30 YEARS OF THE JOURNAL OIL SHALE

The first number of the journal Oil Shale/Горючие сланцы was released in April 1984. Oil Shale appeared originally in Russian, yet the articles were equipped with short English-language summaries. English became the language of the journal in 1992.

After WW II the oil shale industry in the Baltic region was mainly aimed at generating power. In the 1980s, due to the emergence of nuclear energy, the developing oil shale industries remained in the background. In this period shale oil processing was not technically advanced.

The 1980s were a critical time for oil markets in the whole world, the USSR included. Due to the Middle East crisis crude oil prices rose above $20 for the first time. Traditional oil fields in Russia were depleted. New resources were prospected for in unpopulated wild Siberia. Therefore, one could expect a significant increase of oil production price and, hence, shale oil was considered economically important. At that time, Estonia was the leader in oil shale extraction and processing. It was just a suitable time to start issuing the relevant scientific journal.

The first issue of Oil Shale dealt with the following themes:

- oil shale as an organic raw material resource (Prof. M. Sheindlin, Moscow);
- using oil shale in Estonia (Estonian academicians A. Aarna and I. Öpik);
- developing oil shale industry in the Baltic region (a paper by the writer and a review by N. Barabaner and K. Tenno);
- perspectives of using Volga oil shales (Prof. V. Kashirsky and A. Koval, Saratov, Russia).

Other topics concerned technical problems of oil shale mining and processing, as well as its specific chemical and analytical properties. Among other things, erudite scientists K. Urov and J Gorky presented quite a new definition of oil shale: “Oil shale is a sedimentary rock containing mainly aquagenic organic matter of the Early Mesocatagenetic stage of maturation,
which is poorly soluble in low boiling organic solvents, but produces considerable amounts of liquid organic products (shale oil) by thermal decomposition”. However, the most popular was the definition which had been proposed by processing technicians: “Oil shale is a rock whose organic content can be more than 20% of oil”. Yet there was a slogan by field geologists: “Oil shale is a rock that turns matchsticks”.

In the field of oil shale processing a paper “Thermal processing of lumpy shale in gas generator” by V. Jefimov, S. Doilov, I. Rooks and R. Lööper, leading scientists of Kohtla-Järve Oil Shale Institute, appeared. The authors stated that the process they were working out allowed increasing the turnover of the gas generator from 100 to 200–220 t of oil shale per day with a 10–15% increase in shale oil yield. This process is still in use today.

The journal discussed not only Estonian oil shale. An analytical paper by geologists V. Kattai and S. Zhmur considered the composition and characteristics of oil shale from Volga and Baltic deposits. In connection with this a very comprehensive paper by S. Saluste, I. Klesment, A. Voll-Epstein and M. Spielberg dealing with the characteristics of liquid dissolution products of Estonian kukersite and Saratov and Orenburg high-sulphur shales was published. These articles would have proved advantageous in using oil shale in the Middle East today.

The above topics were treated further in the journal’s later issues. Many technological solutions, which were addressed in the first issues, have stalled after the dissolution of the Soviet Union. Several problems have re-emerged in recent years. There have appeared also new items, for example, fine oil shale processing with solid heat carrier and combusting in circulating fluidized bed, which had not been dealt with in the journal before.

Having been a pioneering journal in oil shale research field, Oil Shale of today enjoys wide international recognition. It is cited in the Science Citation Index® and the following ISI® products: SciSearch®, ISI Alerting® Services™, and Current Contents®/Engineering, Computing, and Technology. But most certainly it is contributors that make a journal really valuable and viable. Oil Shale is no exception and holds in high esteem all those contributing to it. Over the years the journal's circle of authors and research spheres covered have significantly expanded. The geography of contributions ranges from China in the east to the United States in the west.

The journal Oil Shale does its best to hold the trust earned and to continue to be the flagship in oil shale area, keeping pace with the most recent achievements in the field.

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