

Geology, stratigraphy & geochemical characteristics of potential oil shale and gas shale basins of India and their prognostic resources

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Oil shale and shale gas exploration and development is a global phenomenon and India has taken major initiatives towards the exploration of these deposits. Whereas oil shale has limited resource potential (~15 million tons of in place oil), shale gas may add significantly to India's unconventional gas reserve estimates (> 60 tcf). The potential shale bearing basins of India are; Assam-Arakan, Cambay, Cauvery, Krishna – Godavari, Gondwana and Vindhyan etc. Shale gas exploration has already been initiated in Cambay and Gondwana basins by Gujarat State Petroleum Corporation and Oil & Natural Gas Corporation and the initial results are quite encouraging. Geology, stratigraphy, and shale characteristics (TOC, VR and Kerogen type) of these basins along with their shale hydrocarbon resource estimates will be presented and discussed. The R& D status of oil shale and shale gas exploration in India will also be deliberated.