

Association Of Large Sandstone Uranium Deposits With

Uranium for Nuclear Power: Resources, Mining and Transformation to Fuel discusses the nuclear industry and its dependence on a steady supply of competitively priced uranium as a key factor in its long-term sustainability. A better understanding of uranium ore geology and advances in exploration and mining methods will facilitate the discovery and exploitation of new uranium deposits. The practice of efficient, safe, environmentally-benign exploration, mining and milling technologies, and effective site decommissioning and remediation are also fundamental to the public image of nuclear power. This book provides a comprehensive review of developments in these areas. Provides researchers in academia and industry with an authoritative overview of the front end of the nuclear fuel cycle Presents a comprehensive and systematic coverage of geology, mining, and conversion to fuel, alternative fuel sources, and the environmental and social aspects Written by leading experts in the field of nuclear power, uranium mining, milling, and geological exploration who highlight the best practices needed to ensure environmental safety

"Following this discovery and further detrital-zircon studies of Mesozoic strata on the Colorado Plateau, Dr. Dickinson began preparing this volume in order to identify key aspects of the sedimentary and tectonic history of Mesozoic strata of the Colorado Plateau and directly adjacent areas. He divided the strata into seven depositional systems"--

Geological Survey Professional Paper

Geology and Geochemistry of Gold Deposits of the Big Canyon Area, El Dorado County, California

Bibliography of Geology and Hydrology, San Juan Basin, New Mexico, Colorado, Arizona, and Utah

Geology of the UraVan Mineral Belt

Unconformity-Related Uranium Deposits

Prepared on behalf of the U.S. Atomic Energy Commission.

Uranium in the Aquatic Environment

Chapter B.

The Economic Geology of Iran

Sedimentary Cover—North American Craton: U.S.

Geological Survey Bulletin

This book furnishes a detailed description of the mineral deposits of metallic, non-metallic, solid energy, gemstones and industrial minerals in Nigeria, West Africa with emphasis on their location, geological setting, mode of occurrence, physical and chemical characteristics, ore reserve estimates and metallogeny. It also provides a geoscientific analysis of the solid mineral sector, mineral production statistics, mining, and potential targets for mineral exploration. There are twenty chapters in the book, divided into five parts: Part 1 (geological setting), Part 2 (metallic minerals), Part 3 (energy minerals), Part 4 (industrial minerals & gemstones), and Part 5 (metallogeny, mining & exploration). This book is an invaluable source of information, not only for geology and mining students, but also for practicing geoscientists, exploration and mining professionals and administrators in government and private companies who are interested or involved in economic geology, mineral exploration, and mineral resource development in Nigeria.

This publication provides a description of existing and emerging technologies to effectively integrate geological, geophysical and geochemical data to recognize the footprint (i.e. the total extent that the mineralizing system has affected its environment) of the deposit and the key vectors to the uranium mineralization. In addition, insights into exploration strategies and risks associated with country and basin selection are discussed, including the role of the IAEA and academia in supporting the exploration process. Representing an unprecedented, comprehensive reference document on unconformity-related uranium deposits with over 350 citations, this publication will be useful for decision makers at all levels, including governmental officers in energy and mineral resources, exploration companies, geologists, geological surveys, energy companies, universities and research institutions, and natural resource authorities.

Reconnaissance Geology of Hiland-Clarkson Hill Area, Natrona County, Wyoming

Economic Geology and the Bulletin of the Society of Economic Geologists

Geology of the Bighorn Basin

Mineral Resources of the Canaan Mountain and the Watchman Wilderness Study Areas, Washington and Kane Counties, Utah

Mineral Deposits and Exploration Potential of Nigeria

A multidisciplinary approach to research studies of sedimentary rocks and their constituents and the evolution of sedimentary basins, both ancient and modern.

An important prerequisite to the long-term use of nuclear energy is information on uranium ore deposits from which uranium can be economically exploited. Hence the basic purpose of this book is to present an overview of uranium geology, data characteristic for uranium deposits, and a synthesis of these data in the form of a typological classification of uranium deposits supported by more detailed descriptions of selected uranium districts and deposits. An additional goal is to provide access for the interested reader to the voluminous literature on uranium geology.

Therefore a register of bibliography as global as possible, extending beyond the immediate need for this book, is provided. The volume presented here was not originally designed as a product for its own sake. It evolved as a by-product during decades of active uranium exploration and was compiled thanks to a request by the Springer Publishing Company. Routine research work on identifying characteristic features and recognition criteria of uranium deposits, combined with associated modeling of types of deposits for reapplication in exploration, provided the data bank. The publisher originally asked for a book on uranium deposits structured as a combined text- and reference book. The efforts to condense all the text into a single publication were soon doomed. The material grew out of all feasible proportions for a book of acceptable size and price, a wealth of data on uranium geology and related geosciences having become available during the past decade, too vast for one volume.

Proceedings of the International Conference Uranium Mining and Hydrogeology III and the International Mine Water Association Symposium Freiberg, Germany, 15-21 September 2002

Geological Survey Research 1962 ; Scientific Notes and Summaries of Investigations

Proceedings of the International Centennial Symposium of the United States Geological Survey, Held at Reston, Virginia, October 14-19, 1979

United States Geological Survey and Atomic Energy Commission United States Geological Survey and Atomic Energy Commission for the United Nations International Conference on Peaceful Uses of Atomic Energy, Geneva,

Switzerland, 1955

Mineral Deposits and Natural Resources

The Economic Geology of Iran is a complete and comprehensive book about mineral deposits, energy and water resources of Iran. Dr. Mansour Ghorbani has travelled to each of the huge variety of locations that feature the resources covered, personally verifying the details of them all. The book starts by describing the geography and physiography of Iran as well as its various climatic regions and the diverse corresponding vegetation. Then the book gives an excellent overview of the geology of the country, followed by the history of mining in Iran up to now. The author describes also the metallogenic and mineralization phases of Iran, its mineral zones and belts, and, more generally, the distribution of mineral deposits in the country. Dr. Ghorbani gives us also an analysis of the position of Iran in terms of global mineral resources, as well as the role that the country's mineral, energy and natural resources play in its overall economy. The book finishes with also provides a complete list of Iranian mineral deposits. This book is a perfect source of information for all students and researchers in the field of geo-science at the university level but also for mining and oil companies that would like to work, invest and get involved in such businesses in Iran.

Humanity's ever-increasing hunger for mineral raw materials, caused by a growing global population and ever increasing standards of living, has resulted in economic geology becoming a subject of urgent importance. This book provides a broad panorama of mineral deposits, covering their origin and geological characteristics, the principles of the search for ores and minerals, and the investigation of newly found deposits. Practical and environmental issues that arise during the life cycle of a mine and after its closure are addressed, with an emphasis on sustainable and "green" mining. The central scientific theme of the book is to place the extraordinary variability of mineral deposits in the frame of fundamental geological processes. The book is written for earth science students and practicing geologists worldwide. Professionals in administration, resource development, mining, mine reclamation, metallurgy, and mineral economics will also find the text valuable. Economic Geology is a fully revised translation of the the fifth edition of the German language text Mineralische und Energie-Rohstoffe. Additional resources for this book can be found at: www.wiley.com/go/pohl/geology. The author's website can be found at: <http://www.walter-pohl.com>.

MESA Journal

Clastic Pipes of Probable Solution-collapse Origin in Jurassic Rocks of the Southern San Juan Basin, New Mexico

Resources, Mining and Transformation to Fuel

Ground-water Flow and Migration of Hydrocarbons to the Lower Permian White Rim Sandstone, Tar Sand Triangle, Southeastern Utah

Draft Little Snake Resource Management Plan and Environmental Impact Statement, Moffat, Rio Blanco, and Routt Counties, Colorado

Preface Uranium is a radioactive element and a heavy metal which is naturally occurring in ground and surface water. Although uranium is enriched in granites and gneiss ground water from these host rocks often shows low to intermediate uranium concentrations, while some ground waters from sandstone and carbonate aquifers show elevated uranium concentrations up to several hundred mg/l without man made impact. On the other side, surface water contains increased anthropogenic uranium concentrations due to the intensive use of phosphate fertilizers and in mining areas due to mining and milling activities. Saxony and Thuringia both being states of the reunified Germany are probably an area where uranium mining activities have impacted the environment more severely than in any other part of the world. Thus, the federal government of Germany allocated huge amounts of money for the rehabilitation work, a unique proceeding without precedent in mining history. In October 1995 the first international conference on Uranium Mining and Hydrogeology (UMM I) was held in Freiberg being organized by the Department of Geology at the technical University Freiberg by the support of the Saxon State Ministry of Geology and Environment. Due to the large scientific interest in the topic of uranium a second conference (UMH II) took place in Freiberg in September 1998.

Scientific notes and summaries of investigations prepared by members of the Geologic, Water Resources, and Topographic Divisions in the fields of geology, hydrology, topography, and related sciences.

Short Papers in Geology, Hydrology, and Topography ; Articles 120-179

Energy Research Abstracts

Wyoming Geological Association 34th Annual Field Conference Guidebook, Billings, Montana, September 17-21, 1983

U.S. Geological Survey Bulletin

U.S. Geological Survey Circular

The present volumes contain up-to-date, comprehensive and state-of-the art knowledge in the fields of: Mineral Prospecting and Exploration; Mining Engineering and Coal Mining; Mining Machinery Engineering; Mineral Process Engineering; Oil and Gas Well Development Projects; Petrochemical Engineering and Chemical Engineering; Metallurgical Engineering; Forestry Engineering; Storage and Processing of Agricultural Products; Energy Saving and Low Carbon Ideas; Development and Management of the Energy Industry; Environmental Protection and Circular Economy; Ecological Civilization and Low-Carbon Economy; Theory and Practice of Sustainable Development; Computer-Aided Design/Engineering. The contents will be invaluable to a wide range of environment-conscious responsible process engineers.

Descriptive Uranium Deposit and Mineral System Models This publication provides a set of systematic descriptive models for each uranium deposit type, subtype and class, using a consistent approach to summarise the same types of information for each. Each model is intended to have a standalone capability, using a tabular style that is typical of conventional mineral resource industry standards. Each deposit model includes a map showing the distribution of deposits, and grade-tonnage graphs. Collectively, these databases and models form a basis for assessing the global distribution of uranium deposits and evaluating supply-demand scenarios. With these, the IAEA can provide the capability for Member States to assess the potential of remaining -- or speculative -- uranium resources for long term supply

beyond identified resources in a consistent and reproducible manner.

Geological Classification of Uranium Deposits and Description of Selected Examples

Power Generation and the Environment

Tectonosedimentary Relations of Pennsylvanian to Jurassic Strata on the Colorado Plateau

Principles and Practice

U.S. Geological Survey Professional Paper

Natural and man-made changes in the environment create a very complex picture. This book analyzes this picture and provides snapshots of different areas of interest and to make suggestions for future work on cleaning and stabilizing the Earth's environment. Starting with conventional energy generation and moving on to renewable energies, this book analyzes and calculates their environmental impact and the lesser known aspects of their "cradle-to-grave" life cycle such as the irreversible environmental damage done during the manufacturing of solar and wind equipment and during the installation, operation, and decommissioning of large scale hydro, solar, and wind power plants.

Uranium Ore Deposits

Geological Survey Research 1969

Geological Survey Professional Papers

Proceedings of the Seventh International Geochemical Exploration Symposium

Uranium for Nuclear Power