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Descrizione fisica	1 online resource (210 pages)
Collana	Earth and Environmental Science Series
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Soggetti	Environment Environmental management Conservation biology Ecology Refuse and refuse disposal Environmental engineering Biotechnology Bioremediation Environmental Sciences Environmental Management Conservation Biology Waste Management/Waste Technology Environmental Engineering/Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Eutrophication – A worldwide water quality issue -- Eutrophication and public health -- The effect of immediate treatment for Water quality: Policies and protection perspectives -- Management strategies for lake restoration -- Chemical lake restoration methods: From alum to innovative composite materials -- Non-invasive removal of phosphorus from lakes using processed calcite-based materials -- Novel composite materials as P-adsorption agents and their potential applications as fertilizers -- A new method for lake restoration, impacting on circular

economy (CE).

Sommario/riassunto

This book aims to structure, in a complete and sequential way, the mainstream technical knowledge which is related to eutrophication control. The book considers the development of innovative technologies for phosphate removal, while supporting the restoration of currently degraded lakes and reservoir systems. In addition, this book contains key-aspects of future benchmark interests being specially framed under the ongoing development of a circular economy. In particular, the book will contribute to a better understanding of the problem of internal P-loads and P-sources disposition towards a more effective control of nutrients' enrichment in lakes. The chemical routes and environmental fate of such lake nutrients will be viewed in the light of innovative technologies (engineering dimensions) and circular economy perspectives (economics dimensions). The main theme extends to an economic appreciation of environmental polluted aquifers. The book will appeal to an interdisciplinary audience, covering a wide spectrum of scientific fields, such as environment, physical chemistry, surface chemistry, interfacial phenomena, coastal engineering, bio-engineering, environmental policy makers, and economists.