

COMBUSTION OF OIL SHALE PARTICLES UNDER ELEVATED PRESSURES

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Experiments on rapid combustion of Fushun and Maoming oil shale particles (3–11 mm) were carried out in a pressurized thermogravimetric analyzer. The effects of particle diameter, temperature and pressure on combustion process were investigated. Oil shale conversion values versus time at different temperatures and pressures were obtained. Kinetic parameters of the process were determined. The overall first-order reaction model was found to fit experimental data.