

CHARACTERIZATION OF OIL SHALE ASHES FORMED AT INDUSTRIAL-SCALE CFBC BOILERS

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Combustion conditions in boilers with circulating fluidized bed differ dramatically from those in boilers with firing of pulverized oil shale. To determine the differences in chemical, grain and phase composition of ashes taken from different technological units of boilers, the samples were analyzed using chemical, fractional and quantitative XRD methods. SEM and BET methods were implemented for surface observations and porosity measurements. The comparative physical-chemical and phase characterization of the two above-mentioned kinds of ashes is presented.

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