Record Nr. UNINA9910254132003321 Autore Warren John K Titolo Evaporites: A Geological Compendium / / by John K. Warren Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2016 3-319-13512-0 **ISBN** Edizione [2nd ed. 2016.] Descrizione fisica 1 online resource (1822 p.) 552.5 Disciplina Soggetti Sedimentology Hydrogeology Mineral resources Geoecology Environmental geology Mineral Resources Geoecology/Natural Processes Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Interpreting evaporite textures -- Depositional chemistry and hydrology -- Sabkhas, saline mudflats and pans -- Subaqueous salts: salinas and perennial lakes -- Ancient basins and stratigraphic evolution -- Flowing salt: Halokinesis -- Pointers to vanished evaporites: Karst, breccia, nodules and cement -- Hypersaline fluid evolution during burial and uplift -- Halotolerant life in feast or famine (a source of hydrocarbons and a fixer of metals) -- Hydrocarbons and evaporites -- Potash resources: Occurrences and controls -- Non-Potash Salts: Borates, Na-sulphates, Na-carbonate, lithium salts, gypsum, halite and zeolites -- Solution mining and salt cavern usage

Sommario/riassunto

The monograph offers a comprehensive discussion of the role of evaporites in hydrocarbon generation and trapping, and new information on low temperature and high temperature ores. It also provides a wealth of information on exploitable salts, in a comprehensive volume has been assembled and organized to provide

-- Meta-evaporites -- Lower temperature metals in evaporitic frameworks -- Magma-evaporite-hydrothermal metal associations.

quick access to relevant information on all matters related to evaporites and associated brines. In addition, there are summaries of evaporite karst hazards, exploitative methods and problems that can arise in dealing with evaporites in conventional and solution mining. This second edition has been revised and extended, with three new chapters focusing on ore minerals in different temperature settings and a chapter on meta-evaporites. Written by a field specialist in research and exploration, the book presents a comprehensive overview of the realms of low- and high-temperature evaporite evolution. It is aimed at earth science professionals, sedimentologists, oil and gas explorers, mining geologists as well as environmental geologists.