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Monitoring; 2.4 Use and Applicability of Zoobenthic Communities in Lake Monitoring; 2.5 Botanical Aspects of Lake Monitoring and Assessment; 2.6 Fish as Components of the Lake Ecosystems; 2.7 Monitoring of Faecal Pollution in Finnish Surface Waters; 3. HARMFUL SUBSTANCES IN THE LAKE ENVIRONMENT; 3.1 Lake Sediments in Historical Monitoring of the Environment.; 3.2 Case Examples of Palaeolimnological Records of Lake Ecosystem Changes 3.3 Organochlorine Compounds in Finnish Freshwaters 3.4 Fate of Organic Xenobiotics in Sediments: Bioavailability and Toxicity; 3.5 Mercury: A Challenge for Lake Monitoring.; 4. NEW APPROACHES IN LAKE MONITORING; 4.1 Integration of Different Approaches in Lake Monitoring; 4.2 Design of the Freshwater Monitoring Network for the EEA Network; 4.3 Remote Sensing as a Tool for Monitoring Lake Water Quality; 4.4 Principles of Monitoring the Acidification of Lakes.; 5 QUALITY ASSESSMENT; 5.1 Quality Assurance for Water Analysis 5.2 Performance Characteristics of Microbiological Water Analysis Methods 5.3 Standardization of Water Analysis within the CEN and ISO: The Example of Water Microbiology; 6 THE MANAGEMENT OF MONITORING RESULTS; 6.1 Methods for Extracting Information from Analytical Measurements; 6.2 Water Quality Modelling of Lakes; 6.3 The Water Quality Classification System in Sweden; 6.4 Classification of the Environmental Quality of Freshwater in Norway; 6.5 Water Quality Classification in Finland; 6.6 Use and Impact of Monitoring Results for Water Protection Management; Index

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Sommario/riassunto

Provides an extensive overview of all the most important aspects of lake monitoring studies describing methods of water sampling, analytical determination and data interpretation. Now that all EC countries must receive the EC Directive on Water Quality, there is a greater need to improve the quality of measurements, both in chemical and biological fields and this book describes the best practices in measuring water, quality, standard procedures and quality assurance in relation to current legislation and guidelines. The book provides coverage of: Abiotic processes and ha

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