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Mineralogy of Shale Gas and Other Low Permeability Reservoirs

Guest Editor:

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Deadline for manuscript submissions: closed (20 March 2020)

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.









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Editor-in-Chief

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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.

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