



JCCP NEWS

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Topics

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Ceremony Held in Commemoration of "Collaboration Between Kuwait and Japan in Celebration of KISR/KNPC/JCCP Joint Projects and Other Activities Related to the Oil Sector"



Ceremony venue

Kuwait and Japan have long maintained friendly relations since the establishment of Kuwait Institute for Scientific Research (KISR), a national research laboratory in Kuwait. JCCP has so far received approximately 300 Kuwaiti participants to its training courses since its establishment in 1981, and in recent years, technical cooperation projects implemented in

Kuwait have been producing steady results, particularly in the areas of heavy oil processing technologies, technologies for inspection and management of oil refinery facilities, and environment-friendly technologies. Based on those results, JCCP had been seeking an opportunity to further strengthen ties between the two countries, together with the oil industry in Kuwait, when



VIP room



(From the left) H.E. Shaikh Ali Al-Jarrah, Minister of Oil, Mr. Hiroyuki Yamamoto, Chargé d'Affaires of Japan, and Mr. Mikio Kojima, Executive Director of JCCP

it received a proposal by Kuwait to organize a ceremony in celebration of JCCP technical cooperation projects and other JCCP-Kuwait joint projects that have been implemented to date in the field of science and technology. Thus a commemorative ceremony came to be held jointly by JCCP, KISR, and Kuwait National Petroleum Company (KNPC).

1. Overview of the Ceremony

On May 26, 2007 (Sat.), JCCP proudly hosted the JCCP-Kuwait commemorative ceremony, in cooperation with KISR and KNPC, in celebration of JCCP activities that have been implemented in Kuwait over the years. The ceremony was

held at the Radisson SAS Hotel in Kuwait, in the Al Hashemi II Hall, a majestic conference room designed in the image of a huge *dhow* ship (see Note 1). Almost all prominent figures in Kuwait's oil industry attended the ceremony, including H.E. Shaikh Ali Al-Jarrah, Minister of Oil, Mr. Saad Al-Shuwaib, Acting Deputy Chairman & CEO of Kuwait Petroleum Company (KPC), Mr. Sami Fahed Al-Rushaid, Chairman & Managing Director of KNPC, and Dr. Nader Al-Awadhi, Acting Director General of KISR. From Japan, 39 members attended the ceremony, including Mr. Hiroyuki Yamamoto, Chargé d'Affaires of Japan, Mr. Kazuki Hondou, Director in the Ministry of Economy, Trade and Industry (METI), representatives

from companies implementing JCCP-Kuwait projects, Mr. Mikio Kojima, Executive Director of JCCP, and Mr. Junichi Hatano, Managing Director of JCCP. With a total attendance of as many as 150 guests, the ceremony was an extremely grand and formal event that demonstrated the strong and friendly relationship between the two countries.

Before the opening of the ceremony, the guest dignitaries were formally received in a stately VIP room prepared specially for them, and a reception was held for other guests in an elegant hall, brilliantly illuminated by a sparkling chandelier. After enjoying a moment to take in the joyful atmosphere of the ceremony, all guests moved into the main venue, a grand ballroom



H.E. Shaikh Ali Al-Jarrah, Minister of Oil



Mr. Hiroyuki Yamamoto, Chargé d'Affaires of Japan



Mr. Sami Fahed Al-Rushaid, Chairman & Managing Director of KNPC



*Dr. Nader Al-Awadhi,
Acting Director General of KISR*



Mr. Kazuki Hondou, Director of METI



Dr. Meena A. Marafi, Manager of KISR

which easily accommodated a seating arrangement for 200. The ceremony opened with speeches delivered by guest dignitaries. Following H.E. Al-Jarrah, Minister of Oil, the other dignitaries each took the podium in turn. They reconfirmed the friendly relationship of technical cooperation between Kuwait and Japan, emphasized the significance of JCCP activities, and expressed their hopes and expectations of building stronger cooperative ties in the future. The ballroom filled with applause after each speech, as the audience acknowledged the achievements of technical cooperation projects based on JCCP initiatives and strengthened expectations of future collaboration. In this respect as well, the ceremony had great meaning.

Following the speeches, Dr. Meena A. Marafi, Manager of KISR, used slides to give an overview of scientific and technological cooperation projects jointly implemented by Japan and Kuwait to date, focusing on training courses, technical cooperation projects, and science and technology seminars and symposiums. She reaffirmed KISR's commitment to addressing oil-related issues confronting Kuwait today in cooperation with Kuwaiti oil companies, and concluded her presentation by expressing great expectations in JCCP activities as an international scheme of cooperation that would contribute to further strengthening relationship between Kuwait and Japan.

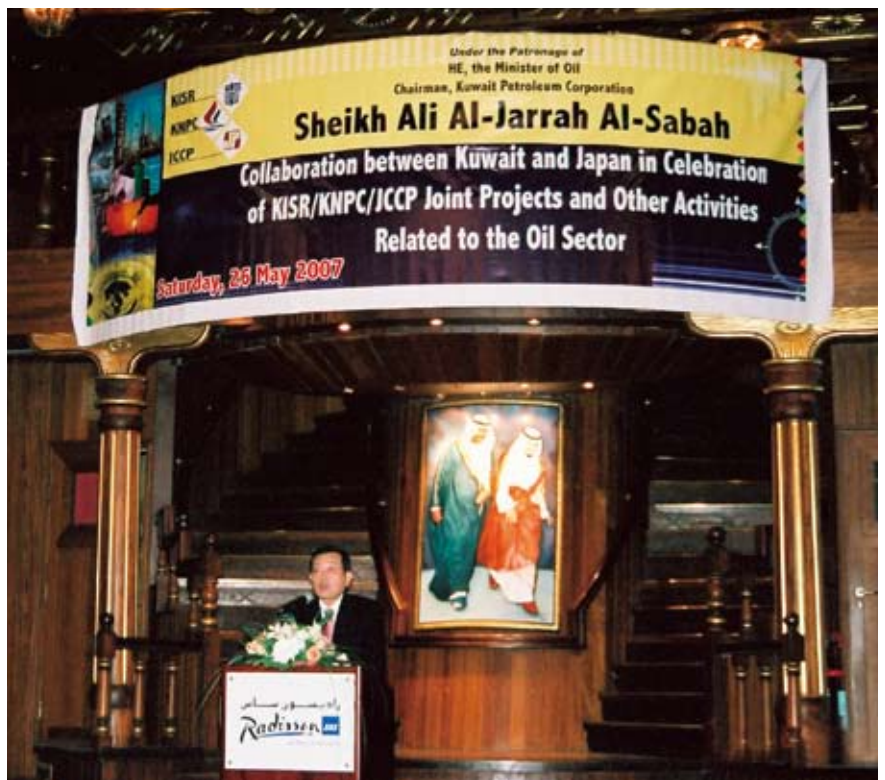
Toward the end of the ceremony, the Kuwaiti Ministry of Oil, KNPC, and KISR exchanged commemorative gifts with the Embassy of Japan in Kuwait, METI, and JCCP, then proceeded to another room where banquet preparations were made. A slide show introducing JCCP activities was shown in the background, as people took the opportunity to enjoy each other's company, and the ceremony eventually drew to a successful close.

News of the ceremony appeared in the following morning's edition of several local newspapers. The media

exposure not only promoted deeper understanding and recognition of JCCP activities in Kuwait, but it also indicated Kuwait's large expectations of JCCP activities. In response to those expectations, JCCP will make greater efforts than ever before to maintaining the friendly relationship with Kuwait, through training courses and technical cooperation projects.

2. Achievements of JCCP Projects in Kuwait

JCCP has implemented the following



Mr. Mikio Kojima, Executive Director of JCCP

technical cooperation projects with Kuwait, mainly in the oil downstream sector, with the cooperation of KISR, KNPC and Kuwait Oil Company (KOC).

- 1) Development study of residue hydrocracking to distillate in KNPC ARDS (see Note 2) units
- 2) Study on hydrogen corrosion countermeasures for oil refining facilities in Kuwait
- 3) Hydroprocessing of residual oil of Kuwait heavy crudes for the production of low-sulfur fuel oil
- 4) Direct upgrading process study of Kuwait crude oils
- 5) Study on large-scale production of soil sulfur amendments and its implementation
- 6) Research on effluent water treatment facility for crude oil

The results of the above projects have been highly evaluated by Kuwait, and some of the technologies have been introduced to new refineries in Kuwait.

With respect to training courses, JCCP has received approximately 300 participants from Kuwait Petroleum Company (KPC), KNPC, and KISR. Having acquired sufficient knowledge through the courses, many of them play an important role in Kuwait's oil industry today.

JCCP is also working to strengthen human interactions by holding seminars and regular forums of information exchange.

Based on these achievements, JCCP will continue to implement efficient



Exchanging of commemorative gifts



Banquet venue

and effective activities in Kuwait, with an aim to strengthening its significant relationship with Kuwait.

Finally, JCCP would like to thank KISR, KNPC, guests who attended the ceremony, and JCCP affiliates, for all

their cooperation and effort in making the ceremony a great success, and would like to ask for everyone's continuous support of JCCP activities.

*<by Yuji Ishii,
Technical Cooperation Dept.>*

Notes:

1. A dhow is a traditional Arab wooden sailing ship. It has a large lateen on one or two masts, and is assembled with cord and tar, without using any nails. It was, and is still, primarily used along the coasts of the Arabian Peninsula, India, and East Africa, though many are now outfitted with a motor.
2. ARDS = direct desulfurization unit



The dhow ship at the Radisson SAS Hotel

Mr. Fayadh Hassan Nima from Iraq's Ministry of Petroleum Visits Japan

The JCCP VIP Invitation Program provides a framework for JCCP to hold policy dialogues with leaders of oil-producing countries, build relationships based on trust, and promote understanding of JCCP activities. Due to various circumstances, the program had been dormant since June 1999, but this spring, JCCP has re-implemented the program for the first time in eight years, and invited Mr. Fayadh Hassan Nima, Director General of Studies, Planning and Follow-up of the Ministry of Oil, Iraq, to Japan.

Mr. Nima holds an extremely important position in the Ministry of Oil, Iraq, as the Director General responsible for planning the reconstruction of the country's oil industry, even amidst the continuing state of unrest in the domestic situation. JCCP had previously requested Mr. Nima's participation in the 2005 and 2006 JCCP International Symposiums as a guest speaker. Mr. Nima had generously accepted both times, but the state of affairs in Iraq at those times prevented him from actually making the trip to Japan. This time, however, JCCP's long-sought visit by Mr. Nima has finally been realized.

Mr. Nima arrived in Japan on April 4, while the cherry blossoms were still in bloom. On the following day, he met with Mr. Mikio Kojima, Executive Director of JCCP, and Mr. Junichi Hatano, Managing Director of JCCP, and discussed prospects for rehabilitating the oil industry in Iraq. Mr. Nima emphasized that the development of excellent managers, engineers, and other human resources is a priority issue that can only be effectively addressed with JCCP's cooperation. In response, the JCCP leaders reaffirmed the significant role of Iraq to Japan as



Mr. Fayadh Hassan Nima, Director General of Studies, Planning and Follow-up of the Iraqi Ministry of Petroleum (center), with Mr. Akihiko Tenbo, President of Idemitsu Kosan, Co., Ltd. (second from left) and Mr. Akira Idemitsu, President of JCCP (second from right)

an oil-producing country, and promised to support reconstruction in Iraq to the greatest extent possible.

After receiving a brief introduction of JCCP activities, Mr. Nima toured JCCP's training facilities. He expressed strong interest in JCCP training activities because, as he mentioned earlier, the development of outstanding human resources in management and in the engineering field is a particularly pressing issue in the rehabilitation of Iraq's oil industry. The JCCP leaders have proposed the arrangement of another meeting to discuss the framework of future cooperation, based on JCCP training programs.

In the afternoon of the 5th, Mr. Nima delivered a presentation entitled "The Present and Future of Iraq's Oil Industry." The lecture was attended by H.E. Ghanim Al-Jumaily, Ambassador

of the Republic of Iraq in Japan, and some 50 visitors from oil-related companies in Japan, despite the short notice.

Mr. Nima's presentation offered a good glimpse into the general state of the oil industry in Iraq, which had remained largely unknown to Japan, and provided a basis upon which to explore possibilities of future cooperation by JCCP, as well as by Japan's oil industry as a whole.

On the 6th, Mr. Nima met with Mr. Yoshiyuki Iwai, Director-General of the Natural Resources and Fuel Department of the Agency for Natural Resources in the Ministry of Economy, Trade and Industry, Mr. Akira Idemitsu, President of JCCP, and Mr. Akihiko Tenbo, President of Idemitsu Kosan, Co., Ltd. He also visited and exchanged views with leaders of other oil companies and organizations, such as the Japan Oil,



With Mr. Mikio Kojima, Executive Director of JCCP (right), and Mr. Junichi Hatano, Managing Director of JCCP



With Mr. Yoshiyuki Iwai, Director-General of the Natural Resources and Fuel Department of the Agency for Natural Resources, METI

Gas and Metals National Corporation (JOGMEC) and Nippon Petroleum Refining Co., Ltd.'s Negishi Refinery.

As Mr. Nima's visit coincided with the visit to Japan by Iraq's Prime Minister Nouri al-Maliki and Oil Minister Hussain al-Shahristani, on April 9 and 10 he joined Prime Minister al-Maliki and his entourage in attending a conference with leaders of the Japanese government.

Though his visit spanned only a short ten days, Mr. Nima built a foundation for future JCCP activities in Iraq, as well as strengthened relations between Iraq and Japan through the series of meetings he held with leading figures in Japan.

To JCCP, Mr. Nima's visit was also significant in that it reaffirmed the important role of the JCCP VIP Invitation Program in strengthening relations between Japan and oil-

producing countries. JCCP would like to take this opportunity to thank everyone who have cooperated with the program and generously took the time to meet with Mr. Nima, despite the short notice.

We hope Mr. Nima's recent visit will act as a catalyst for building stronger bonds of cooperation between Iraq and Japan.

<by Koichi Yokosuka, Operations Dept.>



H.E. Ghanim Al-Jumaily, Ambassador of the Republic of Iraq in Japan, attending Mr. Nima's presentation



Presentation by Mr. Nima

ES/ST Promotion Team Visits Kuwait and Qatar

From April 22 to 27, 2007, two JCCP members, Mr. Shigeyoshi Takahashi, Training Dept., and Mr. Koji Hori, Operations Dept., visited Kuwait National Petroleum Company (KNPC) and Qatar Petroleum (QP) to promote Expert Service (ES) and Study Tour (ST) programs. As a result of discussions, JCCP and KNPC reached an agreement to implement two ES programs and one ST program, and JCCP and QP, one program each, during FY2007. Although the GCC countries are high-priority counterparts of JCCP activities, only one ES/ST program has been held in the GCC countries as a whole, since FY2000. Therefore, the agreements with KNPC and QP represent extremely significant achievements. Details of the background to the recent visits and meetings are presented below.



*At the KNPC Head Office, HR Department:
Mr. Waleed Al-Hamad, Assistant Manager (back row, center);
Mr. Ali Abdulla, Team Leader (back row, left); and
Ms. Ghaida Al-Awadhi, Senior CD Specialist (front row, right)*

1. Background

As introduced in *JCCP NEWS* issue No. 96, Mr. Mikio Kojima, Executive Director of JCCP, visited Kuwait and Saudi Arabia in January 2007, and met with Mr. Sami Fahed Al-Rushaid, Chairman & Managing Director of Kuwait National Petroleum Company (KNPC), and Mr. Abdulaziz F. Al-Khayyal, Senior Vice President, Refining & International of Saudi Arabian Oil Company (Saudi Aramco). In the meetings, Mr. Kojima proposed the implementation of tailor-made courses that would contribute to further strengthening the cooperative relationship between JCCP and the two companies, and received full agreement from the two leaders. In fact, Mr. Kojima and Mr. Al-Rushaid agreed to dispatch a JCCP working team to KNPC to hold further discussions by April 2007.

The objective of the recent visits

made by the ES/ST promotion team was to hold working level negotiations regarding the proposal. With respect to Saudi Aramco, however, negotiations were postponed to a later opportunity, because the refinery staff were not available, due to shutdown maintenance (SDM). Qatar was selected as another destination, as it is one of JCCP's priority countries, and has been actively participating in JCCP programs for many years.

2. Overview of Discussions at KNPC

A meeting was held at the KNPC Head Office on April 24, with the attendance of 15 KNPC members, including Mr. Waleed Al-Hamad, Assistant Manager, Mr. Ali Abdulla, Team Leader, and Ms. Ghaida Al-

Awadhi, Senior CD Specialist, from the Human Resources Department, and 10 representatives from KNPC's three refineries. Having reviewed JCCP's proposal in advance, they welcomed the promotion team with strong interest. They listened to the team's explanation of the background and purpose of the visit and details of the proposal with an open mind, and responded with forward-looking questions and opinions.

During the meeting, the KNPC side stated that it would need to make adjustments of priorities among KNPC's requirements. However, owing to the hardworking efforts of KNPC personnel in the HR Department, the following programs have been selected for implementation.

- <ES> Energy Saving in Refinery: October 2007

- <ES> Advanced Process Control; October to November 2007
- <ST> Energy Saving in Refinery; February to March 2008

It can be said that the basic agreement made between Mr. Kojima and Mr. Al-Rushaid in January provided strong impetus not only to the success of the meeting, but to the attendance of as many as 10 representatives from three refineries, despite the fact that the meeting was held in the middle of the day on a weekday.

3. Overview of Discussions at QP

On April 26, the JCCP promotion team departed from their hotel at 7 a.m., and headed for the Mesaieed Refinery, the sole refinery in Qatar, escorted by Mr. Hamad Al-Thani, Head of Professional Training, and Dr. Barak Yehya, Assistant Manager, Training Strategies, from the QP Career Development. Five officers, including Mr. Nasser Al-Emadi, Head of Operations, welcomed the team to the refinery.

After receiving a presentation on the overview of the Mesaieed Refinery, the JCCP team explained the purpose of their visit and details of JCCP's proposal. As the refinery members had already reviewed the proposal in advance, they responded positively to the team's explanations of tailor-made courses. As a result, the following courses have been



At the QP Training Center, Career Development Department: Mr. Abdulla Al-Sahlawi, Corporate Training Manager (center right); Mr. Hamad Al-Thani, Head of Professional Training (second from left); and Dr. Barak Yehya, Assistant Manager (left)

selected for implementation.

- <ES> Environmental Pollution Control; December 2007
- <ST> Maintenance Management; October to November 2007

After the meeting at the Mesaieed Refinery, the JCCP team visited the QP Training Center in Doha, where JCCP's counterpart department, the Career Development Department, is located. The team met with Mr. Abdulla Al-Sahlawi, Corporate Training Manager, and first reported the results of the discussion held at the refinery. They then exchanged views concerning JCCP's renewed policies based on the Activity Implementation Guidelines and its strategies to place stronger emphasis on tailor-made courses, and received Mr. Al-Sahlawi's kind understanding.

4. Summary

Thanks to the cooperation of the staff of both KNPC and QP, the ES/ST promotion team achieved positive results from discussions with the two companies. Among the successful achievements were that JCCP's new policy of providing tailor-made courses obtained the understanding of the priority countries; that specific details of the proposal JCCP had sent to the companies in advance were reviewed favorably; and that relevant parties were able to discuss important matters face-to-face. Hereafter, JCCP hopes to create opportunities to also hold direct discussions with other priority countries.

Lastly, it should be mentioned that the JCCP team was accompanied throughout the trip by Mr. Takashi Kikuchi, Advisor to the Oil and Gas Technical Strategy and Planning Group at Japan Oil, Gas and Metals National Corporation (JOGMEC). To respond to the diversifying needs of oil-producing countries, JCCP feels that cooperation between organizations in the oil upstream and downstream sectors will become increasingly important, and hopes this first undertaking will lead to stronger ties between JOGMEC and JCCP.

<by Koji Hori, Operations Dept.>



Meeting at the KNPC Head Office

International Joint Research Program Receives Noguchi Memorial Award of Japan Petroleum Institute (JPI)

As part of JCCP's international research program, Phase II of the joint research project on Development of High-Severity Fluid Catalytic Cracking (HSFCC) Technology (demonstration study) was implemented with Nippon Oil Corporation (NOC), King Fahd University of Petroleum and Minerals (KFUPM), and Saudi Arabian Oil Company (Aramco), from 2000 to 2005. A 30 b/d pilot plant has been constructed in Saudi Arabia and test-operated, to verify and examine the effects of the technology.

The project was successfully completed, through the long-term test operation of the pilot plant. Having obtained good prospects for basic data acquisition, the project has provided huge impetus toward the construction of a commercial plant.

The project was awarded the FY2006 JPI Noguchi Memorial Award in recognition of its substantial contribution to promoting cooperation and friendship with oil-producing



Award recipients and relevant parties

countries through the development of oil refining technologies and other technical development efforts.

The award ceremony was held on May 17, following the JPI's annual general meeting. The award went to JCCP, NOC, KFUPM, and Aramco.

Representatives from Saudi Arabia who attended the ceremony included Dr. Sulaiman S. Al-Khattaf, Director of the Research Institute of KFUPM, Mr.

Sami M. Bukhari, Representative for Far East & Oceania Area of Aramco, and Dr. Stephane Kressman, Director of Research & Development of Aramco.

Further R&D results are expected, for practical application to the HS-FCC Scale-up Study, a JCCP technical cooperation project that is being implemented by Saudi Arabia and Japan since FY2005.

*<by Minoru Horike,
Technical Cooperation Dept.>*



JPI general meeting



*Recipients of the JPI Noguchi Memorial Award:
(from the right) Dr. Sulaiman S. Al-Khattaf, Director of the Research Institute of KFUPM; Mr. Sami M. Bukhari, Representative for Far East & Oceania Area of Aramco; Mr. Hiroji Adachi, General Manager of Technical Service Department of NOC; and Mr. Junichi Hatano, Managing Director of JCCP*

Contract Signing Ceremony with Saudi Aramco in the Kingdom of Saudi Arabia Project on Advanced Hydrocracking Catalyst Technology for Saudi Arabian Heavy Feed

On March 10, 2007, a ceremony was held to commemorate the signing of a contract for a project on "Advanced Hydrocracking Catalyst Technology for Saudi Arabian Heavy Feed," which JCCP will be implementing in Saudi Arabia with the Research & Development Center of Saudi Arabian Oil Company (Saudi Aramco) as its counterpart. The ceremony was held at the Saudi Aramco Research & Development Center, with the attendance of representatives from Saudi Aramco, JCCP, and Nippon Oil Corporation, the company that will be implementing the project.

The project is a major milestone marking the first signing of a contract for a project between Saudi Aramco and JCCP, and a harbinger of a new era in the cooperative and friendly relationship between the two organizations. Dr. Omar S. Abdul-Hamid, Manager, Research & Development Center, and Mr. Junichi Hatano, Managing Director of JCCP, agreed to devote their efforts to further strengthening and sustaining



At the Research & Development Center of Saudi Aramco

their relationship of mutual cooperation and friendship.

In the project, joint studies will be made with the prospect of ultimately conducting a demonstration of the advanced and effective utilization of the hydrocracking unit. The key components of the project will include a feasibility study on the future introduction of high-performance catalysts for heavy feed, a catalyst performance simulation,

and a pilot evaluation test for optimum catalyst design.

After the signing ceremony, the JCCP delegation paid a courtesy call on Mr. Khalid G. Al-Buainain, Vice President, Engineering Services of Saudi Aramco, and held a meaningful exchange of views on the enhancement and continuation of cooperation between Saudi Aramco and JCCP.

*<by Keikoh Sasaki,
Technical Cooperation Dept.>*



Contract signing ceremony:

Mr. Minoru Horike, General Manager of JCCP's Technical Cooperation Dept. (second from left), Dr. Omar S. Abdul-Hamid, Manager, Research & Development Center (second from right)



Courtesy call on Mr. Khalid G. Al-Buainain, Vice President, Engineering Services:

Mr. Hatano (left), Mr. Al-Buainain (center), Dr. Abdul-Hamid (right)

Contract Signing Ceremony with KFUPM in the Kingdom of Saudi Arabia Verification Study for Aromatics Production Process



Mr. Junichi Hatano, Managing Director of JCCP, signing the contract



Dr. Mohammad Budair, Vice Rector for Applied Research, signing the contract

On March 12, 2007, a ceremony was held to commemorate the signing of a contract between King Fahd University of Petroleum & Minerals (KFUPM) and JCCP for "Verification Study for Aromatics Production Process," which JCCP will be implementing in Saudi Arabia with KFUPM as its counterpart. Dr. Mohammad Budair, Vice Rector for Applied Research at KFUPM, and Mr. Junichi Hatano, Managing Director of JCCP, signed the contract at the oil refining and petrochemical

institute of KFUPM in the presence of representatives from KFUPM, JCCP, and Nippon Oil Research Institute Co., Ltd., the company that will be implementing the project.

From April 2003 to March 2007, KFUPM and JCCP have implemented a technical cooperation project on creating a framework for aromatics production processes, in two phases. As a result, a suitable research environment for aromatics has been created through the development of necessary facilities

and technical transfers, to facilitate production increases in response to the growing global demand for aromatics. The new project will work toward the future demonstration of the catalyst and process that have been developed under the new research environment for the production of aromatics.

The project will be implemented over a period of two years, from April 1, 2007, to March 31, 2009. With the participation of Nippon Oil Research Institute Co., Ltd. and Nippon Oil



*Courtesy call on H.E. Dr. Khaled S. Al-Sultan, Rector of KFUPM:
H.E. Dr. Al-Sultan (left); Mr. Hatano (second from left);
Mr. Michiro Matsubara, Executive Director of Nippon Oil
Research Institute (second from right)*



*Mr. Hatano presenting a commemorative gift
to H.E. Dr. Al-Sultan*

Corporation, a conceptual design will first be created of a commercial-scale plant for C8 aromatic compound production, based on the C9 aromatic trans-alkylation process, which has been jointly developed with KFUPM using Japanese technologies to suit production conditions in Saudi Arabia. The design will then be used to study the commercial production of C8 aromatics.

The facilities installed at KFUPM will also be used to examine other processes in detail, to comparatively evaluate them with the process developed in this project.

After the ceremony, the JCCP delegation visited H.E. Dr. Khaled S. Al-Sultan, Rector of KFUPM. Mr. Hatano asked for His Excellency's understanding and cooperation in the future course of

the project, as well as in strengthening the friendly ties between KFUPM and JCCP. In return, His Excellency acknowledged KFUPM's significant relationship with JCCP, and expressed high hopes for further cooperation between the two organizations.

*<by Keikoh Sasaki,
Technical Cooperation Dept.>*

Topics

Contract Signing Ceremony with Bandar Abbas Oil Refining Company in Iran Improvement of the Wastewater Treatment System



*Signing of the contract:
Mr. Aminollah Eskandari, Managing Director of BORC,
and Mr. Junichi Hatano, Managing Director of JCCP*



*(From front row center to the right)
Mr. Eskandari, Mr. Hatano, and Mr. Hotta*

On April 15, Bandar Abbas Oil Refining Company (BORC), a company affiliated with National Iranian Oil Refining and Distribution Company (NIORDC), and JCCP held a contract signing ceremony at the refining company for a project on "Improvement of the Wastewater Treatment System at the Bandar Abbas Oil Refining Company in Iran."

The ceremony took place amid a friendly and relaxed atmosphere, with the attendance of approximately ten BORC members, including Mr. Aminollah

Eskandari, Managing Director, Mr. Alireza Amin, Refining Director, and a number of other executives, and eight members from Japan, including Mr. Junichi Hatano, Managing Director of JCCP, Mr. Yasushi Hotta, President of Cosmo Research Institute, the company that will be participating in the project, and several other members.

At the beginning of the ceremony, Mr. Eskandari discussed BORC's active management policies, in reference to the following matters.

- BORC has one of the most strategic

supply bases for domestic demand, and is poised to become the largest exporter in Iran in the near future, once it completes its plan to increase production capacity.

- BORC has begun to process ultra-heavy Iranian crude since last year.
- In the future, BORC plans to construct two new refineries (a condensate refinery and an ultra-heavy crude refinery) in the vicinity. With a total capacity of approximately 1,000,000 BPSD, it will become a major oil

refining center for Iran and the Middle East region.

At the same time, Mr. Eskandari described BORC's environment-oriented policy, as follows.

- BORC is located on the coast of the Gulf. Therefore, preventing marine pollution is of primary concern, and it considers proper wastewater treatment system to be a vital component of the refinery.

Mr. Eskandari believes that the expertise and experience of the JCCP project team will play a significant

role in dramatically improving the wastewater treatment system at BORC, and expressed his appreciation and hopes for the JCCP project team's arrival and its cooperation in the project.

On the Japan side, Mr. Hatano and Mr. Hotta promised to support the project to the greatest extent possible through JCCP technical cooperation, so that the project may be completed successfully. They also expressed their hopes that the project will bring Iran and Japan closer together in a relationship of mutual cooperation.

After the presentations, Mr. Eskandari and Mr. Hatano signed the contract and closed the ceremony.

Mr. Eskandari and other members of BORC warmly received the JCCP team to the ceremony with gracious words of appreciation and welcome. The JCCP team took this as an indication of their huge expectation in the project, and renewed their commitment to providing their best technical cooperation effort to ensure the success of the project.

*<by Hitoshi Hirokawa,
Technical Cooperation Dept.>*

Signing Ceremony Held in Oman for Technical Cooperation Project with Sultan Qaboos University

On June 12, 2007, a ceremony was held for the signing of an agreement on a new technical cooperation project on "Treatment and Utilization of Oilfield Produced Water in Oman," to be implemented with Sultan Qaboos University (SQU) over a period of three years. The grand ceremony was held in the conference room of the vice chancellor of SQU, with the attendance of H.E. Keiji Omori, Ambassador of Japan in Oman.

It so happened that the ceremony took place in the wake of Cyclone Gonu, the strongest cyclone to hit Muscat, the capital of Oman, in 60 years. Damage from the disaster was clearly evident throughout the city, and desperate efforts were being made to restore vital lifelines. Despite this situation, SQU warmly welcomed the Japanese delegation and successfully carried out the ceremony, as planned.

At the opening of the ceremony, Ambassador Omori expressed Japan's strong intention to share its extensive experience in various fields, including hurricane countermeasures, through



*Professor Amer bin Ali Al-Rawas, Deputy Vice Chancellor, and Mr. Junichi Hatano, Managing Director of JCCP, signing the MOU:
(Back row) H.E. Dr. Saud Nasser Ali Al-Riyami, Vice Chancellor (second from left); Dr. Ali Saud Al-Bemani, Deputy Vice Chancellor (third from left); H.E. Keiji Omori, Ambassador of Japan in Oman (third from right); and Dr. Yoshiro Yashiro, Director of the Institute of Technology of Shimizu Corporation (far right)*

technical cooperation. In response, H.E. Dr. Saud Nasser Ali Al-Riyami, Vice Chancellor of SQU, expressed his appreciation of technical cooperation Oman has received from JCCP and other Japanese sources to date, and responded to Ambassador Omori's

message by reaffirming his wish to continue strengthening SQU's cooperative relationship with Japan.

Next, Mr. Junichi Hatano, Managing Director of JCCP, expressed his heartfelt gratitude to SQU for holding the signing ceremony despite the state of affairs in

the aftermath of the cyclone disaster. He then reflected back on the history of cooperation between SQU and JCCP, which began back in 1996 when H.E. Dr. Mohammed bin Hamad Al-Rumhy, present Minister of Oil & Gas, first initiated a joint project with JCCP, and renewed JCCP's commitment to



Scene of the signing ceremony

further deepening its relationship with SQU through implementation of the new project. Following Mr. Hatano's speech, Dr. Yoshiro Yashiro, Director of the Institute of Technology, Shimizu Corporation, thanked SQU for its continued cooperation, and made an appeal concerning future cooperation.

After the opening speeches, Professor Amer bin Ali Al-Rawas, Deputy Vice Chancellor for Postgraduate Studies & Research of SQU, and Mr. Hatano signed the agreement.

The project will examine the treatment and utilization of oilfield-produced water, which amounts to approximately three times the volume of crude oil

production in Oman. It aims to address the groundwater contamination problem caused by the disposal of water from oilfields, a problem that is a principal concern in southern Oman today, and to secure water resources for irrigation by recycling oilfield-produced water.

Through the ceremony, SQU and JCCP reaffirmed the significance of strengthening ties between Oman and Japan through JCCP's technical cooperation.

News of the signing ceremony was broadcast on Oman TV and reported in newspapers, demonstrating the large expectations placed on the SQU-JCCP technical cooperation in Oman.

<by Nobutaka Sumikawa and Wataru Maekawa, Technical Cooperation Dept.>

Topics

FY2006 Survey on Downstream Trends in Oil-Producing Countries

"Social Changes and Future Technical Cooperation in Middle East Oil-Producing Countries"

by Mr. Kyo Kusumoto (ex-Managing Director of Idemitsu Kosan Co., Ltd.), Leader, Study Group for Promotion of Technical Exchange Programs with Oil-Producing Countries

Today, the Middle East oil-producing countries are witnessing a sudden rise in crude oil prices on the one hand, while confronting population growth and other significant social changes on the other. In the Fiscal 2006 Survey on Downstream Trends in Oil-Producing Countries, the Study Group for Promotion of Technical Exchange Programs with Oil-Producing Countries sought to clarify the changes that the oil refining industry is facing in the Middle East oil-producing countries and the future course of JCCP technical cooperation, in relation to the social changes that are taking place in the region. Here we asked Mr. Kyo Kusumoto, then Managing Director of Idemitsu Kosan Co., Ltd., who acted as leader of the study group, to summarize the results of the survey as a wrap-up of the FY2006 technical exchange program.

Please refer to page 29, "Overview of the FY2006 Survey on Downstream Trends in Oil-Producing Countries," in this edition.

1. Background and Objectives of the Study Group

The price of crude oil has been steadily rising since the beginning of the 21st century, and has finally exceeded 60 US dollars per barrel. It will probably continue to rise hereafter, and eventually, management of crude supply and demand balance may become even more difficult than it is today. Given this situation, there is apt to be

greater demand for JCCP cooperation in strengthening cooperative relations between producers and consumers for stability of crude oil supply in the future.

JCCP has celebrated its 25th anniversary last year. Since its establishment, it has received more than 16,000 people from oil-producing countries to Japan, and dispatched some 5,000 Japanese experts to oil-producing countries. JCCP has consistently worked

to enhance technical exchange programs with oil producing countries, and must continue to fulfill its role as a "window of technical exchange" between Japan and oil-producing countries, in the future.

To keep up with the changes that are occurring in oil-producing countries and reflect them in technical exchange programs, JCCP has launched the Study Group for Promotion of Technical Exchange Programs with Oil-Producing Countries in 2000 to conduct annual

surveys of technical needs in oil-producing countries. By way of closing the fiscal 2006 survey, I would like to present an overview of our findings.

2. Approach to the Survey

The fiscal 2006 survey focused on understanding changes in refineries in relation to social changes in seven countries in the Middle East region (Saudi Arabia, Kuwait, Qatar, UAE, Oman, Iran, and Iraq). Although the survey specifically targeted the above-mentioned seven countries, our findings commonly apply to all oil-producing countries in the region.

Because refineries are a country's most important source of energy supply, the role of refineries necessarily reflects social changes in the country. By studying refinery changes in conjunction with social changes, we believe we can better understand a country's technical needs. At the same time, it would also allow JCCP to upgrade its technical exchange program to better meet those needs.

3. Survey Findings

1) Social Changes in the Middle East Oil-Producing Countries

In the Middle East oil-producing countries, the population is growing at an extremely rapid pace. This population growth is the single most salient social

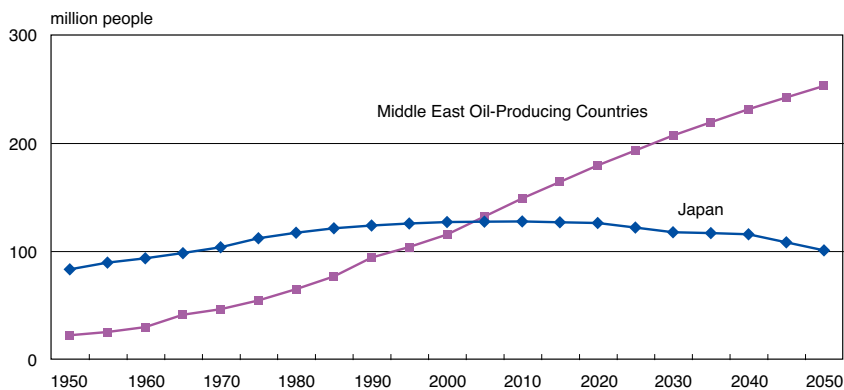


Fig. 1 Population in the Middle East Oil-Producing Countries and Japan (Source: Sekai Kokusei Zue, 2002/03)

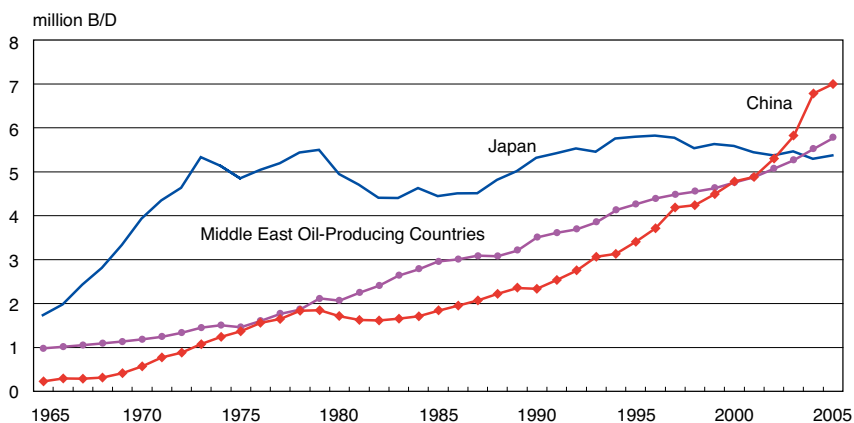


Fig. 2 Oil Consumption Trends in the Middle East Oil-Producing Countries and China (Source: BP Statistical Review of World Energy, 2006)

change in those countries. The region is home to 130 million people today, but this figure is expected to grow to 250 million or more by 2050 (Fig. 1). The nationalization of oil resources following the first and second oil crisis has dramatically improved the living

environment of residents and triggered a rapid increase in population. Today, people under the age of 25 make up half the population, and are expected to account for a larger percentage in the future. Refineries in the Middle East region therefore bear an important responsibility to provide continuous supplies of energy to support the growing population.

2) Changes in Refineries

Refineries in the Middle East oil-producing countries are expected to make the following changes, in response to the above-mentioned social changes.

(1) Measures to respond to growing demand for oil products

The Middle East oil-producing countries are generally regarded as oil exporting countries, but due to their increasing population, they are gradually becoming major oil-consuming countries,



Members of the Study Group for Promotion of Technical Exchange Programs with Oil-Producing Countries (Mr. Kyo Kusumoto, study group leader, third from the left in the front row)

comparable to China. Moreover, demand for oil products is expected to continue growing (Fig. 2).

Given this situation, refineries are rushing to install new crude oil distillation units and secondary refining facilities. For example, as Dr. Ibrahim Mishari, Vice President for Marketing & Supply Planning, Saudi Aramco, discussed at the JCCP International Symposium held last December, there are plans to create 1.6 million barrels per day of additional refining capacity in Saudi Arabia alone, which corresponds to roughly a quarter of all announced plans for worldwide refinery capacity increases.

In terms of oil product, the increase in demand for gasoline is most prominent, and can be expected to increase even more, as the younger generation born after the oil crisis reaches their 20s and 30s and begins to drive their own automobiles. To increase gasoline production, such processes as bottom oil cracking processes, reformers, and hydrodesulfurization processes, are being built in rapid succession. As these processes incorporate advanced technologies, refineries will be expected to enhance their technical capabilities in regard to processes, catalysts, operations, as well as maintenance.

(2) Initiatives for Financial Independence

Refineries in the Middle East oil-producing countries employ a system, in which they buy crude oil from their parent company at international prices, then sell products again at international prices to the parent company. As the oil industry is the most important industry in these countries, the refineries must work to create strong companies with global competitive strength, to support the growing younger population. In the effort to strengthen their companies, refineries take their profit structure to one that is compatible with global standards.

As refineries in the Middle East and in Japan operate based on the same profit structure, the refineries are also



Fig. 3 Sohar Refinery in Oman, home of one of the world's largest heavy oil cracking unit (completed in April 2007) (Photo courtesy of Sohar Refinery Company)

striving toward a similar goal. Just as Japan is aiming to develop refineries with high added-value, such as heavy oil cracking capability and integration of oil and petrochemical operations, in conjunction with energy conservation and cost-reduction activities, it is becoming increasingly important for Middle East oil-producing countries to also implement similar efforts.

(3) Creation of Job Opportunities

The people in the Middle East countries face a major social challenge in initiating the above-mentioned changes themselves. As the oil industry is the priority industry in these countries, it is expected to provide employment opportunities to youths who will soon be entering the workforce, and to provide opportunities to enhance their industrial technology through actual work experience to as many people as possible. Various measures need to be taken, such as to allow nationals to take on jobs that had previously been undertaken by foreign engineers or outsourced to foreign countries, and to start up new businesses that would provide employment to the younger generation.

4. Expectations of JCCP

Through our visits to several

countries in the Middle East and interviews with a number of refinery management personnel, we have learned that refineries in the region are primarily concerned about developing “people” who are capable of transforming the oil industry. It is natural for a country to want to entrust the challenge to citizens of the country, from project managers to operators working in the field, and this is where JCCP can help.

As mentioned at the beginning, for the past 25 years JCCP has worked to enhance technical exchange programs with the Middle East oil-producing countries, and must continue to upgrade its efforts as a “window of technical exchange” between Japan and those countries. The refineries of the Middle East have acquired the highest level of technical skills by global standards, so their expectations of Japan are closely related to expectations for advanced technologies from JCCP.

The future course of JCCP’s technical exchange program will continue to be examined in fiscal 2007, based on the results of this survey. Meanwhile, JCCP will make every effort to respond to the expectations of oil-producing countries as a “window of technical exchange,” and would like to ask all member companies, as well as oil-producing countries, for their continued support and cooperation.

Implementation Report on the Online Analyzer Course (TR-1-07)

1. Course Establishment Policies

Online analyzer systems have been gaining attention in recent years as a tool for quality management and environmental issues. The Online Analyzer course therefore focused on an overview of online analyzer systems, control technologies used in conjunction with analyzers, and maintenance of online analyzers. In addition to

conventional analyzers, the course also covered the basics of soft sensors, which provide one of the functions of model predictive control, and practical training on dead time compensation (DTC) control of advanced process controls (APC). Specifically, the main themes of the course were:

- (1) Case studies of online analyzers
- (2) Maintenance of online analyzers

- (3) Soft sensors
- (4) DTC control training

2. Participants

Twenty-three applicants from 12 countries applied for the 12-member course, plus several more applicants who inquired about the course after the closing date of applications. Twelve members were selected according to the selection criteria, but due to a couple of last-minute cancellations, 10 participants from 9 countries attended the course.

The majority of the participants were in their 30s or 40s, as shown in the table. The group was highly focused, and offered much input to the course.

3. Program Structure

The course was roughly divided into three programs, based on the aforementioned course themes: (1) lectures at JCCP, (2) visits to refineries and manufacturers of analyzers (on-site training), and (3) hands-on software training.

Overview of participants

Country	Organization	No. of participants	Age
Indonesia	LEMIGAS	1	42
Libya	NOC	1	43
Myanmar	MOE	1	41
Nigeria	NNPC	1	50
Pakistan	NRL	1	52
Vietnam	PETROVIETNAM	1	28
Saudi Arabia	ARAMCO	2	42, 32
Yemen	MOMR	1	39
Oman	ORC	1	37
Total: 9 countries		10 participants	Average age: 40.6



At the DKK-Toa Tokyo Engineering Center



Training in control theories and DTC control



At the Idemitsu Kosan Chiba Refinery



At the Cosmo Oil Chiba Refinery

(1) Lectures at JCCP (lectures by JCCP lecturers)

1) Overview of online analyzers

This lecture provided an overview of online analyzers, the main subject of the course. It also discussed the objective of the subsequent practical training session and other basic components of the course. Topics covered in this lecture included introductions to various types of analyzers, typical analyzers, analyzers commonly used in refineries, near-infrared analyzers and other relatively new types of analyzers, and a study of soft sensors, which are quality estimators that use model predictive control software to predict analytical values.

2) Control theories

As part of the study of control theories, this lecture discussed PID control, which forms the basis of process controls, and reviewed control technologies that are required of all

instrumentation engineers. Participants studied various features of PID control using PC software.

3) Dead time compensation (DTC) control using analyzers

In process controls using an analyzer, time lags are inevitable, because “the sampling line is long,” or “analysis takes time.” This lecture session offered training in DTC control, as a method of reducing the time lag.

(2) On-site training

1) On-site training at refineries

In this course, two sites provided on-site training: the Chiba Refinery of Idemitsu Kosan Co., Ltd. and the Chiba Refinery of Cosmo Oil Co., Ltd.

• *Idemitsu Kosan Chiba Refinery*

Participants were introduced to online analyzers and soft sensors used at the refinery. In an off-site area of the refinery, they observed an old analyzer

that is still in operation, and were impressed with the well-maintained state of all equipment at the refinery. In the introduction to the refinery’s soft sensors, the participants took notice in the fact that the convenience of soft sensors is predicated on large volumes of data.

• *Cosmo Oil Chiba Refinery*

Cosmo Oil’s Chiba Refinery also uses a number of online analyzers, mainly for process controls. Seeing how even old analyzers are still in use at the refinery, the participants were once again impressed with the careful maintenance and advanced management of equipment there, as they were at Idemitsu Kosan’s Chiba Refinery.

2) Practical training at manufacturers of analyzers

In this course, the participants received on-site training at three companies that manufacture analyzers, namely DKK-Toa Corporation,



On-site training at DKK-Toa



At Yokogawa Electric



At Horiba



Presentation of the results of a review exercise on soft sensors

Yokogawa Electric Corporation, and Horiba, Ltd.

- *DKK-Toa Corporation, Tokyo Engineering Center*

DKK-Toa has a long history in the manufacture of online analytical instruments, and supplies many products to refineries in Japan. It also delivers products to Idemitsu Kosan and Cosmo Oil, two oil companies the participants visited during this course. The participants were introduced to explosion-proof online analyzers and various other types of analytical instruments. They were also taken through a step-by-step description of the production process while they observed actual operations at the plant, and appeared to appreciate the first-hand experience in the production of analyzers. Some participants raised questions concerning details of maintenance techniques, and obtained precious information and knowledge from plant members.

- *Yokogawa Electric Corporation Headquarters and Mitaka Plant*

As a comprehensive instrumentation manufacturer, Yokogawa Electric has been manufacturing analyzers for many years. Therefore, lectures focused mainly on near-infrared analyzers, and intrigued the participants with meticulous details. An introduction to a software program for soft sensors, which

the company is currently developing, and of the latest distributed control system (DCS) that has been developed by the company from the perspective of a comprehensive instrumentation manufacturer, also captured the interest of the participants.

- *Horiba Ltd.*

Horiba is a manufacturer of analytical and measurement instruments for use in various fields. Among the many types of instruments it manufactures, it mainly introduced environmental analyzers and industrial gas analyzers to the participants. During the tour of the Horiba plant, participants appeared impressed with the wide variety of analytical and measurement instruments being manufactured, from portable types to types having a large housing.

(3) Software training (lectures by external lecturers)

A lecturer from Yamatake Corporation gave a two-day lecture on another type of analyzer called soft sensors. The first day of the lecture covered soft sensor theories, and the second day was spent on practical training. Soft sensors are a type of model predictive control that is generally difficult to understand at first, but the participants appeared to gain a good grasp of the concept. In fact, in the presentation session held after the

practical training on the second day, all participants presented outstanding results to the review exercises they were given, and engaged in active discussions.

4. Impressions

Perhaps owing to the fact that the course content was strongly relevant to their duties, the participants rated the course very highly, and seemed to have learned much from it. As a lecturer of regular courses, I always hope that at the end of each course, all participants take back with them at least one thing special. I believe the participants of this course, like all courses, have done so.

It is often the case with online analyzers that they are only perfunctorily inspected for maintenance, despite the importance of meticulous maintenance. Or, so much thought is given to details of their maintenance that the details obscure the actual meaning of maintaining analyzers in good condition. However, as the participants have comprehended the necessity of maintenance, I am certain they will hereafter utilize online analyzers to the fullest.

Lastly, I would like to thank all external lecturers and relevant personnel of facilities we visited, for their kind contribution to the successful completion of this course. On behalf of JCCP, I would like to extend my deepest appreciation, and ask for your continued support.

<by Yoshiaki Tozawa, Training Dept.>

Report on the Cooperation with Training Centers Program —Iran, Oman, and UAE—

Following a visit to Kuwait and Qatar by a JCCP ES/ST Promotion Team in April, a four-member JCCP mission visited Iran, Oman, and UAE, under the Cooperation for Training Centers program (TC-21-07), from May 24 to June 4, 2007. The mission, consisting of Mr. K. Yokosuka, General Manager, Operations Department, Mr. T. Esumi, Lecturer, Training Department, Mr. K. Hirano, General Manager, JCCP Middle East Office, and Ms. M. Kitahara, Assistant Manager, Operations Department, paid visits to the National Iranian Oil Refining & Distribution Co. (NIORDC), Shiraz Oil Refining Co. (NIORDC SORC), National Iranian Oil Co. (NIOC), Oman Refinery Co. (ORC), and Abu Dhabi Oil Refining Co. Takreer (Takreer).

Prior to visiting the three countries, the members attended a ceremony that was being held in Kuwait to commemorate the “Collaboration between Kuwait and Japan in Celebration of KISR/KNPC/JCCP Joint Projects and Other Activities Related to the Oil Sector.” They met with JCCP graduates who had also attended the ceremony, and took the opportunity to learn about their subsequent activities and achievements.

Taking a slightly different approach from past TC programs, the members of this particular program exchanged views with relevant organizations, focusing on specific needs and issues in each country. From this perspective, they promoted Expert Service (ES) and Study Tour (ST) programs, explained and clarified questions in relation to regular courses, resolved problems brought to their attention, mutually reaffirmed the significance of building a close relationship between JCCP



With JCCP graduates at the Shiraz Refinery in Iran

training program coordinators and their counterparts in oil-producing countries, and held follow-up meetings with JCCP graduates.

1. Iran

(1) Visit to the NIORDC

Head Office

On May 28, the JCCP mission visited NIORDC and met with Mr. H. Ghorbani, Director of Training & Admin. Affairs, Mr. Hassibi, Foreign Assignments Representative and counterpart for JCCP activities in Iran, and five other officers in charge of training.

At the outset of the meeting, Mr. Yokosuka gave a detailed overview of ES and ST programs, which were the main subjects of the mission. In response, the NIORDC side expressed strong interest in receiving a training program for human resources management (HRM), in particular, because NIORDC is aiming to privatize its organization within the next five years. As a result of discussions, NIORDC and JCCP agreed to implement an ST program on HRM in February 2008. As productivity

improvement and human resources development are pressing issues for privatization, JCCP intends to support NIORDC, with a focus on those areas.

On May 29, the mission paid a courtesy call on Mr. Mohammad Zali, Director of Refining Affairs, but Mr. Zali was away on urgent business that required his immediate attention. Instead, the members met with Mr. A. Jowshan, Deputy Director of Refining Affairs, who had participated in a JCCP International Symposium 16 years ago and expressed his gracious appreciation of JCCP activities.

(2) Visit to NIOC

On May 28, the JCCP mission visited the NIOC head office and held a meeting with Mr. S. M. A. Khatibi Tabatabai, Vice Executive Director, and three other NIOC officers. Up to now, NIOC has been applying to JCCP regular courses via JCCP's counterpart at NIORDC, but the organization has also been seeking a direct channel to JCCP. Therefore, with the approval of NIORDC, the mission members visited NIOC to explain the requirements, method of application,

and other guidelines for participating in JCCP-initiative courses, as well as the role expected of a JCCP counterpart. When the members suggested its participation in a future marketing course, the NIOC side responded with great interest in applying for the course, which is scheduled to be held this autumn.

(3) Visit to the Embassy of Japan in Iran

On May 27, the mission paid a courtesy call on Mr. Hidetoshi Ishizawa, Second Secretary at the Embassy of Japan, located in Tehran. Mr. Ishizawa was still new to his post in Iran, but was fully acquainted with JCCP activities. Nevertheless, the JCCP members elaborated on JCCP's relationship with Iran based on training programs, and obtained Mr. Ishizawa's further approval. Mr. Ishizawa, on the other hand, provided valuable insight into the political, economic, and social situations in Iran today, and gave an updated overview of circumstances surrounding Iran.

(4) Follow-up Meeting at NIORDC SORC (Shiraz Refinery)

On May 30, the JCCP mission visited the Shiraz Refinery to hold a follow-up meeting with JCCP graduates. A large number of JCCP graduates assembled in an impressive conference room, equipped with state-of-the-art facilities, to welcome the JCCP mission. The members were proud to learn that



At the NIORDC Head Office

Mr. Shahrokh Khosravani, Managing Director, and many of the executives were JCCP graduates themselves, and that other JCCP graduates have applied their JCCP experience to their work and risen to important positions in the organization. Their underlying understanding and respect of JCCP activities contributed to making the follow-up meeting especially constructive and meaningful.

In his speech, Mr. Khosravani gave high praise to JCCP operations, and expressed his appreciation, as well as his expectations, of JCCP's continuous relationship with SORC. He also indicated that the refinery has introduced the 5S system and has developed a greenbelt around the refinery. Other executives gave their views on environmental management, quality management, and HSE (health, safety and environment), as issues of immediate concern in the refinery.

Other JCCP graduates, after uniformly thanking JCCP and sharing memories of their experience in Japan, voiced their future expectations of JCCP, such as for the establishment of a course on electric power and the need for improved English proficiency.

After the meeting, the mission members toured the refinery. The refinery had suffered tremendous damage and lost nearly 20 employees during the Iran-Iraq War that occurred in 1980. However, it has admirably recovered from the devastation, and the sight of the well-maintained refinery today, surrounded by abundant greenery that belies its location in the midst of a desert, duly impressed the JCCP members.

In regard to ES/ST programs, SORC agreed to the JCCP mission's proposal to implement a program during the first half of fiscal 2008. The two organizations will discuss and finalize details of the program by this coming November.



With Mr. Hidetoshi Ishizawa, Second Secretary (left end), at the Embassy of Japan in Iran



Exchange of views at the Shiraz Refinery; Mr. Shahrokh Khosravani, Managing Director (center)



Courtesy visit to the ORC Head Office



With officers of the HR & Admin. Div. at the Takreer Head Office

2. Oman: Overview of Meetings at ORC

On June 2, the JCCP mission visited the ORC head office, located in Muscat on the same grounds as its refinery, and met with Mr. Salim A. N. Al-Barwani, Manager, HRD & Training, and officers in charge of training and human resources. The ORC executives explained that human resource development is a priority issue for ORC today, because the company is planning a merger with Sohar Refinery Co. (SRC) in the near future, as a means to improve operating efficiency. About two years ago, as many as 94 operators from ORC participated in JCCP training programs in Japan (member company courses), and these operators are now playing central roles in operations at ORC's new refinery, which was completed last September.

Mr. Barwani, having served many years as a counterpart for JCCP training activities in Oman, as well as participated in a JCCP International Symposium in the past, is an understanding supporter of JCCP activities. Therefore, he immediately expressed strong interest in ES and ST programs, after listening to the JCCP mission's presentation. The mission also paid a courtesy call on Mr. Masoud S. Al-Msalmy, General Manager, HR/Admin. & PR, to thank him for ORC's regular participation in this fiscal year's training courses, in response to a suggestion made by Mr.

Mikio Kojima, Executive Director of JCCP, when he visited ORC this past February. As ORC is also planning to participate in a JCCP Program Seminar (TCJ) this year, JCCP is hopeful that its increasing participation will lead to an even deeper understanding of JCCP activities.

In Muscat, the mission members found the striking contrast between the beautiful white buildings and the imposing presence of the classic fortresses especially impressive, against the backdrop of the deep blue sea and sky. Soon after returning to Japan, however, the members learned of the cyclone that brought disaster to Oman. JCCP prays for the safety of the people of Oman and the quick restoration of the country.

3. UAE: Overview of the Meeting at Takreer

On June 3, the JCCP mission visited Takreer. They met with Mr. Ahmed Mohamed Al Gattan, Manager, Training & Career Development Dept., and officers in charge of human resources and training, to discuss ES and ST programs. The Takreer side expressed its wish for a five-day ES program on the *kaizen* system developed by Toyota Motor Corporation, but in regard to ST programs, some members indicated that Takreer cannot afford to send many employees to Japan all at once, and would therefore like to focus

on participating in regular courses instead. They appeared to have a good understanding of JCCP regular courses, and were of the opinion that regular courses are extremely beneficial, in that they allow participants from different countries to interact with each other, and provide an ideal opportunity for participants to become familiar with Japanese history and culture.

In regard to the JCCP International Symposium, the Takreer side was in favor of JCCP's holding of the next symposium in February, because October marks the beginning of the new fiscal year in UAE, and the couple of months before and after October are the busiest time of the year for Takreer.

One of the members of the meeting, Mr. Anwar A. Mutawa, Senior Training Officer, had participated in a training management course in the past, and is now in charge of handling applications to JCCP courses. He has deep ties to JCCP, and plans to participate in the JCCP Program Seminar in July.

As already mentioned, this TC program adopted a different approach from that of previous TC programs, and focused on holding meetings on issues specific to each country. This shift in policy proved to be highly significant, as it allowed the JCCP mission to hold effective meetings with relevant organizations, and concentrate on addressing their immediate concerns and needs. Moreover, JCCP was able

to obtain opinions and views directly from the organizations through face-to-face discussions, and JCCP training program coordinators were able to get to know their counterparts in those

organizations in person, to strengthen their relationships of mutual trust. We believe these achievements will facilitate future cooperation activities between JCCP and the organizations visited.

Lastly, the mission members would like to thank everyone who warmly welcomed them and contributed their time and effort to making the mission possible.

<by Masumi Kitahara, Operations Dept.>

Participant's Voice



Human Resource Management

(TR-5-07: May 15 – June 1, 2007)

Mr. Ghassan A. Al-Khunaizi (Saudi Aramco / Saudi Arabia)

On behalf of the participants of the Human Resource Management course (TR-5-07) representing 12 oil-producing countries, I would like to express our deepest thanks and appreciation to the JCCP Executive Director and all staff members for the opportunity to gain a comprehensive and concrete perspective of Japan's people, its history and traditions, as well as the country's lively business environment and its unique human resource management (HRM) culture.

Thanks to JCCP, we have been fortunate to experience the generosity and hospitality of the Japanese people. We are especially grateful to our course coordinators, Messrs. Akio Hoshino, Haruhide Hayabe, and Yasuo Tabei, who have devoted much care and attention to us. We have also received warm and friendly welcome from the companies that we have visited during the course, namely JGC Corporation, Nippon Oil Corporation, Catalysts & Chemicals Ind. Co., Ltd., Nippon Oil Corporation's Mizushima Refinery, Cosmo Oil Co., Ltd.'s Sakaide Refinery, and the Ueno Kosan Group.

The three-week course was well-organized, and offered a good balance of lectures on HRM, group activities, technical field trips, and cultural outings. Through the activities, we have gained valuable insight into the Japanese HRM system, which has strongly supported Japan's economic development through the years. We have learned that the system today uniquely supports not only conventional work values as represented by the lifetime employment system, but also the more modern entrepreneurial approaches to business, and that it has always maintained high standards in taking care of individual employees, who are any company's most important asset. As HR professionals in our respective companies, we realize that the concept of lifetime employment is unique to Japan and may not necessarily

be compatible with performance-oriented employment, which is a socially defined value in many countries. Yet, the knowledge we have gained of the Japanese HRM system has no doubt broadened our perspectives in addressing future issues in capacity development and maintenance, and in redefining the long-standing issue of the relationship between employees and the workplace.

We have also learned that tacit knowledge drives Japanese businesses to a large degree, as opposed to explicit knowledge, which is the principal concept governing more globalized businesses today. While it is a traditional concept, tacit understanding is found in many other aspects of modern Japanese society, sometimes in amazingly subtle ways. This realization has helped us reaffirm our values of tacit knowledge in our respective countries, as well as its possible application to the HR field.

In addition to the practical benefits, another major benefit of the course was the opportunity to get to know, and share experiences with, participants from 12 oil-producing countries, over an ample period of three



At the Cosmo Sekiyu Sakaide Refinery

weeks. The scope, depth, and duration of the course allowed us to hold insightful and meaningful exchanges with each other, which would not have been possible in a fast-paced conference or technical seminar. Consequently, we learned not only about the Japanese HRM system and its issues and trends, but also about the HR practices and attitudes in the oil-producing countries represented by the course participants, and have acquired numerous ideas to address HR challenges that we continue to face on a day-to-day basis.

In Hiroshima, we learned first-hand, how the Japanese people have overcome one of the most tragic experiences

faced by mankind, through their unrelenting efforts and strong commitment to restoring their community, the environment, and world peace. Today, the Hiroshima atomic bomb dome stands as a proud symbol of the Japanese people's unparalleled discipline and love of life.

We are proud to say that this course has opened our eyes to the world, and has marked the beginning of a new stage in the development of our HR practices. We are deeply grateful for this precious experience, and would like to say *Domo Arigato Gozaimashita* to everyone at JCCP.



Diagnostic Techniques and Maintenance for Rotary Machinery

(TR-8-07: June 5 – 22, 2007)

Mr. Bader Al-Jazzaf (KNPC / Kuwait)

I am honored to have this opportunity to represent the participants of TR-8-07 "Diagnostic Techniques and Maintenance for Rotating Machinery," in expressing our gratitude to all the staff of JCCP for their excellent organization of the course and kind cooperation during our three-week stay in Japan.

Since our arrival in Japan, we have received only kindness and friendliness from the Japanese people wherever we went. The JCCP staff members, in particular, were extremely considerate and caring, and at the same time, meticulous about being organized and punctual.

At the beginning of the course, we received an introductory lecture on Japanese culture and language. This knowledge served us well throughout the course. Despite some communication obstacles and cultural differences between the Japanese people and most of the participants, we managed to overcome them and enjoy the wonderful experience that the course offered.

The presentation and discussion of case studies by participants was an outstanding feature of the course. It gave us an opportunity to share our experiences, as well as learn about maintenance techniques from different perspectives.

We have gained a tremendous amount of valuable information and knowledge, not only from the presentations given by JCCP and external lecturers, but also at all of the places we visited, which included Kashima Oil Co., Ltd., Mitsubishi Heavy Industries, Kobe Steel Ltd., Shinkawa Sensor Technology, Inc., Showa Yokkaichi

Sekiyu Co., Ltd., and NTN Corporation. We also deepened our understanding of Japan and its history by visiting the traditional cities of Hiroshima and Kyoto.

Once again, on behalf of all the participants of this course, I would like to extend my appreciation to all JCCP staff for their time and effort in organizing such a meaningful and successful course. I would also like to give special thanks to our coordinators, Miyawaki-san and Higashi-san, for attending to us during the entire three weeks. Please keep up the good work. We wish good luck to you all.

In closing, please allow me to express our appreciation in our native languages. *Shukran, Terimakasih, Moteshakeram, E Se Pupo, Imena, Shukriya, Muchas Gracias*, and finally, *Arigato Gozai-mashita*.



At the Hiroshima Peace Memorial Park

JCCP Regular Courses Completed in April – June 2007

TR-1-07 Online Analyzer

Period: April 3 – April 18, 2007
No. of participants: 10
Country of participants: Indonesia, Libya, Myanmar, Nigeria, Oman, Pakistan, Saudi Arabia, Vietnam, Yemen



TR-2-07 Upgrading Processes of Heavy Oil

Period: April 3 – April 20, 2007
No. of participants: 11
Country of participants: Bahrain, Indonesia, Libya, Mexico, Myanmar, Nigeria, Pakistan, Vietnam, Yemen



TR-3-07 Maintenance Management

Period: April 3 – April 18, 2007
No. of participants: 12
Country of participants: Indonesia, Libya, Mexico, Myanmar, Oman, Pakistan, Saudi Arabia, Thailand, Yemen



TR-4-07 Essential Petroleum Refining for Process Engineers

Period: May 8 – May 25, 2007
No. of participants: 12
Country of participants: Bahrain, Colombia, Indonesia, Libya, Mexico, Myanmar, Nigeria, Pakistan, Papua New Guinea, Yemen



TR-5-07 Human Resource Management

Period: May 15 – June 1, 2007
No. of participants: 17
Country of participants: Indonesia, Iran, Kuwait, Libya, Malaysia, Mexico, Nigeria, Pakistan, Qatar, Russia, Saudi Arabia, Thailand



TR-6-07 DCS Fundamentals and Applications

Period: May 15 – June 1, 2007
No. of participants: 13
Country of participants: Bahrain, Indonesia, Iran, Malaysia, Mexico, Qatar, Russia, UAE, Yemen



TR-7-07 Refinery Management

Period: June 5 – June 19, 2007
No. of participants: 15
Country of participants: Colombia, Indonesia, Iran, Kuwait, Nigeria, Qatar, Saudi Arabia, UAE



TR-8-07 Diagnostic Techniques and Maintenance for Rotary Machinery

Period: June 5 – June 22, 2007
No. of participants: 17
Country of participants: Indonesia, Iran, Kuwait, Mexico, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia, UAE, Yemen



Total: 107 participants



Exchange of an MOA for the Project on “Environmental Survey at the Esfahan Refinery and Its Surroundings in Iran”

On April 18, 2007, Esfahan Oil Refining Company (EORC) in Iran and JCCP exchanged a Memorandum of Agreement (MOA) on the “Environmental Survey at the Esfahan Refinery and Its Surroundings in Iran,” a study that JCCP will be implementing in Iran, with EORC as its counterpart. The signing and exchanging of the MOA took place at the Esfahan Refinery, with the participation of representatives from Goodwill Engineering, Inc. (GWE), the company that will be conducting the project.

Mr. Manuchehr Aghanejad, Managing Director of EORC, warmly welcomed the JCCP team, saying he is very familiar with JCCP, and expressed his honor of receiving JCCP cooperation for the project. He also expressed his appreciation for JCCP’s regular training courses and technical cooperation activities. In regard to GWE, Mr. Aghanejad indicated that has reviewed GWE’s achievements in environmental surveys, and requested quick survey results at the Esfahan Refinery.

The Esfahan Refinery began operations in 1980 as one of the oil refineries of the National Iranian Oil Refining and Distribution Company (NIORDC). Today, it operates at its

full production capacity of 370,000 b/d, in response to robust demand for oil products in Iran. However, as close to 30 years have passed since it has begun refining operations, there had been increasing environmental concern about its operations. This concern has triggered the development of this project.

This fiscal year, JCCP will conduct

a preliminary survey to assess the general state of environmental concern around the refinery, and will examine appropriate countermeasures as the first step toward formulating environmental measures that would enhance the harmonious coexistence of the refinery with its surrounding community.

<by Toru Moriyama,
Technical Cooperation Dept.>



Exchanging the MOA with Mr. Manuchehr Aghanejad,
Managing Director of EORC

Fifth Scientific Council Meeting with UAE University Held in Japan

On May 14, 2007, JCCP and UAE University (located in Al Ain, UAE) co-sponsored the Fifth Scientific Council Meeting in Japan, at JCCP Headquarters.

JCCP has been implementing

technical cooperation programs in UAE since FY2001, with UAE University as its counterpart. Two research programs have been carried out between FY2001 and FY2004, and two new programs have been launched in FY2005. The two

current programs aim to apply Japan’s advanced industrial technologies to the treatment of wastewater and acid gas in UAE’s oil and gas industries.

Abu Dhabi Oil Refining Company (Takreer) is engaging in the wastewater

treatment program, and Abu Dhabi Gas Liquefaction Limited (ADGAS) in the acid gas treatment program, as partners from UAE's industrial sector. With their cooperation, JCCP and UAE University are striving to implement practical research activities.

From Japan, Nippon Oil Research Institute is taking part in the implementation stage of both programs, and in the acid gas treatment program, Dr. Masaaki Teramoto of Kobe University is providing research guidance and assistance, at the request of JCCP.

The Scientific Council Meeting is held biannually, alternating the venue between Japan and UAE, and provides a forum where all principal members from both countries gather to discuss

the progress of ongoing technical cooperation programs. As the fourth such meeting was held last November in Al Ain, UAE, this fifth meeting was therefore held in Japan, with the attendance of eight researchers from UAE.

The members reported on the progress of the programs that have been made during FY2006, discussed implementation plans for FY2007, and verified that the programs are making steady progress.

In the wastewater treatment program, a process simulation will be conducted on all wastewater treatment facilities, including a bioreactor, which was taken up for consideration last fiscal year. Based on the results of the simulation,

an optimal configuration of treatment equipment will be proposed sometime in the future.

In the acid gas treatment program, a treatment method using a membrane contactor is being considered. A mathematical model that has been developed for the removal of carbon dioxide from a methane and carbon dioxide binary system, is being examined in reference to the results of a laboratory removal experiment. This will be the final year for conducting basic research on acid gas treatment, and a final meeting is scheduled to be held next March, in Al Ain.

*<by Nobutaka Sumikawa,
Technical Cooperation Dept.>*



Discussion session



Presentation of FY2006 results

Overview of the FY2006 Survey on Downstream Trends in Oil-Producing Countries

1. Significance of the Survey and Characteristics of the FY2006 Survey

JCCP has been conducting the “Survey on Downstream Trends in Oil-Producing Countries” (DS survey) since fiscal 1990. The fiscal 2006 survey, however, differed in nature from past surveys. Prior to launching the fiscal 2006 survey, JCCP issued a JCCP Activity Review, a comprehensive report on the results and issues of JCCP activities, based on a review of JCCP’s performance over the past 25 years since the organization’s establishment. The report stated that “country-specific programs should be enhanced with respect to major counterpart countries, based on an accurate assessment of the status of Japan’s seeds and oil-producing countries’ needs,” and recommended the utilization of the DS survey for that purpose. In response to this recommendation, JCCP has conducted the fiscal 2006 DS survey mainly to acquire basic materials for the formulation of the country-specific programs, slated to commence this year. Consequently, the fiscal 2006 survey differed from previous surveys in the following aspects.

Firstly, past DS surveys have been conducted under certain themes (quality management, environmental management, etc.), and have focused on identifying technological issues that the DS sectors of oil-producing countries are facing, accompanying major changes occurring in the business environment in those countries. The recent survey was a comprehensive survey with no specific theme.

Secondly, the recent DS survey included an analysis of the changes in the macro environment (political, economic, and social situations) in major counterpart countries, and aimed to shed light on the background to various issues confronting the DS sectors in those countries as accurately as possible, in relation to the changes in the macro environment.

Finally, the recent survey involved detailed studies that highlighted the distinctive situations in each counterpart country, and how they affect the response of those countries to various issues confronting the DS sectors—for example,

their response to changes in the demand structure, response to environmental issues, including product quality improvement, measures to strengthen profitability, and measures for human resources development.

The fiscal 2006 survey covered seven Middle East oil-producing countries, including Saudi Arabia, Kuwait, UAE, Qatar, Oman, Iran, and Iraq. However, sufficient results have not been obtained for Iraq, compared to other countries, because the survey team was not able to conduct an on-site survey, and had to resort to available information in Japan.

2. Overview of the FY2006 DS Survey

(1) Macro Environment in the Surveyed Countries

The fiscal 2006 survey aimed to carry out a detailed assessment of specific changes in the macro environment (political, economic, and social situations) surrounding the DS sectors in the Middle East oil-producing countries. The economic and social issues in each country differed according to the size of their economy, population, and population composition (proportion of young people). Therefore, these differences must be taken into consideration when formulating country-specific programs. However, many other factors were found to be common to all countries. For example, the ratio of the young population has increased along with rapid population growth in the countries, and changes in the economic structure have promoted urbanization. These factors have brought structural changes to the oil and natural gas industries, which form the economic foundation of the countries. Moreover, the countries are more or less committed to implementing serious reforms (diversification of the economic foundation, creation of employment opportunities, etc.) in order to break away from their status as a mono-culture economy dependent on oil, and develop industrial human resources. Particularly in Saudi Arabia, where some 200,000 people, corresponding to the population of Qatar, graduate from universities every year, the creation of employment opportunities and establishment

As introduced in the article by Mr. Kusumoto on page 14 of this edition, JCCP formed a special Study Group for implementing the FY2006 Survey on Downstream Trends in Oil-Producing Countries. This overview was compiled by the Study Group, and does not necessarily reflect the views of JCCP.

of vocational schools are issues of immediate concern. The country is therefore strongly seeking cooperation for its new industry-building policy and human resource development efforts, in the form of joint ventures with Japanese companies. Meanwhile, to correct disparities between cities and regions, Saudi Arabia is inviting companies and industries that will employ and train Saudi workers, under a regional economic city construction concept (concept to construct an industrial park in the regions and promote new industries).

In response to changes in their macro environment, not only Saudi Arabia, but all other surveyed countries as well, are pushing forward measures for promoting employment of national workers and economic structural reforms. Their immediate concerns, however, lie in resolving the issue of mismatched employment opportunities among the younger population and correcting urban and regional disparities.

(2) Issues Confronting the DS Sectors in the Middle East Countries

The recent DS survey has confirmed that oil refining companies and refineries in the surveyed countries are in fact facing various issues arising from the above-mentioned changes in the macro environment. However, their responses and the extent of their responses to those changes differ according to country. Some are making considerable progress, while others require greater efforts. JCCP activities in these countries must therefore focus on providing individually beneficial supports.

1) Structural changes in demand

Rapid population growth over a short period of time has increased the proportion of young people in society. This change in population composition, combined with increasing urbanization and improved consumer living standards, has created increased demand for gasoline. Iran, for example, must now import a considerable amount of gasoline for domestic consumption, even though it is itself an oil-producing country. Demand for gasoline is continuously increasing in Iran, partly because of low-priced gasoline financed by subsidies. On the other hand, production capacity continues to be inadequate. Given this situation, the country is urgently seeking measures to establish an international cost structure, and to increase gasoline production capacity. It is also promoting the introduction of heavy oil cracking units and processing of oil residues.

2) Quality improvement of oil products

Improving the quality of oil products, such as by lowering their sulfur content, is not only important as a countermeasure

to environmental issues in oil-producing countries. It is also necessary in terms of complying with regulations in Europe and other importing countries, to increase exports of oil products. Qatar, for example, possesses refining facilities capable of producing diesel oil and other oil products that satisfy the Euro4 standard (50 ppm sulfur). Kuwait has also increased exports of gasoline and diesel oil distillates to Europe and the U.S. in recent years. To respond to demands for high quality products that comply with environmental regulations in the importing countries, it is striving to increase production of high-quality gasoline, desulfurized diesel oil, and other export products, by hydrocracking heavy oil.

3) Responses to environmental problems in the oil refining sector

As international efforts to address global environmental issues continue to increase, oil-producing countries are also showing increasing awareness of the urgent significance of their oil industry to address environmental issues. Kuwait has already taken measures to minimize flare gas and prevent gas leaks. UAE is currently installing flare gas recovery units under the scope of a JCCP project. Iran, UAE, and some other countries are implementing plans to introduce an HSE (health, safety and environment) management system.

4) Strengthening profitability

Improving profitability with an eye to achieving financial self-sufficiency and “nationalization” of workers is a common issue among the refining departments of national oil companies in the surveyed countries, and all countries are initiating various efforts aimed at improving profitability. Many refineries in the surveyed countries have established goals for profitability improvement based on the Solomon survey (relative comparison program for refinery competitiveness). Saudi Arabia, Kuwait and Qatar, in particular, are actively pursuing increased efficiency in refineries, operational improvements, maintenance efficiency, and improved facility reliability, in the race to become the pace-setter (global standard) in Europe and the U.S.

Additionally, the majority of the surveyed countries are working to strengthen their profitability by upgrading heavy oil and integrating their oil industry with the petrochemical industry. Saudi Arabia, for example, is implementing a policy for securing the maximum amount of light crude oil for exports, by requiring existing refineries to handle larger amounts of heavy oil than ever before, and designing new refineries to process Arabian Heavy feedstock. To produce oil products that comply with EU and U.S. standards, the domestic refineries are also expected to install diesel oil desulfurization units and hydrocracking units. Furthermore,

the country is integrating the oil and petrochemical industries, as seen in the Rabigh Refinery expansion plan, as a key strategy toward improving added-value of oil products and diversifying the oil downstream business.

5) Human resource development

All the countries surveyed in the fiscal 2006 survey face problems in human resource development, but the problems differ according to country. For example, in Saudi Arabia and Kuwait, developing human resources in the maintenance sector, which is entrusted to private companies, is a priority issue, particularly from the perspective of promoting employment of nationals hereafter. Saudi Arabia is also placing emphasis on securing “quantity” of workers at its new refineries, because it needs to create employment opportunities for young workers and correct regional and urban disparities, simultaneously, while Qatar is primarily seeking to improve the “quality” of management-class workers. Meanwhile, UAE is aiming to “nationalize” refinery operators, and Iran is working to develop human resources capable of promoting privatization.

(3) Expectations of JCCP Cooperation

As discussed above, refineries in the countries of the fiscal 2006 survey face various issues accompanying changes in the macro environment (political, economic, and social situations). They are each addressing those issues in their own way, but because the issues are becoming increasingly complex and multidimensional, expectations of cooperation from JCCP appear to be growing stronger than ever.

In regard to personnel exchange programs, the countries have expressed strong desire for tailor-made programs, including the dispatch of Japanese experts who are well-versed in the situations of their respective countries. Saudi Arabia and Qatar have also expressed interest in programs for the petrochemical field, reflecting their measures to integrate the oil and petrochemical industries.

In terms of technical cooperation projects, the countries have shown strong interest in specific technical fields (processing of heavy crude, energy conservation, long-term stable operations, etc.) related to environmental measures and increasing profitability. As they are fields to which Japan can transfer technology and abundant experience, it is important to enhance such meaningful technical cooperation in the surveyed countries.

The recent DS survey sounded out the opinions of refineries in oil-producing countries that have been surveyed in relation to their cooperative potential, regarding a proposal to employ the total plant management (TPM) system. The

responses of the refineries varied.

To respond to the diversifying needs of the surveyed countries, JCCP will need to consider its seeds from a slightly broader perspective than the conventional viewpoint, and propose visual possibilities of applying Japanese-style refinery management (TPM) to oil-producing countries with an aim toward contributing to their nationalization policies, as well as of specific concepts of technical cooperation projects.


(4) Future Issues for JCCP Activities

The recent DS survey has found that the issues confronting oil refining companies and refineries in the surveyed countries reflect changes in the macro environment, and are becoming increasingly complex and diverse. To deal with those issues, the expectations of these countries toward JCCP have been growing stronger than ever before, and JCCP should concentrate on responding to those expectations, by promptly establishing a working group for launching country-specific programs and providing effective cooperation to each major oil-producing country.

In formulating these programs, the DS survey should be used effectively as a tool for identifying specific needs that have emerged in each country accompanying changes in the macro environment. Full advantage should also be taken of JCCP’s personnel exchange activities and technical cooperation projects. At the same time, flexible thinking is also important, to compensate for matters that have not yet been fully addressed by JCCP activities. With that as a basis, JCCP should implement projects that truly respond to the needs of major counterpart countries, and that are appreciated by executives of oil policy institutions as significant projects, in a timely and steady manner, in line with the programs. It should also promote further acknowledgement and evaluation of JCCP activities, and create a framework for networking executive officers of oil policy institutions in oil-producing countries. In this regard, future DS surveys should be considered a vital tool for collecting relevant information for the country-specific program working group.

The recent DS survey has also found that the surveyed countries are implementing medium to long-term measures for new industry-building and human resource development, as a means for breaking away from a mono-culture economy dependent on oil. It is highly likely that these measures may require cooperation from Japan that cannot be addressed by JCCP alone. Therefore, it will become extremely important to strengthen partnerships with other Japanese organizations engaging in cooperation to oil-producing countries, and establish a framework that maximizes their characteristics, to provide comprehensive cooperation.

Personnel Changes

	Outgoing Personnel	Incoming Personnel
Managing Director	 Junichi HATANO	 Katsuo YOKOYAMA
Training Department	 Yoshiaki TOZAWA	 Katsuo KIRITA
Technical Cooperation Department	 Toshinobu ISHIKAWA	 Wataru MAEKAWA
	 Yuji ISHII	 Nobuyuki TANEDA
	 Tetsuji TAKEMURA	 Takeyoshi HAISHIMA



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