Selenium Assessment In Aquatic Ecosystems A Guide For Hazard Evaluation And Water Quality Criteria Springer Series On Environmental Management

Environmental Toxicology and ChemistryIndian Journal of Environmental ProtectionThe Fate of Selenium in an Algal-bacterial System in the San Joaquin Valley of California, Public Health ConsiderationsWater Quality ProgramBiomonitoring of Polluted WaterEnvironmental Standards and Preliminary Environment Impact Assessment for Water Quality and Discharge of Effluent Into Water and Land in UgandaProceedings, Annual Summer Symposium of the American Water Resources AssociationInteractions of SeleniumEnvironmental Chemistry of Selenium GESAMP--arsenic, Mercury and Selenium in the Marine EnvironmentThe Impacts of Mountaintop Removal Coal Mining on Water Quality in AppalachiaWater Quality AssessmentsEnvironmental Contaminants in BiotaThe Bioaccumulation of Selenium in Aquatic EcosystemsModelling the Fate of Chemicals in the Environment and the Human BodySelenium toxicokinetics, chronic toxicity, and interaction with salinity stress in white sturgeonWater ResearchSelected Water Resources AbstractsJournal of Freshwater BiologyEnvironment Abstracts AnnualActa Hydrochimica Et HydrobiologicaAssessment and Control of Nonpoint Source Pollution of Aquatic EcosystemsSelenium Assessment in Aquatic EcosystemsThe Evaluation of Water Quality Criteria for Selenium, Boron, and Molybdenum in the San Joaquin River BasinEffects of excess selenium on the health and reproduction of white sturgeon (Acipenser transmontanus). Metal Metabolism in Aquatic Environments Areas Susceptible to Irrigation-induced Selenium Contamination of Water and Biota in the Western United StatesEnvironmental Toxicology and Risk AssessmentTrace Substances in Environmental Health, XXIEcological Risk AssessmentImpacts of Selenium on the Biogeochemical Cycles of Mercury in Terrestrial Ecosystems in Mercury Mining AreasMass Emissions Reduction Strategy for SeleniumEcological Assessment of Selenium in the Aquatic EnvironmentCoal MiningCurrent Environmental Engineering Summaries Aquatic Toxicology and Hazard AssessmentAssessment of Geothermal Wastewater Disposal Effects Case StudiesPollution AbstractsSelenium mass balance and modeling in agricultural evaporation basinsSelenium and Agricultural Drainage

Environmental Toxicology and Chemistry

Indian Journal of Environmental Protection

The Fate of Selenium in an Algal-bacterial System in the San Joaquin Valley of California, Public Health Considerations

Biomonitoring of Polluted Water

Environmental Standards and Preliminary Environment Impact Assessment for Water Quality and Discharge of Effluent Into Water and Land in Uganda

Proceedings, Annual Summer Symposium of the American Water Resources Association

Interactions of Selenium

Environmental Chemistry of Selenium

From a new perspective, namely focusing on the interaction of selenium and mercury, this thesis provides new insights into traditional research on biogeochemical cycles of mercury in soil-plant interaction and associated human exposure and risks. The subject of this thesis is both valuable and timely, providing essential information not only on selenium-mercury interaction in the soil-plant system but also on how to assess the combined benefits and risk of co-exposure to mercury and selenium. This work also sheds light on future aspects regarding prevention, remediation and risk management for environmental mercury contamination. Presenting high-quality papers published in leading international SCI journals such as Environmental Health Perspectives and Environmental Science & Technology and having been recognized with the Special Award of Presidential Scholarship Award and Excellent Doctoral Dissertations Prize of the Chinese Academy of Sciences (CAS), this thesis offers a valuable resource for scientific communities, policy-makers and non-experts who are interested in this field. Dr. Hua Zhang works at the Norwegian Institute for Water Research (NIVA), Oslo, Norway.

GESAMP--arsenic, Mercury and Selenium in the Marine Environment

This volume focuses on modelling the fate of chemicals in the environment and the human body to arrive at an integrated exposure assessment. It covers five broad topics, namely: future challenges in exposure assessment; the evolution of human health and environmental risk assessment; standard documentation for exposure models; modelling different environmental components (i.e. surface waters, atmosphere, soil, groundwater, plants, aquatic organisms and mammals); and the fate of contaminants in humans. This work draws on the authors' and editors' extensive experience and a range of different research activities, including case studies, that have led to the development of MERLIN-Expo, a standardised software package for simulating the fate of chemicals in the main environmental systems

and in the human body in an integrated manner. It will be of considerable interest to researchers and students, risk managers, and policy- and decision-makers whose work involves environmental protection and human health.

The Impacts of Mountaintop Removal Coal Mining on Water Quality in Appalachia

Water Quality Assessments

"Written as a complement to the definitive work selenium in the Environment (Marcel Dekker, Inc.). Presents basic and the most recent applied research developments in selenium remediation-emphasizing field investigations as well as covering topics from analytical methods and modeling to regulatory aspects from federal and state perspectives. "

Environmental Contaminants in Biota

The Bioaccumulation of Selenium in Aquatic Ecosystems

Modelling the Fate of Chemicals in the Environment and the Human Body

This guidebook, now thoroughly updated and revised in its second edition, gives comprehensive advice on the designing and setting up of monitoring programmes for the purpose of providing valid data for water quality assessments in all types of freshwater bodies. It is clearly and concisely written in order to provide the essential information for all agencies and individuals responsible for the water quality.

Selenium toxicokinetics, chronic toxicity, and interaction with salinity stress in white sturgeon

Although it is a rock rather than a mineral (the building blocks of rocks), coal is often considered to be a mineral resource. Coal has been mined since ancient Roman times, but it has become a major energy source only since the Industrial Revolution. It currently provides 22 percent of the world's energy, and is used to generate approximately 40 percent of electricity world-wide. Coal generates more than half of all electricity in the United States. Coal is also an important ingredient in the creation of methanol which turns up in such items as plywood (binding resin) and plastic bottles (acetic acid). Reserves are widely distributed throughout the globe, although the United States, Russia, China, and India account for more than half of the world's recoverable coal reserves. This book presents new research in the field.

Water Research

Selected Water Resources Abstracts

Journal of Freshwater Biology

Environment Abstracts Annual

Acta Hydrochimica Et Hydrobiologica

Assessment and Control of Nonpoint Source Pollution of Aquatic Ecosystems

Selenium Assessment in Aquatic Ecosystems

The Evaluation of Water Quality Criteria for Selenium, Boron, and Molybdenum in the San Joaquin River Basin

Examining tissue residues of contaminants in biota reveals the movement of contaminants within organisms and through food chains as well as the context for understanding and quantifying injuries to organisms and their communities. Yet tissue concentrations of some contaminants are especially challenging to interpret and the ability of today's analytical chemists to provide reliable analytical data of most important environmental contaminants often surpasses the ability of ecotoxicologists to interpret those data. Offering guidance on the ecotoxicologically meaningful interpretation of tissue concentrations, Environmental Contaminants in Biota, Interpreting Tissue Concentrations, Second Edition is updated with current data and new ways of analyzing those data as well as additional contaminants not previously considered. Beginning with a history of wildlife toxicology and data interpretation, chapters cover a wide range of contaminants and their hazardous and lethal concentrations in various animals including DDT, Dioxins, PCBs, and PBDEs in aquatic organisms; methylmurcury, selenium, and trace metals in fishes and aquatic invertebrates; and pharmaceuticals and organic contaminants in marine mammals. The book considers the impact of Polychlorinated Biphenyls, Dibenzo-p-Dioxins and Dibenzofurans, and Polybrominated Diphenyl Ethers; cyclodiene; and other organochlorine pesticides in birds and mammals. Later chapters examine the effects and analysis of lead, cadmium, and radionuclides in biota. With thousands of published research papers reporting tissue concentrations each year, Environmental Contaminants in Biota, Interpreting Tissue Concentrations, Second Edition gives ecotoxicologists the ability to draw actionable value regarding the toxicological consequences of those concentrations and relate tissue concentrations quantitatively to injury: the core of ecotoxicology.

Effects of excess selenium on the health and reproduction of white sturgeon (Acipenser transmontanus).

Metal Metabolism in Aquatic Environments

Selenium is a naturally occurring trace element that can become concentrated and released by industrial, agricultural, petrochemical and mining activities. At concentrated levels it is toxic and has polluted ecosystems around the world. This book will serve as a comprehensive practical handbook for everyone dealing with selenium in aquatic environments. It offers field-tested approaches and methods for assessment and water quality management. Using his twenty-year experience, the author discusses the effects of selenium on fish and bird populations and presents guidelines for identifying sources of pollution, interpreting selenium concentrations, assessing hazardous conditions, setting water quality criteria and ecosystem loading limits (TMDLs). He also includes a procedure for setting environmentally safe limits that ensure compliance with EPA regulations. Selenium Assessment in Aquatic Ecosystems will interest field scientists, natural resource managers, risk assessors and environmental planners.

Areas Susceptible to Irrigation-induced Selenium Contamination of Water and Biota in the Western United States

Biomonitoring of water pollution grew out of various disciplines, such as aquatic ecology and (eco)toxicology. It has now become a scientific tool for monitoring the degree of pollution of aquatic systems. The present book is a comprehensive review of the field. The most promising techniques used in the biomonitoring of polluted water are discussed in the light of their advantages and limitations.

Environmental Toxicology and Risk Assessment

Trace Substances in Environmental Health, XXI

Metal Metabolism in Aquatic Environments is a synthesis of recent developments in the field of metal ecotoxicology and features a number of contemporary issues arising from the interaction of metals and biota, such as pathways of assimilation and food chain transfer, metal accumulation and detoxification in humans and biotransformation of elements such as mercury and arsenic.

Ecological Risk Assessment

This book is not meant to be an extensive technical treatise on the topic of nonpoint source pollution, but rather it is intended to provide sufficient information to allow interested persons to acquire a broad, general knowledge of the assessment, causes and control of nonpoint source pollution and bring this knowledge together in a form that is useful for both scientific and management purposes.

Impacts of Selenium on the Biogeochemical Cycles of Mercury in Terrestrial Ecosystems in Mercury Mining Areas

Mass Emissions Reduction Strategy for Selenium

Ecological Assessment of Selenium in the Aquatic Environment

Based on the work and contributions of 46 scientists, managers, and policymakers, Ecological Assessment of Selenium in the Aquatic Environment documents the state of the science and explores how to use this information when assessing and managing the environmental effects of Se. A focused discussion on the fate and effects of Se in aquatic ecosystems, the book reviews: Past and current problems related to Se in aquatic environments, together with lessons learned, and provides a generalized conceptual model Environmental partitioning, in particular Se speciation leading to its entry into the food chain, and provides conceptual models specific to environmental partitioning. Se bioaccumulation and trophic transfer from the physical environment (i.e., water-column particulates), and from primary producers to herbivores to carnivores, including the influence of modifying ecological factors Toxic effects from Se, in particular body burdens and their relationship to toxicity Filled with practical guidance and concise information on how to conduct selenium risk assessments in the aquatic environment, the book contains the latest information on assessment techniques, elucidates the current state of contamination in industrialized countries, and raises awareness for developing nations. Written by leading experts, it describes best practices for designing experiments to collect information on aquatic effects and trophic transfer of selenium for risk assessments, presents numerous case studies both domestic and international, and gives insight as to how current and future ecosystems may or may not be affected.

Coal Mining

Current Environmental Engineering Summaries

Aquatic Toxicology and Hazard Assessment

Assessment of Geothermal Wastewater Disposal Effects Case Studies

This database encompasses all aspects of the impact of people and technology on the environment and the effectiveness of remedial policies and technologies, featuring more than 950 journals published in the U.S. and abroad. The database also covers conference papers and proceedings, special reports from international agencies, non-governmental organizations, universities, associations and private

corporations. Other materials selectively indexed include significant monographs, government studies and newsletters.

Pollution Abstracts

Selenium mass balance and modeling in agricultural evaporation basins

Selenium and Agricultural Drainage

ROMANCE ACTION & ADVENTURE MYSTERY & THRILLER BIOGRAPHIES & HISTORY CHILDREN'S YOUNG ADULT FANTASY HISTORICAL FICTION HORROR LITERARY FICTION NON-FICTION SCIENCE FICTION