

KINETICS AND CORRELATIONS FOR PEAT HYDROLYSIS. S.A. Weil, D.V. Punwani: Inst. of Gas Technology, Chicago 60616; M.J. Kopstein: U.S. Dept. of Energy, Washington, D.C. 20545; and A.M. Rader: Minnesota Gas Company, Minneapolis 55426.

The kinetics and correlations for rate and extent of conversion of peat to carbon oxides and light hydrocarbons during hydrolysis have been extended to cover North Carolina and Maine peats. The primary variations due to feedstock characteristics can be accounted for in terms of the ultimate yield of each product species. These limiting values can be approximately estimated from the ultimate and proximate analyses of the feedstocks.

The liquid products of hydrolysis of Minnesota peat have been analyzed. They are essentially aromatic. Higher temperatures and hydrogen pressures favor the formation of the lighter fractions (i.e., BTX) both relatively and absolutely. The heavier compounds as well as phenols and pyridines are reduced with the greater severity.