

# CONTENTS

Preface		vii
<b>Chapter 1</b>	Environmental Fate of Polycyclic Aromatic Hydrocarbons Emitted from Indoor Burning of Fuel Biomass in Poorly Ventilated Households: A Case Study in the Traditional Rural Households in Western Kenya <i>Fred Ayodi Lisouza, P. Okinda Owuor and Joseph O. Lalah</i>	1
<b>Chapter 2</b>	Polycyclic Aromatic Hydrocarbons in Foods and Herbal Medicines: Analysis and Occurrence <i>Hiroyuki Kataoka and Atsushi Ishizaki</i>	45
<b>Chapter 3</b>	Biomonitoring of Polycyclic Aromatic Hydrocarbons by Pine Needles – Levels and Trends in Southern Europe <i>Nuno Ratola, José Manuel Amigo, Silvia Lacorte, Damià Barceló, Eleftheria Psillakis and Arminda Alves</i>	83
<b>Chapter 4</b>	Investigation on Biodegradation of a Model Polycyclic Aromatic Hydrocarbons (PAHs) Compound - Anthracene (ANT) - by <i>Fusarium Solani</i> MAS2 Isolated from Mangrove Sediment <i>Yi-Rui Wu, Zhu-Hua Luo and L. L. P. Vrijmoed</i>	115
<b>Chapter 5</b>	Sources, Distributions and Forensic Applications of Polycyclic Aromatic Hydrocarbons (PAHs) in the Niger Delta Region of Nigeria: An Overview <i>B. O. Ekpo, E. P. Fubara and V. E. Etuk</i>	143
<b>Chapter 6</b>	Thermodynamics and Phase Behavior of Polycyclic Aromatic Hydrocarbon Mixtures <i>James W. Rice, Jinxia Fu and Eric M. Suuberg</i>	169
<b>Chapter 7</b>	Occurrence of Polycyclic Aromatic Hydrocarbons in Cephalopods <i>Simone Morais, Filipa Gomes, Maria João Ramalhosa, Cristina Delerue-Matos and Maria Beatriz Prior Pinto Oliveira</i>	197
<b>Chapter 8</b>	Children Environmentally Exposed to Polycyclic Aromatic Hydrocarbons Are at Risk of Genotoxic Effects <i>M. Sánchez-Guerra and B. Quintanilla-Vega</i>	217

<b>Chapter 9</b>	Hydroxylated Nitro Polycyclic Aromatic Compounds: Atmospheric Occurrence and Health Impacts <i>Takayuki Kameda, Ayuko Akiyama, Akira Toriba, Ning Tang and Kazuichi Hayakawa</i>	<b>235</b>
<b>Chapter 10</b>	Analysis of PAHs in Environmental Solid Samples <i>Nobuyasu Itoh</i>	<b>265</b>
<b>Chapter 11</b>	Exposure to Polycyclic Aromatic Hydrocarbons and the Associated Health Risks in Schoolchildren: A Review <i>Marta Oliveira, Klara Slezakova, C. Delerue-Matos, Maria do Carmo Pereira and Simone Morais</i>	<b>289</b>
<b>Chapter 12</b>	Chemical and Electronic Properties of Polycyclic Aromatic Hydrocarbons: A Review <i>Sergio Manzetti</i>	<b>309</b>
<b>Chapter 13</b>	Mutagenic Potential and Profile of PAHs in Soils Contaminated by Wood Preservatives: Effects on the Environment and on Human Health <i>Vera Maria Ferrão Vargas, Roberta de Souza Pohren, Flávio da Silva Júnior Souza, Jorge Willian Moreira, Jocelita Vaz Rocha, Cristiani Rigotti Vaz, Daniel Derrossi Meyer and Karen Leal</i>	<b>331</b>
<b>Chapter 14</b>	Phase Behavior and Thermochemical Properties of Polycyclic Aromatic Hydrocarbons and Their Derivatives <i>Jinxia Fu, James W. Rice and Eric M. Suuberg</i>	<b>349</b>
<b>Chapter 15</b>	PAH-DNA Adducts in Non-Smoking Inhabitants of Mexico City <i>W. A. García-Suástegui, A. Huerta-Chagoya, M. M. Pratt, K. John, P. Petrosyan, J. Rubio, M. C. Poirier and M. E. Gonsebatt</i>	<b>369</b>
<b>Chapter 16</b>	Determination of Polycyclic Aromatic Hydrocarbons in Drinking Water Sources <i>Sandra Sanches, Joana Ricardo, Maria C. Leitão, Maria T. Barreto Crespo and Vanessa J. Pereira</i>	<b>381</b>
<b>Index</b>		<b>391</b>