

Devolatilization of Organic Wastes

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Reutilization of organic waste has been considered extensively. This study investigated the devolatilization characteristics of organic waste materials with a thermogravimetric analyzer (TGA). Sewage sludge, before and after treatment of wet air oxidation, and refuse plastic fuel (RPF) were used as waste materials. Devolatilization occurred over 210 °C. The rate of devolatilization was measured with isothermal conditions(500 -800 °C). The kinetic rate was found to dominate the devolatilization process. The activation energy ranged from 30.3 kJ/mol to 34.7 kJ/mol.