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Soggetti	Geobiology Geochemistry Soil science Soil conservation Pollution prevention Biogeosciences Soil Science & Conservation Industrial Pollution Prevention Polar Geography Polar regions
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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Introductory Paper: Biogeochemical Technologies For Managing Pollution In Polar Ecosystems -- Part I. Monitoring of Environmental Pollution in Gas Industry Impacted Ecosystems -- Natural Biogeochemical Cycling in Polar Ecosystems -- Gas Industry Impacts on Natural Ecosystems -- Modern Biogeochemical Cycling in Gas Industry Impacted Areas -- Emission Carbon Dioxide And Methane in Gas Industry Impacted Ecosystems -- Specific Reaction Biota to Environmental Pollution in Tundra Ecosystems -- Biota Monitoring in the Impacted Zones Oil and Gas Industry in the Arctic Region -- Climate Cycling and Modeling in Polar Areas -- Part II. Geo-Environmental Risk Assessment -- Evaluation Geo-Environmental Risks in the Impacted Zones Oil and Gas Industry in the Russian Arctic -- Biogeochemical Cycling and SMB Model to Assess Critical Loads

Nitrogen and Acidity for Terrestrial Ecosystems in the Russian Arctic -- Possible Indicators for Assessing Geo-Environmental Risk in Polar Ecosystems Yamal Peninsula in Relation to Pollutant Emission During Gas Production -- Analysis Geoecological Risks and Ratings as a Factor Improving Investment Attractiveness Enterprises -- Part III. New Environmentally Oriented Biogeochemical Technologies for Managing Risk Environmental Pollution in Gas Production Areas -- Biogeochemical Engineering and Development Biogeochemical Technologies -- Biogeochemical Standards for Environmental Managing Polar Ecosystems -- Biogeochemical Approaches for Managing Geoenvironmental Risk Hydrocarbons Pollution in Disturbed Soils -- Biogeochemical Technology for Monitoring Cleaning Soil Polluted by Gas Condensate and Neutralization its Sludge by Means Enzyme Activity Analysis -- Biogeochemical Control Peat-Based Recultivation Process Disturbed Tundra Soils Varying in Granulometric Composition and Full Moisture Capacity -- Biogeochemical Technology for Disturbed Tundra Soils Recultivation by Peat and Potassium Humate Application.

Sommario/riassunto

This edited book is devoted to one of the hottest topics of modern environmental science, i.e. environmental risk management in gas industry impacted polar ecosystems of Russia. The contributions from experts cover topics that shed new light on the impacts of oil and natural gas production on arctic ecosystems in the country as well as biogeochemical engineering technologies to manage pollution in these areas. Readers will also discover new insights on potential ecological indicators for assessing geo-environmental risks of these impacted ecosystems, and climate modeling in polar areas. The book has interdisciplinary appeal, and specialists and practitioners in environmental sciences, ecology, biogeochemistry and those within the energy sector who are interested in understanding ecosystems affected by anthropogenic impacts in severe climatic conditions will find it particularly engaging. Through this book, readers will learn more about biogeochemical cycling through food chains and specific reactions of biota to environmental pollution in extreme environments through the lens of experts. .