Special Issue

Mineralogy of Shale Gas and Other Low Permeability Reservoirs

Message from the Guest Editor

Shale gas reservoirs and other low permeability rocks have become significant contributors to global hydrocarbon production in the past two decades, with shale gas contributing up to 30% of the world's natural gas supply by 2040. Shale gas production is complex because of the combination of geological processes that control the reservoir characteristics. These processes include primary depositional environment, diagenetic processes (mineral and organic), and structural processes. The mineralogy of shale gas reservoirs and other tight reservoirs is an important characteristic that governs whether a shale play will be successfully developed.

This Special Issue aims to publish papers that explore the role that primary and secondary minerals in low permeability reservoirs (shale, mudstones, siltstone, and tight sandstones) have on the development of the porosity, permeability, and geomechanics. Research that investigates the influence that the mineral composition and texture have on the geochemistry of produced water are also welcome.

Guest Editor

Dr. Gareth Chalmers School of Science, Technology and Engineering, University of the Sunshine Coast, Sippy Downs, QLD 4556, Australia

Deadline for manuscript submissions

closed (20 March 2020)



Minerals

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.4



mdpi.com/si/29535

Minerals Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 minerals@mdpi.com

mdpi.com/journal/ minerals





Minerals

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.4



minerals



About the Journal

Message from the Editor-in-Chief

Minerals welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

Editor-in-Chief

Prof. Dr. Leonid Dubrovinsky Bayerisches Geoinstitut, University Bayreuth, D-95440 Bayreuth, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Mining and Mineral Processing) / CiteScore - Q1 (Geology)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.2 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).