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COAL GASIFICATION AND LIQUEFACTION

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ABSTRACT

The current major processes being developed for coal gasification and liquefaction will be reviewed briefly. The Bureau of Mines Hydrane process for converting coal to pipeline quality gas directly by reaction with hydrogen will be discussed in more detail. The featured topic will be the Bureau's Synthoil process which converts coal in one step into a low-sulfur, low-ash fuel oil. Coal suspended in recycled oil is propelled through a packed-bed reactor by rapid turbulent flow of hydrogen. A 1/2 TPD plant is in operation producing over 1 bbl of oil per day.