Record Nr. UNINA9910437948503321 Acidic pit lakes: the legacy of coal and metal surface mines / / Walter **Titolo** Geller ... [et al.], editors Pubbl/distr/stampa Heidelberg [Germany], : Springer, 2013 **ISBN** 1-282-05685-9 9786613798800 3-642-29384-0 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (536 p.) Collana Environmental science and engineering. Environmental science, , 1431-6250 Altri autori (Persone) GellerWalter Disciplina 628.1 628.16832 Soggetti Acid pollution of rivers, lakes, etc Acid mine drainage - Environmental aspects Limnology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Terrestrial Environment of Pit Lakes -- Limnology of mining lakes --Remediation and Management of Acidified Pit Lakes -- Regional Surveys and Case Studies -- Lessons Learned, Open Questions and Concluding Remarks. Sommario/riassunto This monograph provides an international perspective on pit lakes in post-mining landscapes, including the problem of geogenic acidification. Much has been learned during the last decade through research and practical experience on how to mitigate or remediate the environmental problems of acidic pit lakes. In the first part of the book, general scientific issues are presented in 21 contributions from the fields of geo-environmental science, water chemistry, lake physics, lake modeling, and on the peculiar biological features that occur in the extreme habitats of acidic pit lakes. Another chapter provides an overview of methods currently used to remediate acidic pit lakes and treat outflowing acidic water. The second part of the book is a

collection of regional surveys of pit lake problems from three European

countries and Australia, and case studies of various individual

representative lakes. A final case study provides an innovative approach to assessing the economic value of new pit lakes and balancing the costs and benefits, a valuable tool for decision makers.