

Customized Program on “Energy Saving” for Russia (LUKOIL)



At the main entrance to Nippon Petroleum Refining Co., Ltd., Negishi Refinery

Following the implementation of an instrumentation seminar for LUKOIL last fiscal year in Moscow, JCCP has again held a seminar on “Energy Saving in Refineries” this fiscal year for LUKOIL, under the Customized Program-Overseas



*At the seminar venue:
Mr. Alexander Kobalenko, Chief Engineer at
the Nizhny Novgorod Refinery (center)*

(CPO). After conducting the 4-day seminar at LUKOIL’s Nizhny Novgorod Refinery in mid-September 2008, JCCP also provided training in Japan on the same topic under the Customized Program-Japan (CPJ), about two weeks later, in early October. Since we understood that the same members would basically be participating in both the programs in Russia and Japan, we paid careful attention to designing the two programs so that the subjects do not overlap. To our relief, the two programs were completed successfully.

1. Seminar in Russia

Nizhny Novgorod is Russia’s fourth-largest city, located approximately 500 km east of Moscow, as well as the capital of the province of the same name and the center of a prosperous automotive industry. The Volga River flows through the city and adds to its picturesque beauty, along with the

famous Kremlin fortress. The city was known as Gorky during the Soviet era, and was a closed city to protect the status of a military plant that was situated there. Today, it is home to a large LUKOIL refinery boasting a capacity of 340,000 b/d, which was chosen as the venue of the seminar.

The seminar was conducted by Messrs. K. Kamijyo and S. Satake, lecturers from JCCP's Training Department, with the participation of Mr. Hisato Aoyama from JGC Corporation and Mr. Naohiro Sugie from Idemitsu Kosan Co., Ltd.'s Chiba Refinery, in the capacity of experts. Seminars for a Russian audience always require Russian interpretation, and the amount of time that can be allotted to lectures is half of the available time. With this awareness, the members of the Japanese team held preliminary meetings twice in Japan prior to making their trip to Russia, to carefully select contents for the seminar based on mutual understanding of each other's lecture ideas, and thereby ensure efficiency and productivity of the seminar. On the Russian side, the cooperation of International Business Relations (IBR), a company that has acted as an intermediary between LUKOIL and JCCP, and LUKOIL's active support, were instrumental in moving forward the necessary



Seminar scene

preparations, from creating a detailed schedule of the seminar, to pre-sending and printing text materials. Furthermore, the Japanese members were met at the airport and escorted to their hotel immediately upon arriving in Russia, and were assured that all the necessary arrangements have already been made, in regard to setting up the seminar venue and securing a reliable interpreter.

Mr. Alexander Kobalenko, Chief Engineer at the Nizhny Novgorod Refinery, delivered a greeting during the opening ceremony, and the seminar proceeded according to the schedule shown in the table below.

Seminar schedule in Russia

Sept. 15 (Mon)	AM	Opening ceremony Introduction of lecturers Overview of JCCP activities
	PM	Alternative energies to oil, energy conservation in refineries
Sept. 16 (Tue)	AM	Energy saving in refineries 1 (operational improvement, small investments) Overview of pinch technology
	PM	Issues in global warming Energy saving activities at LUKOIL
Sept. 17 (Wed)	AM	Energy saving refineries 2 (large investments) Japan's energy policies
	PM	New technologies for energy saving in refineries
Sept. 18 (Thu)	AM	Optimization of refinery utilities, refinery IPP Energy saving using computers
	PM	Energy saving evaluation and promotion framework Q&A session Closing ceremony



*At the Nizhny Novgorod Refinery:
Japanese members in refinery uniform*

The participants were extremely attentive and focused all through the seminar, and fully attended each day's lectures, precisely from 10 a.m. to 4 p.m. A friendly atmosphere began to evolve in the auditorium as the seminar progressed, and the participants began to ask more and more questions and engage in lively discussions. The focus of their interest seemed to be on the lectures on specific implementation examples of energy conservation, latest energy saving technologies, and promoting energy conservation. A closing ceremony was held on the fourth and last day of the seminar, and JCCP completion certificates were presented to all 25 participants.

On the day after completion of the seminar, LUKOIL staff kindly arranged for the Japanese team to visit the Nizhny Novgorod Refinery and tour its various plant facilities, including the newly installed visbreaking unit. The following week, the Japanese team visited the LUKOIL Head Office in Moscow, where they reported on the successful implementation of the seminar to executive members of the Personnel Affairs and Education Departments, and exchanged frank views on future cooperation.

2. Training in Japan

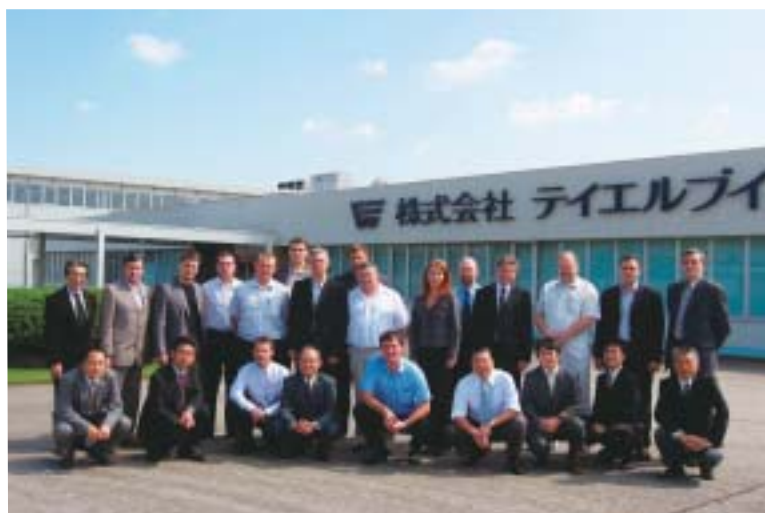
Two weeks after the Japanese seminar team's visit to the LUKOIL Head Office in Moscow, a



At Toa Oil Co., Ltd., Keihin Refinery

Training schedule in Japan

Oct. 7 (Tue)	Opening ceremony, Orientation, Japan's oil industry, LUKOIL presentation
Oct. 8 (Wed)	Discussion on pinch technology
Oct. 9 (Thu)	Onsite training: Toa Oil Co., Ltd., Keihin Refinery, Mizue Factory
Oct. 10 (Fri)	Onsite training: Nippon Petroleum Refining Co., Ltd., Negishi Refinery
Oct. 11 (Sat)	Day off
Oct. 12 (Sun)	Energy saving using computers <Travel to Kyoto>
Oct. 13 (Mon; Holiday)	Field trip in Kyoto
Oct. 14 (Tue)	Onsite training: TLV Co., Ltd., Kakogawa Head Office and Plant
Oct. 15 (Wed)	Onsite training: Continuation of above <Travel to Tokyo>
Oct. 16 (Thu)	Recent energy saving technologies
Oct. 17 (Fri)	Summary, Closing ceremony



At TLV Co., Ltd., Kakogawa Plant

15-member study group from LUKOIL arrived in Japan. All members, excluding the leader of the group, Mr. Fedor Zimin, Deputy Director of Nizhny Novgorod Refinery, were members of the seminar just held in Russia, and attended the program in Japan amid a relaxed and friendly atmosphere.

The program proceeded according to the schedule shown on the opposite page, and spanned a period of 11 days. Different topics from those covered in the seminar in Russia were selected for classroom lectures, and more visits to offsite facilities were included in the program compared to other study tours in Japan. In addition to two refineries, the participants also visited a steam-trap manufacturer and received in-depth training over 1 1/2 days, in consideration of the use of an interpreter, where conventional programs only allot one day. The practical training was offered over an ample amount of time, and rated highly among all participants.

3. Future Issues

As a basic principle, JCCP provides CPO and CPJ programs in combination under the same training theme, to JCCP counterparts in oil-producing countries. However, the recent implementation of

a CPO and CPJ series only two weeks apart, was quite rare. Generally speaking, providing training in Japan soon after participants receive sufficient advance knowledge in a seminar held in their country is expected to facilitate implementing efficiency and learning effectiveness. In the case of the recent programs, moreover, the members of the seminar held in Russia and the members who attended training in Japan were mostly the same, so from the standpoint of one who has organized and implemented both programs, the effort seemed easier than other combination programs.

As was the case with the group from LUKOIL, most members from Russia and nations such as Kazakhstan that have formed from the former Soviet Union tend to find communicating in English slightly difficult. Therefore, it would probably be a good idea for these countries to participate more in CPO and CPJ programs with the assistance of an interpreter, than in JCCP regular courses. In this respect, we believe that the recent programs have provided a good step in the right direction.

Lastly, we would like to thank everyone who has supported the successful implementation of the two programs, for their generous time and cooperation.

<by Shinichi Satake, Training Dept.>