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| Autore | Winita Kumara |
| Titolo | Recent Trends in Management and Utilization of Industrial Sludge / / edited by Vineet Kumar, Sartaj Ahmad Bhat, Pradeep Verma, Sunil Kumar |
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| ISBN | 9783031584565<br>9783031584558 |
| Edizione | [1st ed. 2024.] |
| Descrizione fisica | 1 online resource (412 pages) |
| Altri autori (Persone) | BhatSartaj Ahmad<br>VermaPradeep<br>KumarSunil |
| Disciplina | 363,728<br>628.4 |
| Soggetti | Refuse and refuse disposal<br>Environmental engineering<br>Biotechnology<br>Bioremediation<br>Sustainability<br>Waste Management/Waste Technology<br>Environmental Engineering/Biotechnology |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Chapter 1 Fundamentals of industrial sludge -- Chapter 2 Management of textile industry sludge for environmental sustainability -- Chapter 3 Sustainable management of oily petroleum refinery sludge through anaerobic digestion with bioenergy production -- Chapter 4 Hydrothermal carbonization of industrial sludge -- Chapter 5 Sustainable management of industrial sludge through vermistabilization utilizing pollutants loaded spent biochar produced from wastewater treatment process -- Chapter 6 Production of microbial fuel cell material from industrial wastewater sludge -- Chapter 7 Industrial sludge as adsorbent for wastewater treatment and reclamation -- Chapter 8 Sustainable utilization of industrial sludge in |

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| | the construction industry -- Chapter 9 Utilization of waste sludge and poplar trees for remediation -- Chapter 10 Sustainable production of enzymes using industrial sludge -- Chapter 11 Sustainable application of industrial sludge in agriculture land -- Chapter 12 Production of biodiesel from industrial sludge -- Chapter 13 Advancement in sustainable management and valorization of solid waste through composting and vermitechnology. |
| Sommario/riassunto | This book discusses the latest information and advancements on all aspects of sustainable sludge management including treatment, characterization, stabilization, digestion, thickening, dewatering, thermal processing, utilization, valorization production of usable materials, and disposal, with associated pros and cons addressed. It provides an up-to-date resource on industrial sludge generation in various industries, its disposal and treatment by various modern treatment approaches, its physico-chemical and microbiological characterization, as well as legislation, risk assessment, and methodological aspects related to its characterization. Past and recent trends in industrial sludge handling are covered to understand and overcome the environmental risks posed by industrial sludge, with a focus on the brick and agrochemical industries and how to implement sustainable sludge managements practices in these industries. The book is intended for environmental engineers, chemical engineers, soil scientists, and policymakers, and will be of interest to students and researchers of environmental biotechnology, environmental engineering, and chemical engineering. Chapter “Production of Microbial Fuel Cell Material from Industrial Wastewater Sludge: Recent Trends and Development” is available open access under a Creative Commons Attribution 4.0 International License via link.springer.com. |