

ABOUT THERMAL LOW-TEMPERATURE PROCESSING OF OIL SHALE BY SOLID HEAT CARRIER METHOD

J. KANN, A. ELENURM, I. ROHTLA *

Chemical Engineering Department
at Tallinn University of Technology
5 Ehitajate Rd., Tallinn 19086, Estonia

N. GOLUBEV, A. KAIDALOV, B. KINDORKIN

Narva Power Plants Inc.
59 Elektriijaama Rd., Narva 21004, Estonia

The method of retorting shale fines bases on the effect of ultrarapid heat transfer between polydispersed fine-grained solid substances – from high-temperature solid heat carrier (ash of the retorted oil shale) to the decomposable oil shale. The solid heat carrier method is also applied for utilization of organic liquid and solid wastes, e.g. waste oil and scrap rubber waste, etc. The process of solid heat carrier (SHC) has been developed at a commercial scale plant with a capacity of 3,000 tonnes shale per day at Oil Factory of Narva Power Plants Inc. in Narva (Estonia).

* Corresponding author: e-mail irohtla@staff.ttu.ee