

Sawdust CO_2 가스화 특성

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CO_2 gasification of sawdust char was performed in a thermobalance reactor at high temperature. Gasification temperature was changed from 1000°C to 1400°C and CO_2 partial pressure was 0.2, 0.4, 0.6 and 0.8 atm. Three models of gas-solid reaction were applied to the reaction kinetics analysis and modified volumetric model was an appropriate model. Apparent activation energy and pre-exponential factors were evaluated and the effects of CO_2 partial pressure were examined. Produced gas was analyzed by micro gas chromatography at the time interval of 3min.