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Titolo	Bioremediation in Latin America : Current Research and Perspectives / / edited by Analía Alvarez, Marta Alejandra Polti
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Descrizione fisica	1 online resource (311 p.)
Disciplina	363.73 54 660.62
Soggetti	Microbiology Pollution Applied Microbiology Pollution, general
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Impacts of agriculture in Latin America: problems and solutions -- Organochlorinated contaminants in general population of Argentina and other Latin American countries -- Strategies to ameliorate soils contaminated with boron compounds -- Advances in Chile for the treatment of pesticide residues: biobeds technology -- Bioremediation of soils contaminated with pesticides: experiences in Mexico -- Bioremediation and biotransformation of nanostructures through enzymatic and microbial systems -- Phytoremediation: strategies of Argentinean plants against stress by heavy metals -- Microbial consortia, a viable alternative for clean up of contaminated soils from Latin American countries -- Application of integrated microbial processes for heavy metal recovery from industrial wastes of Buenos Aires, Argentina -- Microbial generation of acid mine drainage: Its bioremediation in Buenos Aires, Argentina -- Co-contaminated soil bioremediation by Actinobacteria -- Molecular markers in hydrocarbon degradation: state of the art and prospective in South America -- Perspective in bioremediation: enhancing the hexavalent chromium

removal using native yeasts from Tucumán, Argentina -- Ecology of dye decolorizing yeasts -- Cooper resistance and oxidative stress response in Rhodotorula mucilaginosa RCL-11 yeast isolated from contaminated environment in Tucumán, Argentina -- Surface-active compounds of microbial origin and their potential application in technologies of environmental remediation -- Use of Actinobacteria consortia to improve methoxychlor bioremediation in different contaminated matrices -- Biodegradation of - and - hexachlorocyclohexane by indigenous Actinobacteria -- Cell immobilization technique for the enhanced removal of lindane using Streptomyces strains isolated from Northwestern Argentina.

Sommario/riassunto

The book compiles an update information about the state of bioremediation in emerging Latin American countries. Some of the studied regions are sites that suffered decades of pollution by agrochemicals, heavy metals and industrial waste due to the lack of control by government regulations. Such is the case of Northern Argentina, where were illegally deposited over 30 tn of obsolete organochlorine pesticides in 1994. The content has focused in the use of native organisms (from bacteria to plants) as a viable solution to the problem of pollution, using low-cost and powerful techniques, socially well accepted and appropriate from the environmental point of view. In this context, levels of pesticide found in the Latin American population are informed. It was also displayed as a multidisciplinary approach based on concerns of a diverse group of researchers (biochemists, biologists, chemical engineers and geneticists) about a global problem, dealing with specific cases of study, with a view to project their findings to worldwide. In this regard, researchers provide their findings to regulatory sectors, whom could make appropriate decisions.