Record Nr. UNINA9910317804803321 Autore Jan Derco Titolo Biosorption / / Jan Derco, Branislav Vrana, editors Pubbl/distr/stampa IntechOpen, 2018 [Place of publication not identified]:,: IntechOpen,, [2018] ©2018 **ISBN** 1-83881-299-7 1-78923-473-5 Edizione [1st ed.] Descrizione fisica 1 online resource (158 pages): illustrations Disciplina 660.62 Soggetti Microbial biotechnology Adsorption (Biology) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Sommario/riassunto Municipal and industrial wastewaters contain a wide spectrum of pollutants. Their effective removal presents a challenge for water treatment technology. Biosorption of nutrients and pollutants has been used in sewage treatment since the discovery of the activated sludge process. It is a passive uptake process by which pollutants are adsorbed on the surface of cell walls and/or dissolved in structures of microorganism cells that are present in sludge. Sorbed pollutants remain in the sludge and can be potentially released back into the environment depending on their condition and the reversibility of the pollutant-sludge interaction. An overview of typical biosorption applications for the removal of nutrients, organic pollutants, and metals in wastewater treatment is provided in different areas of their use for the protection of aquatic ecosystems and human health. This book will be of interest to operators of wastewater treatment plants

and sludge treatment and disposal facilities as well as to researchers and university students in the field of environmental engineering.