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Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Part 1.Introduction -- Introduction -- Part 2.Physical and Chemical Characteristics -- Physical Parameters of PAHs/NPAHs/Oxidative Derivatives -- Chemistry of PAHs/NPAHs/Oxidative Derivatives (structures/name/numbering by IUPAC) -- Part 3.Analytical Method -- PAHs/NPAHs (including Application to Environmental Samples) -- PAHOHs/PAHQs (including application to biological samples) -- Part 4 Atmospheric Polycyclic Aromatic Hydrocarbons and PM2.5 -- Sampling Methods for PM -- PAHs/NPAHs in PM (including formation of PAHs/NPAHs) -- Atmospheric Reaction: Formation and Degradation -- PAHs/NPAHs in Japan (Tokyo/Sagamihara, Hokkaido, Kanazawa, Kitakyushu, Muroran) -- PAHs/NPAHs in North-East Asia (China, Korea, Russia) -- Long-Range Transport of PAHs/NPAHs (Noto and Tateyakma) -- PAHs/NPAHs in South East Asia -- PAHs/NPAHs in Africa -- Emission Sources of PAHs/NPAHs (including source marker) -- Emission of PAHs/NPAHs from Diesel-Engine Vehicles -- Model Simulation of PAHs in North-East Asia -- Part 5.Polycyclic Aromatic Hydrocarbons in Marine -- PAHs Pollution caused by Oil Spill -- PAHs in North-West Japan Sea -- PAHs in South-East China Sea -- Part 6. Metabolic Activation/Toxicities -- Metabolic Activation --

Carcinogenicity/Mutagenicity -- Endocrine Disruption -- ROS Production -- Toxicities in Fish and Other Marine Organisms -- Part 7. Environmental Standards/Guidelines -- Environmental Standards/Guide Lines of PAHs/NPAHs (including environmental standards/guide lines in Japan and in the world.

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Sommario/riassunto

This book reviews Polycyclic Aromatic Hydrocarbons (PAHs) and Nitropolycyclic Aromatic Hydrocarbons (NPAHs) contamination in the context of environmental pollution in Asia. It is comprised of the following sections: 1. Fundamental Chemistry and General Characteristics; 2. Analytical Methods; 3. Emission Source and Atmospheric Behavior; 4. Atmospheric Polycyclic Aromatic Hydrocarbons and PM<sub>2.5</sub>; 5. Polycyclic Aromatic Hydrocarbons in Marine Environments; 6. Metabolic Activation/Toxicities; and 7. Environmental Standards and Guidelines. This volume concentrates on the Far East due to the massive consumption of coal and petroleum in China, which has led to considerable levels of air pollution. High concentration of atmospheric PM<sub>2.5</sub> in Beijing have been reported since January 2013 and exposure to such high concentrations may cause respiratory, cardiac and lung diseases. Gathering contributions from international experts, this volume provides a valuable reference guide for global researchers and students interested in learning from the East Asian experience.

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