

THERMOGRAVIMETRIC ANALYSIS OF PRETREATED GÖYÜNÜK OIL SHALE AND ŞIRNAK ASPHALTITE

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To investigate the effect of mineral matrix on thermal degradation of Göynük oil shale and Şırnak asphaltite, their samples (initial ones and those subsequently treated with solutions of the acids: HCl, HNO₃ and HF) were studied in a thermogravimetric analyzer. Initial and HCl-washed samples showed similar degradation behavior, while HNO₃ washing affected it in both cases. Changes in organic structure, which is different for shale and asphaltite – the former being aliphatic, and the latter having aromatic character – after HNO₃ treatment affected the degradation kinetics of the samples differently, whereas the mineral matter content had no effect on it.

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