THERMAL BEHAVIOR OF KHOOT OIL SHALE IN DIFFERENT CONDITIONS

B. AVID ^{*1}, M. BORN ², B. PUREVSUREN ¹, N. UNDRAKH ¹, A. TUVSHINJARGAL ³

¹ Institute of Chemistry and Chemical Technology, Mongolian Academy of Sciences Ulaanbaatar-51, Mongolia

- ² Institute of Energy Process Engineering and Chemical Engineering, Freiberg University of Mining and Technology Reiche Zeche, D-09596 Freiberg, Germany
- ³ Engler-Bunte-Institut, Lehrstuhl für Chemie und Technik von Gas, Erdöl, Kohle, Universität Karlsruhe, Germany

The Khoot oil shale has been non-isothermally pyrolyzed in a thermogravimetric analyzer to determine the influence of temperature, heating rate and purge gas (N_2 or CO_2) employed on thermal degradation of the sample. The heating rates investigated were $10-50 \text{ K min}^{-1}$ to final temperature of 950 °C. The oil shale was also pyrolyzed in a wire-mesh reactor to determine the yield of volatile compounds. The oil shale and shale oil were characterized by size-exclusion chromatography.

^{*} Corresponding author: tel./fax 976-11-453133; e-mail *b_avid@yahoo.co.uk* and *avid-budeebazar@aist.go.jp*