Record Nr. UNINA9910484202203321 Environmental flotation engineering / / Lawrence K. Wang [and three **Titolo** others], editors Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2021] ©2021 3-030-54642-X **ISBN** Edizione [1st ed. 2021.] Descrizione fisica 1 online resource (XIV, 433 p. 153 illus., 55 illus. in color.) Collana Handbook of Environmental Engineering;; Volume 21 Disciplina 628.1622 Soggetti Water - Purification - Dissolved air flotation Sewage - Purification - Flotation Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di contenuto Chapter1. Humanitarian engineering education of the lenox institute of water technology and its new potable water flotation processes --Chapter2. An innovative lee, massachusetts usa dissolved air flotation potable water filtration plant -- Chapter3. Fundamentals of chemical coagulation and precipitation -- Chapter4. A new wave of flotation technology advancement for wastewater treatment -- Chapter5. Innovative circular gravity flotation and fiber detection for fiber separation -- Chapter6. Independent physicochemical wastewater treatment system consisting of primary flotation clarification, secondary flotation clarification and tertiary treatment -- Chapter7. Innovative wastewater treatment using activated sludge and flotation clarifications under cold weather conditions -- Chapter8. Operation and performance of the aquadaf process system for water purification -- Chapter9. Operation and performance of the clari-daf process system for water purification -- Chapter 10. A spectrophotometric method for determination of dissolved proteins in water or wastewater -- Chapter11. Biological and physicochemical sequencing batch reactors using sedimentation or flotation. This volume covers topics on humanitarian engineering education of Sommario/riassunto

the Lenox Institute of Water Technology and recent advances in potable water and wastewater flotation processes. The specific advancements

covered include: chemical coagulation and precipitation enhancements, first wave of flotation advancement for potable water treatment, second wave of flotation technology advancement for wastewater treatment, innovative circular gravity flotation, fiber detection, fiber separation, independent physicochemical wastewater treatment systems, primary flotation clarification, secondary flotation clarification, tertiary treatment, activated sludge and flotation wastewater treatment, cold weather wastewater conditions, operation and performance of the AquaDAF process system, operation and performance of the Clari-DAF process system, water purification, spectrophotometric determination of dissolved proteins, biological and physicochemical sequencing batch reactors, and sedimentation and flotation comparisons. The book will be of value to advanced undergraduate and graduate students, to designers of flotation systems, and to scientists and researchers.