world and resist degradation, they cause long-term effects in organisms. Trend monitoring studies are essential to make clear the behavior and fate of these compounds and to protect our environment and living resources. Relevant to professionals and students alike, Global Contamination Trends of Persistent Organic Chemicals facilitates the understanding of environmental and biological behavior of these chemicals and the development of strategies for protecting the global environment for future generations.

FEATURES

- Covers the effects of man-made chemical pollutants in a comprehensive manner
- Aids readers in understanding the history and present status of the contamination of the global environment
- Includes list of chemicals that are concern for future environmental issues as well as projected future global pollution trends of classical and emerging persistent organic chemicals

CONTENTS

Classical and Emerging Persistent Organic Chemicals—Perspectives

Global Contamination Trends of Persistent Organic Chemicals: An Overview, Bommanna G. Loganathan

Spatial and Temporal Trends of Polybrominated Diphenyl Ethers, Ying Guo, Susan D. Shaw, and Kurunthachalam Kannan

Temporal Trend of Perfluorinated Compounds from Various Environmental Matrices, Yasuyuki Zushi and Shigeki Masunaga

Synthetic Musks and Benzotriazole UV Stabilizers in Marine Ecosystems, Haruhiko Nakata, Ryu-ichi Shinohara, Sayaka Murata, and Hiroshi Sasaki

See reverse side for Continuation of Contents, Other Titles of Interest and ordering information

Catalog no. K11737, August 2011, c. 626 pp. ISBN: 978-1-4398-3830-3, \$159.95 / £99.00

ORDER ONLINE AT WWW.CRCPRESS.COM

Contents continued...

Global Environmental Distribution and Human Health Effects of Polycyclic Aromatic Hydrocarbons, Aramandla Ramesh, Anthony E. Archibong, Darryl B. Hood, Zhongmao Guo, and Bommanna G. Loganathan

Persistent Organic Chemicals in the Asia-Pacific Region

- Organohalogen Contamination Profiles and Trends in Australia, Munro R. Mortimer, Leisa-Maree Toms, and Jochen F. Mueller
- Environmental Status of Polychlorinated Biphenyls in China, Ying Xing, Yonglong Lu, and Wenbin Liu
- Organochlorine Pesticides, Polychlorinated Biphenyls, and Polybrominated Diphenyl Ethers in the Indian Atmosphere, Paromita Chakraborty and Gan Zhang
- Historical Trends of Dioxin Sources and Contamination in Japan, Shigeki Masunaga
- Polychlorinated Naphthalenes: Use and Contamination Trends in Japan and China, Sachi Taniyasu, Yuichi Horii, Nobuyasu Hanari, Nobuyoshi Yamashita, Jing Pan, Yongliang Yang, and Bommanna G. Loganathan
- Sources, Distributions, and Temporal Trends of Nonylphenols in South Korea, Seongjin Hong and Kyung-Hoon Shin
- Spatial and Temporal Trends of Persistent Organic Chemicals in Vietnam Soils, Masahide Kawano and Vu Duc Thao

Persistent Organic Chemicals in Europe and Africa

- Contamination Profiles and Possible Trends of Organohalogen Compounds in the Estonian Environment and Biota, Ott Roots, Vladimir Zitko, Kurunthachalam Senthil Kumar, Kenneth Sajwan, and Bommanna G. Loganathan
- Chlorinated Hydrocarbons in Animal Tissues and Products of Animal Origin from Poland, Alicja Niewiadowska and Jan Zmudzki
- Temporal Trends of Organohalogen Compounds in Mother's Milk from Sweden, *Anders Glynn*, *Sanna Lignell, Marie Aune*, *Per Ola Darnerud*, *and Anna Törnkvist*
- Temporal Trends of POPs in Human Milk from Italy, Annalisa Abballe, Anna Maria Ingelido, and Elena De Felip
- Contamination Status of Organochlorine Pesticides in Ghana, William J. Ntow and Benjamin O. Botwe

Persistent Organic Chemicals in the Americas

- Contamination Profiles and Possible Trends of Persistent Organic Compounds in the Brazilian Aquatic Environment, Gilberto Fillmann and Juliana Leonel
- Contamination Profiles and Temporal Trends of Persistent Organic Pollutants in Oysters from the Gulf of Mexico, Jose L. Sericano and Terry L. Wade

- Using Sediment Cores to Assess Inputs of Organochlorines and Polycyclic Aromatic Hydrocarbons in Coastal Georgia Estuaries, Clark Alexander, Allen D. Uhler, and Richard F. Lee
- Temporal Trends of Selected Chlorinated Hydrocarbon Pollutants in Sediments of Kentucky Lake, *Baki B. Sadi and Bommanna G. Loganathan*

Persistent Organic Chemicals in the Coastal, Oceanic, Arctic, and Antarctic Regions

- Temporal Trends of Polybrominated Diphenyl Ethers and Hexabromocyclododecanes in Marine Mammals with Special Reference to Hong Kong, South China, Ling Jin, James C.W. Lam, Margaret B. Murphy, and Paul K.S. Lam
- Status and Trends of POPs in Harbor Seals from the Northwest Atlantic, Susan D. Shaw, Michelle L. Berger, and Kurunthachalam Kannan
- Organohalogen Pollutants in Seabird Eggs from Northern Norway and Svalbard, Lisa Bjørnsdatter Helgason, Kjetil Sagerup, and Geir Wing Gabrielsen
- Contamination Profile and Temporal Trend of POPs in Antarctic Biota, Simonetta Corsolini
- Global Distribution of PFOS and Related Chemicals, Nobuyoshi Yamashita, Leo W.Y. Yeung, Sachi Taniyasu, Karen Y. Kwok, Gert Petrick, Toshitaka Gamo, Keerthi S. Guruge, Paul K.S. Lam, and Bommanna G. Loganathan

Index

Enter discount code 227CC at checkout and SAVE 20%

Receive Free Standard Shipping when you order online at www.crcpress.com

Join the CRC Press community!

Sign up for email alerts at CRCPress.com and be the first to know about new books in your area of interest. You will also receive exclusive discounts only available through our email and print promotions. Take full advantage of your insider savings and free shipping when you buy directly from CRCPress.com

http://www.crcpress.com



e-mail: orders@taylorandfrancis.com web: www.crcpress.com