

# JCCP NEWS

Special Issue

connected by technology, person-to-person

## Report of Activities Related to **UAE**



*FY2008 - FY2010*

Extracted from past issues of JCCP NEWS

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# Seminar on “Environmental Management in the Refinery” Held at TAKREER (UAE)

## 1. Background

As requested by Abu Dhabi Oil refining Company (TAKREER) in UAE, JCCP held a seminar on “Energy Saving in the Refinery” last spring, followed by a seminar on “Environmental Management in the Refinery” this past November.

## 2. Seminar Overview

The seminar was held over a period of four days, from November 22 to 25, 2009, at Le Royal Meridien Hotel in Abu Dhabi. The Japanese seminar team consisted of two lecturers from JCCP’s Training Department, K. Kamijyo and S. Satake, and two external lecturers, Mr. Tetsuro I from JGC Corporation and Mr. Masaaki Sakurai from Toyo Engineering Corporation.

The majority of the participants were from the Ruwais and Abu Dhabi Refineries, but there was also a participant from the head office, and a female participant among the members from the Abu Dhabi Refinery.

## 3. Details of the Seminar

On the first day, a brief lecture was initially given

on “Introduction of JCCP.” This was followed by lectures on “Environmental Strategies of Japanese Oil Companies” and “Clean Fuel and Heavy Oil Upgrading Technologies.” The first lecture discussed the history of pollution in Japan and environmental regulations imposed on Japanese refineries, as well as the social responsibility of oil companies and their commitment to global environmental conservation. The second lecture introduced initiatives that have been implemented by Japanese oil companies to produce sulfur-free fuel for the first time in the world, and outlined their approaches to heavy oil upgrading. The second day’s lecture covered various air pollution prevention technologies, with an emphasis on SOx and NOx treatment facilities. The participants seemed especially interested in the description of ultra low-NOx burners that use fuel gas as fuel. On the third day, wastewater management in refineries was discussed in terms of technologies for primary treatment to advanced treatment, and by providing case examples of wastewater treatment measures employed by Japanese refineries. On the last day of the program, the participants divided into two groups, the Ruwais Refinery group and the Abu Dhabi Refinery group, and discussed environmental



*Seminar participants*



*Group discussions  
Front table: Ruwais Refinery  
Rear table: Abu Dhabi Refinery*

issues they face in their respective refineries. Time constraints unfortunately prevented them from engaging in deep discussions, but the members of each group seemed to share a deep sense of common understanding of the issues.

#### 4. Reflections

At the end of the seminar, the participants were asked to provide their impressions and opinions of the seminar. They evaluated the seminar as extremely meaningful, and said they would like to participate in a JCCP regular course in the future. In the closing seminar, Mr. Jamshid Khan, Senior Safety & Fire Engineer, and Mr. Ahmed Al Gattan, Training & Career Development Department manager, took their time to deliver closing statements, and Mr. Anwar M. G. Al Mutawa, Senior Training Officer, also expressed words of appreciation to JCCP.

We would like to extend our deepest thanks to everyone and all companies who gave us their time and cooperation in the seminar.

*<by Kazuyoshi Kamijyo, Training Dept.>*



*A TAKREER environmental management manager (center) witnessing the presentation of the completion certificate*

# Seminar on "Energy Saving in the Refinery" Held at TAKREER (UAE)

## 1. Background to the Seminar

UAE is one of the most important countries to Japan in securing a stable supply of crude oil. It also plays a leading role in the Middle East, particularly in the introduction of renewable energies as the next major energy source following crude oil.

In response to JCCP's promotion of Customized Programs-Overseas (CPO) that are specifically designed based on a survey of training needs in major oil-producing countries, Abu Dhabi Oil Refining Company (TAKREER) has requested the implementation of a CPO on energy saving in spring and another on environmental management in autumn. After working out the details and schedule of the programs, we held the first of the two programs that are planned to be implemented during the present fiscal year.

## 2. Overview of the Seminar

- (1) Name  
TAKREER-JCCP Joint Seminar on Energy Saving in Refinery (CPO-21-09)
- (2) Date  
June 28 – July 2, 2009

- (3) Location  
Abu Dhabi, UAE
- (4) Lecturers  
<Lecturers from the JCCP Training Dept.>
  - i) Tetsuji Kubota
  - ii) Shigeyoshi Takahashi
 <Outside lecturers>
  - iii) Mr. Hisato Aoyama, Senior Sales Manager, Heavy Oil Project, Global Marketing, JGC Corporation
  - iv) Mr. Mitsuru Sugihara, Foreman, Administration Section No.1, Tokuyama Refinery, Idemitsu Kosan Co., Ltd.

## 3. Details of the Seminar

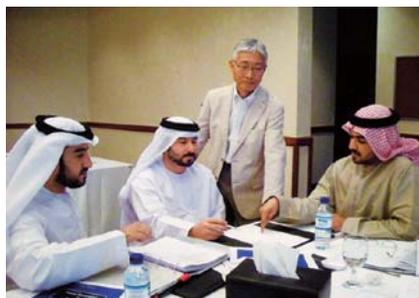
Japan has a long history in energy conservation. Especially since 1979, when the Act on the Rational Use of Energy (Energy Saving Law) came into effect in the wake of the second global oil crisis, the entire nation has shown consistent efforts to save energy. Therefore, we organized this seminar with hopes that Japan's history and experience in energy conservation could be of some use in promoting energy-saving activities in the Middle East.



*Seminar participants and JCCP-side lecturers*



Lecture scenes



Presentation by a participant

The seminar covered the following topics:

- Day 1: Japan's Oil Industry
  - Alternative Energies to Oil
  - Energy Saving in Japan
  - Energy Saving in the Refinery
- Day 2: Energy Saving in the Refinery 1 (Operational Management, Small Investments)
  - Pinch Technology
- Day 3: Energy Saving in the Refinery 2 (Large Investments)
  - New Energy Saving Technologies
- Day 4: Group Discussion on Energy Saving in the Workplace
- Day 5: Energy Saving Using the Computer
  - Actual Examples of Optimization Using Computers

TAKREER operates two refineries: the large-scale Ruwais Refinery and the Abu Dhabi Refinery situated adjacent to Abu Dhabi City. They use a simple hydro-skimming facility that requires few secondary devices to process light crude oil produced in UAE, including Murban crude. We understand that they have rated favorably in many of the categories of the Solomon Survey. Following the completion of a JCCP technical cooperation project on flare gas recovery, the refineries have actively promoted energy-saving measures, and are now two of the most advanced refineries in the Middle East.

From the above two refineries, 14 experts, including 2 women, attended the seminar held recently.

## 4. Overview of Lectures

As a new initiative, we added a group discussion

session to our conventional program on energy saving. We divided the participants into groups and had each group discuss energy-saving efforts in their workplace. We then asked all groups to deliver a presentation on the issues, future direction, and other specific aspects of energy-saving activities. Through the group discussion session, we hoped to provide a forum where participants could gain practical ideas and hints that would benefit their future work.

### (1) Day 1: Energy Saving in Japan

Following an introduction of JCCP and Japan's oil industry and a lecture on alternative energies, we delivered a lecture on Japan's history and countermeasures for energy saving, and another on the global warming issue and energy saving in the refinery, as scheduled. Though the lectures covered a lot of content in a short time, they seemed to be well received by all participants.

The lectures emphasized the following three points: (1) energy saving is a global commitment that contributes to solving environmental issues; (2) Japan's energy conservation activities are jointly implemented by the public and private sectors; and (3) small-group activities should form the basis of energy saving in refineries. The third point on small-group activities, in particular, seemed to capture the avid attention of the participants as an issue that pertains directly to them.

### (2) Day 2: Energy Saving in the Refinery 1 (Operational Improvement, Small Investments) / Pinch Technology

In the first half of the second day's program, we discussed specific examples of operational changes and improvements in Japanese refineries that do not

require capital investment, again with an emphasis on small-group activities, TPM, and other unique initiatives developed in Japan.

In the latter half of the program, we introduced pinch technology, a tool that is used to analyze system design in the rearrangement of a heat exchanger. We also covered topics that provided a foundation for studying specific cases the next day at a refinery.

### **(3) Day 3: Energy Saving in the Refinery 2 (Large Investments) / New Energy Saving Technologies**

On the third day, we explained about capital investment projects for energy conservation that are being implemented in refineries, and the profit of such projects. In response to lectures on the plot and layout of actual heat exchangers and the reliability and safety of additional equipment, the participants also introduced their experiences at TAKREER. JCCP lecturers and TAKREER participants thus actively exchanged opinions and engaged in interactive discussions with each other.

In the latter half of the day's program, we talked about the introduction status of the latest equipment in refineries, and proceeded to describing the details of such equipment. Since there were a number of power plant engineers among the participants, we hastily arranged a lecture on IGCC (Integrated Gasification Combined Cycle), which captured the participants' attention and gained their appreciation.

Information on high-efficiency heat exchangers that incorporate the latest technologies was also a source of strong interest among the participants.

### **(4) Day 4: Group Discussion on Energy Saving in the Workplace**

On the fourth day, we provided a forum for group discussions on designated energy-saving issues. Adopting a method commonly used in TQM, TPM, and various other management practices, each group identified a specific issue they face in their workplace, analyzed its causes, and gave a presentation on improvement measures or future visions regarding that issue.

As a summary of the constructive ideas that emerged from the discussions, we emphasized four important points and then wrapped up the session. The four points were: (1) the development of operators who read manuals carefully and think for themselves; (2) encouragement of small-group activities; (3) the necessity of risk management when considering an operational change; and (4) constant efforts to make improvements using the PDCA (Plan, Do, Check, Act) cycle.

After the final discussion session, many participants articulated their appreciation of the seminar. By participating in the seminar, they said they obtained knowledge and information for resolving problem areas in their workplace, and were inspired by the exchange of views with participants from fields other than their own.

The stronger-than-expected positive feedback from the participants has in turn inspired us to incorporate such discussion sessions in other seminars as well.

### **(5) Day 5: Energy Saving Using the Computer / Examples of Optimization Using Computers**

In the first part of the day's lecture on energy saving using the computer, we provided the basics of PID (Proportional-Integral-Derivative) control, MPC (Model Predictive Control), APC (Advanced Predictive Control, and RTO (Real Time Optimization). We explained their differences and introduction methods in an easy-to-understand manner in relation to the various controls needed to drive a car, as an example.



*Presentation of the completion certificate*

In the second part of the lecture, we introduced a case example in which APC was introduced to optimize operations in response to changes in needs regarding multi-boiler and power generator utility systems. In the example, the introduction of APC also contributed to reducing the manpower needed to switch between steam, electricity, and fuel operations.

## 5. Reflections

At the end of the seminar, the participants were asked to fill in an evaluation sheet and give their impressions and opinions of the seminar. As a result, we received many opinions concerning the group discussion session. It was the first attempt of its kind for us lecturers, but it was a new experience for the participants as well. They said that the opportunity to hold a discussion with members from the same workplace, followed by a discussion with groups of participants from other workplaces, was extremely interesting and meaningful.

At the closing ceremony, we received kind words of appreciation from Mr. Ahmed Herzallah, Senior Career Development Officer, and Mr. Anwar M. G. Al Mutawa, Senior Training Officer. (Mr. Al Mutawa is also the gentleman who undertook all of the necessary preparations for the seminar as our counterpart in TAKREER.) Mr. Ahmed M. Al Gattan, Director, Training & Career Development, also attended the ceremony to confirm the participants' reaction to the seminar, and both the TAKREER and JCCP sides were gratified by the participant's extremely high evaluations of the seminar.

The participants, many of whom attended a JCCP program for the first time through this seminar,



*Mr. Ahmed M. Al Gattan, Director,  
Training & Career Development (seated center),  
at the TAKREER Head Office*

expressed their wish to also attend a JCCP regular course in the future.

After the seminar, we visited the TAKREER Head Office to assess the results of the seminar and discuss future plans. We also paid a courtesy call on the Japanese Embassy in UAE, where we gave a report on the seminar, as well as received invaluable information on current issues in Abu Dhabi.

In sum, the recent seminar convinced us that the continuous implementation of joint seminars with TAKREER would further strengthen our two organizations' long-standing relationship and contribute to enhancing mutual understanding.

Duly realizing that the implementation of such seminars is made possible by JCCP member companies and cooperating companies inside and outside of Japan, we would like to extend our deepest appreciation to everyone who gave us their cooperation in the planning of the recent seminar through to its implementation.

*<by Tetsuji Kubota, Training Dept.>*

# Customized Program on “Human Resource Management (HRM)” in Kuwait (KNPC) and UAE (TAKREER)

In October and November 2008, JCCP implemented a Customized Program—Overseas (CPO) on human resource management (HRM) intended for Kuwait National Petroleum Company (KNPC) in Kuwait and TAKREER in Abu Dhabi, UAE. Both seminars featured the same program.

## 1. Overview of the Seminar

The 5-day seminars were held at hotels in Kuwait and Abu Dhabi. Following a general introduction of HRM under the heading, “Transitions and Status Quo of Japanese-style HRM,” one day each was spent on more details of HRM practices applied by a Japanese oil company and an engineering company. In addition to the general introduction and details of HRM, another day was allotted to topics in “Kaizen,” namely, “General Overview of Kaizen” and “Introductions of Kaizen Examples in Refineries,” as requested by the counterpart organizations. These lectures were provided as an aspect of personnel education, from the approach of “cultivating a Kaizen mind.”

## 2. Seminar Program

The seminar was organized as follows:

### [Day 1, Day 2] “*Transitions and the Status Quo of Japanese-style HRM*”

Two days were spent on a general discussion of the main theme of the seminar, divided into 4 parts: (1) Japanese history and Japanese mentality; (2) Traditional Japanese-style HRM system; (3) Environmental changes surrounding Japanese society and companies today; and (4) Issues and future direction of HRM in Japanese companies.

### [Day 3] “*HRM System of Nippon Petroleum Refining Co., Ltd.*”

A detailed description was given of the company’s HRM system, in reference to its ability assessment

and performance-based compensation systems, which were newly adopted when the company revamped its HRM system in 2002.

### [Day 4] “*HRM System of JGC Corporation*”

The engineering company’s current HRM system was comprehensively examined, including its performance-based personnel, recruitment, and evaluation systems, which were introduced to the company several years ago in response to the general trend of the times.

### [Day 5] “*General Overview of Kaizen*” and “*Kaizen Examples in Refineries*”

This session was intentionally designed to first provide a general overview of the concept of Kaizen prior to introducing Kaizen examples in refineries. It invited participants to consider the meaning of Kaizen and examine the unique “Kaizen mind” of the Japanese people, by explaining the process of implementing Kaizen activities, the “5S” as a means to achieving Kaizen, and the “Toyota method” as a successful example of continuous Kaizen efforts. The session finally expounded on what is necessary for entrenching the Kaizen mind in the workplace.

In a closer examination, specific examples of Kaizen that Idemitsu Kosan Co., Ltd. has actually adopted in its refinery were introduced, with the addition of examples of other companies, in UAE. Visuals were used to provide easy comparison between “before” and “after” implementation of Kaizen, in an easy-to-understand presentation.

The good combination of general and detailed discussions seemed well received and appreciated by all participants.

## Abu Dhabi, UAE



*Participants of the seminar (excluding the 5 female participants)*

### 1. Background

In February 2008, JCCP members Mr. Hisayoshi Tanda, then Operations Manager, and Mr. Shigeyoshi Takahashi, Lecturer, embarked on a promotional tour of CPO and CPJ programs in the Middle East region. During their visit to TAKREER, they received a request for a 5-day HRM seminar as a FY2008 CPO program. Thereafter, members of JCCP's Training Department and the TAKREER side held working discussions on the specific content and schedule of the program, and agreed to conduct the CPO in November 2008.

### 2. Dates of Implementation

November 9–13, 2008

### 3. Lecturers

Akio Hoshino (JCCP Training Dept.)  
Shinichi Satake (JCCP Training Dept.)  
Hitoshi Miyasaki (Personnel Department,  
Nippon Oil Corporation)  
Nobutaka Nohara (Personnel Department,  
JGC Corporation)



*Seminar venue*



*Opening address by Mr. Ahmed Gattan, Director,  
Training & Career Development*



*Mr. Hitoshi Miyasaki  
from Nippon Oil Corporation*



*Mr. Nobutaka Nohara  
from JGC Corporation*



*Thank-you speech by one of the  
participants*

#### 4. Summary of the Seminar

- (1) The seminar was attended by 21 participants. About half were personnel in charge of human resources in the Head Office, and the other half were staff from TAKREER's two refineries, and included a number of engineers. Five participants were women.
- (2) Mr. Ahmed Gattan, Director, Training & Career Development, kindly delivered a speech at both the opening and closing ceremonies. Other members of the department, namely, Mr. Ahmed Herzallah, Senior Officer, and Mr. Anwar Mutawa, our counterpart in TAKREER, attended to us throughout our stay in Abu

Dhabi, and lavished warm hospitality and consideration on us on behalf of TAKREER.

- (3) It seems that the concept of the "Kaizen mind" was new to the participants. They did not leave their seats during the 3-hour lecture on the general overview of Kaizen, but listened to the lecture with strong interest.
- (4) In the closing ceremony, one of the participants gave a heartwarming thank-you speech on behalf of his fellow participants. Moreover, during our visit to the TAKREER Head Office prior to our departure, Mr. Herzallah informed us that the seminar met with high acclaim among the entire staff, which indicated to us TAKREER's strong expectations and feelings of gratitude to JCCP.



*With executive personnel of the TAKREER  
(from third from left: Mr. Anwar Mutawa,  
Mr. Ali Al-Harmoudi Sultan, Mr. Ahmed Gattan;  
second from right: Mr. Ahmed Herzallah)*

#### 5. Visit to the Japanese Embassy in UAE, the TAKREER Head Office, and Other Institutions

##### Japanese Embassy in UAE

The Japanese members visited the Japanese Embassy in UAE, where they spent an hour and a half exchanging views on recent situations in Abu Dhabi, general conditions in UAE, UAE's relationship with other GCC countries, and other such topics of interest, with H.E. Mr. Takuma Hatano, Ambassador Extraordinary and Plenipotentiary, and Messrs. Tomoyoshi Hisamori



*Ambassador Takuma Hatano (second from left) and Mr. Tomoyoshi Hisamori, Secretary*



*At the TAKREER Head Office; Ms. Nadia Al Romaithy, Training Officer (right)*

and Atsunori Sato, Secretaries. The members were especially interested to learn about the recent state of affairs in Dubai, which had seemed to enjoy a bubble economy at one time.

#### **TAKREER Head Office**

The Japanese members met with Mr. Ahmed Herzallah, Senior Career Development Officer, and Ms. Nadia Al Romaithy, Training Officer. Mr. Herzallah was a participant in the FY2007 JCCP Program Seminar (TCJ: special seminar held in Japan, inviting managerial people from oil companies in oil-producing countries), and Ms. Al Romaithy

was a participant in a seminar held the previous week, so they shared their frank views and requests regarding JCCP seminars based on their personal experiences.

The Japanese members also visited the Abu Dhabi Offices of Nippon Oil Corporation and JGC Corporation. At the former, they met with Mr. Baba, Director, and Mr. Shibata, Manager, and at the latter, with Mr. Katagi, Director, and discussed national issues and living conditions in Abu Dhabi, the state of the economy in the Middle East, as well as other general situations and current circumstances in the Middle East as a whole.

*<by Akio Hoshino, Training Dept.>*



*At the Nippon Oil Corporation Abu Dhabi Office: Mr. Baba, Director (second from right) and Mr. Shibata, Manager (right)*



*At the JGC Corporation Abu Dhabi Office: Mr. Katagi, Director (center)*

# "Refinery Plant Maintenance Seminar" Held in UAE (TAKREER)



*Participants of the seminar*

## 1. Background to the Seminar

The United Arab Emirates is the second largest exporter of crude oil to Japan after Saudi Arabia, accounting for a share of approximately 26%, and one of Japan's most important countries in terms of securing stable supplies of crude oil. However, no Customized Program Overseas (CPO) has been held in UAE since the establishment of JCCP, except for the "Environment and Safety Seminar" held in 2004.

In January 2008, Mr. Mikio Kojima, then-Executive Director of JCCP, held a policy dialogue with H.E. Yousef Omair Bin Yousef, CEO of Abu Dhabi National Oil Company (ADNOC), and Mr. Jasem Ali Al-Sayegh, General Manager at Abu Dhabi Oil Refining Company (TAKREER), and paved the way for future implementation of tailor-made programs in UAE. Thereafter, a JCCP delegation composed of Mr. Hisayoshi Tanda, then-General Manager of the Operations Department, Mr. Shigeyoshi Takahashi, then-Master Lecturer of the Training Department, and Mr. Kazuhiro Hirano, then-General Manager of the JCCP Middle East

Office, visited TAKREER in February, to advance discussions on the implementation of the programs. In the meeting, JCCP counterparts Mr. Ahmed Herzallah, Senior Career Development Officer HR & A Division, and Mr. Anwar Mahmoud Ghalib Al Mutawa, Senior Training Officer, Training & Career Development Dept. HR & A Division, requested a seminar on refinery plant maintenance.

As requested, JCCP held the "Refinery Plant Maintenance Seminar" over a four-day period, from July 21 to 24, 2008. Four Maintenance Group members from JCCP's Training Department (Messrs. S. Miyawaki, K. Nakazawa, F. Tone, and A. Higashi) lectured on pre-assigned topics related to the theme of the seminar.

## 2. Overview of the Seminar

Tailor-made programs would typically be held at a training center situated on a refinery site. However, the Refinery Plant Maintenance Seminar was held in the conference room of the Sheraton Abu Dhabi Hotel, due to refinery security policies. Mr. Abed Nasser Al Ameri, Manager of the Maintenance



*Preliminary meeting on the day before the seminar*



*Seminar scene*

Department at Abu Dhabi Refinery, participated in the seminar, in addition to 17 engineers from TAKREER's Abu Dhabi and Ruwais Refineries and pump stations.

Recent years have seen the construction of many new buildings in Abu Dhabi and Dubai, which have dramatically changed the cities' skylines. Sheraton Abu Dhabi, the venue of the seminar, provided superb hospitality, and facilitated the pleasant and successful implementation of the seminar. Also owing to thorough preparations made by the TAKREER staff, the seminar proceeded smoothly and accomplished its goals, as planned.

### 3. Details of the Seminar

The seminar mainly featured various maintenance management issues and their countermeasures, which the JCCP lecturers have experienced at Japanese refineries. The following topics were covered during the four days of the seminar.

Day 1: Opening ceremony, self-introductions, introduction of JCCP

Lecture on maintenance management of rotary equipment at refineries



*Mr. Abed Nasser Al Ameri, Manager, delivering the closing address*

Day 2: Lecture on maintenance management at refineries

Day 3: Lecture on safety management and TPM activities at refineries

Day 4: Lecture on case examples of damage to static equipment and their countermeasures

Q&A session, presentation of completion certificates, closing ceremony

Based on their vast experience in their respective topics, the lecturers also discussed technical improvements that have been made at Japanese refineries, reliability improvement activities, awareness-raising activities, and achievements made in those areas, and engaged the participants in an active Q&A session, which enhanced the content of the seminar.

### 4. Evaluation and Impressions of the Seminar

As a general impression of the seminar, we JCCP lecturers sensed the participants' strong desire to apply even a small part of what they have learned from the seminar to their respective workplaces, to contribute to improving TAKREER refineries in the future. In the evaluation forms handed out on the final day, all of the participants indicated their wish to participate in a JCCP regular course in Japan in the near future, and provided bright prospects for JCCP training activities.

Lastly, we wish to extend our sincerest appreciation to everyone (and Mr. Anwar, in particular) who generously gave us their time and cooperation every step of the way in the planning and implementation of the seminar.

*<by Akio Higashi, Training Dept.>*

# Report on the Cooperation with Training Centers Program

—Saudi Arabia, Qatar, UAE, Oman—

A two-member delegation from JCCP, consisting of A. Yamanaka, General Manager, Operations Department, and K. Kojima, Lecturer, Training Department, visited Saudi Arabia, Qatar, UAE and Oman from February 18 to March 1, 2010 under the Cooperation with Training Center Program.

The main objectives of the visits were to introduce and promote the FY2010 JCCP regular course programs, explain and discuss in detail the implementation of customized programs, and exchange views with JCCP counterparts in those countries.

## Saudi Arabia

The JCCP delegation visited Saudi Aramco's Ras Tanura Refinery on February 20 and held a meeting with Mr. Mohammed A. Al-Omair, Executive Director, Refining & NGL Fractionation, and his staff. Mr. Al-Omair is responsible for overseeing all refineries operated by Saudi Aramco.

After expressing his appreciation of JCCP training programs and technical cooperation projects, Mr. Al-Omair noted that he has recently begun requiring participants to submit a report after completing their training courses at JCCP. He also put forth a request for a Customized Program-Japan (CPJ) in fiscal 2010.

JCCP proposed the implementation of an information exchange program between young employees of Saudi

Aramco and Japanese oil companies. As the training of young employees is an important issue at Saudi Aramco, the proposed program, which focuses on training young employees, was well-received by Saudi Aramco. To JCCP, the program would provide a means for assessing new training needs in oil-producing countries.

Following the meeting, the delegation was shown Saudi Aramco's impressive laboratory, meticulously managed to ensure safety and health.

## Qatar

On February 22, the JCCP delegation visited Qatar Petroleum (QP) and met with Mr. Mohamed Normarzuki Bin Yaacob, Senior Supervisor, Short Tech., Corporate Training, and his staff.

Mr. Yaacob thanked JCCP for its cooperation through training programs and technical cooperation projects, and then mentioned a few points in regard to QP's future participation in JCCP regular courses. He explained that QP was unable to send many participants overseas last year due to the outbreak of the H1N1 influenza virus, but plans to increase its participation this year, given the improved situation. He also said he will consider QP's participation in JCCP training programs comprehensively, in reference to JCCP member company courses as well.

On February 23, the delegation visited the



Meeting with Mr. Mohammed A. Al-Omair, Executive Director (center), at Saudi Aramco's Ras Tanura Refinery



Meeting at the QP Head Office



*Meeting at the TASWEEQ Head Office*

Qatar International Petroleum Marketing Company (TASWEEQ) and met with Mr. Anton Bray, Marketing Director, Condensate & Refined Products, and his staff. TASWEEQ is wholly owned by the Qatari government, and mainly engages in the export and sales of petroleum products. This was the first visit made by a JCCP delegation.

The delegation introduced JCCP and its activities, gave an overview of the FY2010 regular course program and customized training program. They also explained and requested TASWEEQ's participation in the FY2010 JCCP Program Seminar (TCJ) that is scheduled to be held in Japan this July for JCCP counterpart personnel.

Mr. Bray said he would need to discuss the possibility of customized programs with other officers of TASWEEQ, but wishes to implement several Customized Programs-Japan (CPJ) and Customized Programs-Overseas (CPO) on separate occasions during the year. He also said he would like the CPJ to be designed mainly for Qatari personnel, in consideration of the number of participants the program could accommodate and the duties of the participants, and the CPO, for all employees.

## UAE

On February 24, the JCCP delegation visited Abu Dhabi Oil Refining Company (TAKREER) to meet with Mr. Ja'afar Salem Al-Jaberi, HR & Administration Division Manager, Mr. Ahmed Herzallah, Senior Career Development Officer, HR & Administration Division, and other staff members.

TAKREER thanked JCCP for its support through training programs and technical cooperation projects, and talked about several topics, such as the fact that officers at the president's assistant level were reshuffled

to better implement the capacity increase project planned for the Ruwais Refinery, that TAKREER wishes to send a member to participate in the FY2010 TCJ program, and that they are thinking positively about the next VIP invitation of JCCP.

Following the visit to TAKREER, the delegation visited Abu Dhabi National Oil Company (ADNOC), and met with Mr. Hashem Y. Al Refaei, Marketing Research & Administration Division Manager, Marketing & Refining Directorate, who participated in last year's JCCP International Symposium, and his staff.

Mr. Al Refaei expressed his appreciation of JCCP training programs and technical cooperation projects, and said he wishes to continue sending ADNOC employees to participate in JCCP's FY2010 regular courses. He also thanked the JCCP members for their proposal for a CPJ on oil marketing and physical distribution, and promised to make the necessary internal arrangements to realize the program.

After the meeting, the delegation had the opportunity to inspect a large-scale service station complex operated by ADNOC.



*At the TAKREER Head Office*



*Meeting at the ADNOC Head Office*

## Oman

In Oman, the JCCP delegation visited Oman Refineries and Petrochemicals Company (ORPC) on February 28, and met with Mr. Mohammed Rabia Al Ghailani, General Manager Corporate Support, and his staff.

Mr. Al Ghailani has only recently been appointed to his present position, but on welcoming the JCCP delegation, he promptly expressed his appreciation of JCCP training programs and technical cooperation projects. Because ORPC was



*With Mr. Mohammed Al Ghailani, General Manager, at the ORPC Head Office (center)*

founded by a merger between the former Oman Refinery Company (ORC) and the Sohar Refinery, Mr. Al Ghailani showed strong interest in the merger and consolidation of Japanese oil companies.

The delegation introduced JCCP activities, thanked ORPC for its participation in JCCP training programs and technical cooperation projects, gave a rundown of Oman's past record of participation in JCCP training programs, presented an overview of FY2010 JCCP regular courses and customized training programs, and explained and requested ORPC's participation in the FY2010 TCJ program.

The delegation learned from its recent visits that countries and organizations with a steady record of participation in JCCP training programs and technical cooperation projects, such as Saudi Arabia and UAE, have stronger interest not only in JCCP regular courses but also in CPO and CPJ programs, and more specific requests of JCCP training programs. JCCP takes this as a testament to the achievements and relationships of trust that it has established over its history of close to 30 years.

In recent years, JCCP has been concentrating its efforts on providing even more practical training programs than ever before, but the recent visits made the delegation renew their awareness of the significance of meeting and exchanging frank views with JCCP counterparts.

*<by Kazuo Kojima, Training Dept.>*



# Fish Reef Completion Ceremony “Application Study of Sulfur Concrete Technology in UAE”

On August 3, 2010, JCCP and the Marine Environment Research Center (MERC) of the UAE Ministry of Environment and Water held a ceremony at the JAL Hotel in the Emirate of Fujairah, UAE, to mark the completion of an artificial fish reef under the “Application Study of Sulfur Concrete Technology in UAE.”

## 1. Project Overview

Sulfur is a refinery operation by-product that is available in surplus. This project aims to demonstrate how the application of this large supply of sulfur resources could be expanded, by creating sulfur concrete from sulfur, sand, and additives, installing artificial fish reef blocks and sewage pipes made of sulfur concrete on a trial basis, and examining their applicability in UAE. Compared to regular concrete, sulfur concrete is more salt resistant and acid resistant—properties that make it suitable for use as fish reef blocks and sewage pipes.

To examine the applicability of sulfur concrete to sewage pipes, a segment (approx. 80 m) of existing pipes in Al Ain, Abu Dhabi was replaced with sulfur concrete sewage pipes last January. The evaluation of its applicability is presently ongoing.

To examine the applicability of sulfur concrete as an artificial fish reef, sulfur concrete fish reef blocks have been installed off the coast of Umm Al Quwain

last June, and off the coast of Fujairah this February. After their installation, a large colony of pearl oysters and numerous schools of fish have been confirmed. With regular concrete fish reefs, the growth of algae and shells take time, because concrete is alkaline, but since sulfur concrete is practically neutral in alkalinity, algae and shell growth was observed soon after installation.

The fish reef blocks are being checked for any outflow of substances, and the impact of any such outflow on the environment is being assessed at a MERC laboratory. So far, no outflows to the sea or impact on fishes have been observed, and the safety of sulfur concrete has been confirmed.

## 2. Completion Ceremony

A ceremony marking the completion of the fish reef was held to present the proven effects of the fish reef and to introduce JCCP activities to UAE parties.



*Fish reef block covered with pearl oysters*



*Mr. Morihiro Yoshida, Managing Director of JCCP, delivering a speech*

The ceremony was held with the attendance of Dr. Ebrahim Al Jamali, Manager, MERC, Ministry of Environment & Water; Mr. Soliman Al Kadem, Head of Fujairah Fisheries Society, and others on the UAE side; and H.E. Mr. Tatsuo Watanabe, Japanese Ambassador

to UAE; representatives from participating Japanese companies Penta-Ocean Construction Co., Ltd. and JX Nippon Oil & Energy Corporation; and Mr. Morihiro Yoshida, Managing Director of JCCP, on the Japanese side.



*Dr. Ebrahim Al Jamali, Manager, MERC, giving a presentation on future plans for the fish reef*

Following a series of speeches by the guests of honor and sponsors of the ceremony, an overview of the project was introduced, and technical presentations were given regarding the installation status of the fish reefs and the results of ensuing observations. The participating Japanese companies and MERC assumed the role of giving the presentations, and used photos and videos to visually emphasize the effects of the installed fish reefs. This produced frequent questions and comments from fishery members and other UAE participants throughout the presentations, as an indication of their strong interest in the project. The participants also engaged in active exchanges of views while browsing photographs of the fish reefs displayed along the wall at the back of the room, before and during intervals of the ceremony.

### **3. Ripple Effects of the Project**

The global balance of sulfur demand-supply continues to trend toward considerable supply excess. In fact, the



*Exchanging views while browsing a wall of photos of the project*

Middle Eastern countries as a whole produce sulfur in amounts exceeding demand by more than 4 million tons/year. At present, some 2.4 million tons of sulfur are produced in UAE refineries, but this volume is expected to increase to almost 6.5 million tons by 2015.

Even from a global perspective, sulfur production is steadily growing amid an increasing need to process heavier crude oil and produce lighter, low-sulfur fuels. Given this situation, the development of large-scale sulfur applications is extremely important to refinery management, and the application of sulfur to such structures as artificial fish reefs and sewage pipes offers a potential solution as a large-scale market for sulfur.

The fish reefs that were installed in this project are of minimum scale, and the sulfur concrete blocks composing each fish reef were made using approximately 100 tons of sulfur. However, since some fish reefs are almost 1,000 times larger in reality, sulfur usage would amount to some 100,000 tons per fish reef. Besides sulfur, sand and other aggregates can also be procured in UAE, so steady technical transfer to UAE through this project would enable the demonstration of sulfur concrete as a large-scale outlet for sulfur usage, as well as creating new employment in the country. There are thus mounting expectations of this project on the UAE side.

*<by Hiroshi Iida, Technical Cooperation Dept.>*

# Commencement of the TAKREER Research Centre Project, Phase II —Signing Ceremony Held in UAE—

UAE is pursuing a national policy for employment creation and human resource development of the younger generation. Under this policy, Abu Dhabi Oil Refining Company (TAKREER), an affiliate of Abu Dhabi National Oil Company (ADNOC), has been strongly seeking to establish a technology center to enable it to develop capacities to solve technical issues related to refinery management and to upgrade its oil refining technologies as a future leader in oil refining and facility management technologies among the GCC countries.

The TAKREER Research Centre (TRC) Project was approved by H.E. Yousef Omais Bin Yousef, Chief Executive Officer, in FY2005, and was thereafter launched with the cooperation of Idemitsu Kosan Co., Ltd.

By leveraging Idemitsu Kosan's wealth of technical expertise regarding research center operations, the project aims to provide support for the designing of R&D facilities and the installation of laboratory instruments in the research center, as well as for the establishment of the organizational framework, functions, and management technologies of the center and the development of research center personnel. Phase I of the project was launched in FY2006 and was completed at the end of March 2010, after having achieved its original objectives of formulating safety measures regarding the handling of dangerous high-pressure substances during the construction of the research center building, providing support for designing a rational equipment layout plan that takes pilot plant operations into consideration, and supporting the introduction of analytical instruments.

The subsequent stage of the project was recently launched anew as the TAKREER Research Centre Project, Phase II. Prior to kicking off the project, Mr. Jasem Ali Al-Sayegh, General Manager, and Mr. Morihiro Yoshida, Managing Director of JCCP, signed the Memorandum of Agreement (MOA) for the project on October 18, 2010



*Meeting held after the signing ceremony: (from left) Mr. Jasem Ali Al-Sayegh, General Manager of TAKREER; Mr. Morihiro Yoshida, Managing Director of JCCP; Mr. Setsuo Ohmori, Japanese Minister to UAE; and Mr. Shigeki Nakashima, Managing Executive Officer of Idemitsu Kosan*

at the TAKREER Head Office. As a continuation of the previous TRC establishment project, the Phase II project will send Japanese instructors and advisors to TRC as required to help establish long-term stable operations of the pilot plant installed in the previous project, and to transfer analysis procedures for data acquired from the pilot plant and evaluation technologies for new and spent catalysts used there. Through the technical transfer, the project aims to provide technical support that would ultimately allow TRC to improve refinery operations and optimize the refinery on its own. The transfer of the necessary technologies will be conducted through on-the-job training, to also promote the development of TRC personnel.

The signing ceremony was held in stately splendor at the TAKREER Head Office, with the attendance of Mr. Al-Sayegh and the deputy general manager and executive officers under him; the director of TRC; Mr. Setsuo Ohmori, Japanese Minister to UAE; and Mr. Shigeki Nakashima, Managing Executive Officer, and Mr. Yoshikuni Yamakawa, Executive Officer, from Idemitsu Kosan. In the opening statement, the UAE side

emphasized that the human resource development of UAE workers is the country's foremost important issue, and UAE is therefore placing great expectation on the development of its personnel through the TRC project. The Japanese side noted that JCCP receives many participants from UAE to its regular courses and has implemented a number of technical cooperation projects with UAE beside this TRC project, and pledged to devote every effort to building technical capacities in refining engineers and thereby contribute to human resource development in UAE through JCCP programs.

It is hoped that the implementation of this project will further deepen friendly ties between UAE and Japan, and that the transfer of Japan's operation and evaluation technologies for oil refining equipment will contribute to the development of oil refining technologies and human resource development in UAE.

On the day after the project signing ceremony, Mr. Yoshida, Mr. Nakashima, and other members of the Japanese delegation visited the TAKREER Research Centre to inspect its laboratory facilities, thus completing the agenda of the signing ceremony.

The following is an outline of the TAKREER Research Centre Project, Phase II.

## Overview of the Planned Project

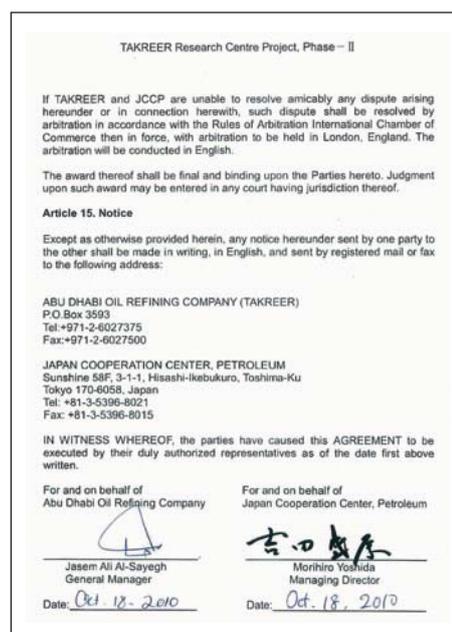
1. Project implementation period:  
April 1, 2010 – March 31, 2013 (three-year project)
2. Host facility: TAKREER Research Centre
3. Participating company: Idemitsu Kosan Co., Ltd.
4. Project details:
  - (1) Advisors and instructors will be dispatched to TRC to provide support for long-term stable operations of the pilot plant and operational guidance of analytical instruments (on-the-job training).
  - (2) The correlation between operating data acquired from an actual unit and that acquired from the pilot plant will be established, and support will be provided for the transfer of catalyst evaluation technology for catalysts used in the pilot plant and for the creation of a reaction simulation system.
  - (3) The technologies and procedures for achieving operational improvement and optimization of actual refinery units will be transferred to TRC through the transfer of catalyst evaluation technologies.
  - (4) Support will be provided for human resource development and TRC operations through the above transfer of technologies.

<by Takeyoshi Haishima, Technical Cooperation Dept.>



The completed TAKREER Research Centre

- Constructed on the site of the Petroleum Institute, located in the eastern suburbs of Abu Dhabi
- Building area: approx. 2,200 m<sup>2</sup>, 3 stories
- Construction began in April 2008 and was completed in late April 2009; Ownership was transferred to TAKREER in early August 2009



Project agreement

# Commencement of a New JCCP Project with UAE

## — Design and Evaluation of a Pilot Plant for the Treatment of Refinery Wastewater —

UAE is experiencing remarkable economic growth today, mainly in its oil and gas industries. However, this growth is raising concerns about environmental problems. The Abu Dhabi Oil Refining Company (TAKREER), a subsidiary of Abu Dhabi National Oil Company (ADNOC), has also been seeking to improve environmental load reduction technologies at the Ruwais Refinery and to upgrade its refinery wastewater treatment system.

In light of this situation, JCCP and United Arab Emirates University (UAE University) have carried out the Project on Development, Design and Evaluation of Advanced Refinery Wastewater Treatment Process in UAE (FY2005 – 2009) to examine efficient refinery wastewater treatment methods, and have succeeded in developing a new treatment system at the laboratory level. The new system treats refinery wastewater according to a three-step process, which includes electrocoagulation (for sulphate removal and COD reduction), bioreaction (for phenol removal), and adsorption (for COD removal).



*Signing the MOA*

Compared to the conventional system, it can efficiently treat wastewater at a higher level.

Before the new wastewater treatment system could be applied to an operating refinery, practical performance evaluation tests needed to be performed using actual wastewater discharged from a refinery. Therefore, with the objective of performing the necessary evaluation



*Principal members of the signing ceremony*

*(From the left) H.E. Dr. Maitha Salem Al Shamsi, Minister of State;  
Dr. Abdulla Saad Al-Khanbashi, Vice Chancellor of UAE University;  
Mr. Jasem Ali Al-Sayegh, General Manager of TAKREER;  
Mr. Morihiro Yoshida, Managing Director of JCCP;  
Mr. Setsuo Omori, Minister at the Japanese Embassy in UAE*

tests, JCCP will be launching a new project, the Joint Study on Design and Evaluation of a Pilot Plant for the Treatment of Refinery Wastewater in UAE, this fiscal year over a period of three years.

The project will be held jointly with UAE University and TAKREER as JCCP's counterparts on the UAE side. UAE University will be responsible for evaluating the performance and optimizing the pilot wastewater treatment unit, and TAKREER will install the unit in the Ruwais Refinery and cooperate in its operation.

After a series of discussions on the joint implementation of the project, JCCP, UAE University, and TAKREER reached a final agreement and held an MOA (Memorandum of Agreement) signing ceremony on May 17, 2010.

On the UAE side, Mr. Jasem Ali Al-Sayegh, General Manager of TAKREER, and Dr. Abdulla Saad Al-Khanbashi, Vice Chancellor of UAE University; and on the Japanese side, Mr. Morihiro Yoshida, Managing Director of JCCP, signed the MOA and exchanged

commemorative gifts, with hopes for the success of the new project.

H.E. Dr. Maitha Salem Al Shamsi, Minister of State and JCCP's counterpart for technical cooperation projects in UAE, also attended the ceremony and delivered words of gratitude for the new JCCP project and for JCCP's technical cooperation with UAE. On the Japanese side, Mr. Setsuo Omori, Minister at the Japanese Embassy in UAE, expressed his approval of the new JCCP project and articulated his hopes that it will contribute to strengthening ties between UAE and Japan. Other members on the Japanese side included Mr. Masaki Ikematsu, Executive Director, from Nippon Oil Research Institute Co., Ltd., a participating member in the JCCP technical cooperation project.

All parties concerned look forward to the successful completion of the project, and hope that the transfer of Japanese environmental countermeasure technologies and environmental improvement technologies will enhance the friendly relationship between UAE and Japan.

*<by Nobuyuki Suyama, Technical Cooperation Dept.>*

# Completion Ceremony for “Application Study of Sulfur Concrete Technology” in UAE

A two-day ceremony to celebrate the completion of the preparatory phase of the UAE-JCCP joint technical cooperation project on “Application Study of Sulfur Concrete Technology” was held on May 10 and 11, 2009, at Marine Resources Research Center (MRRC) in the Emirate of Umm Al Quwain on the first day, and at UAE University in the Emirate of Abu Dhabi on the second day.

The project aims to demonstrate new uses of sulfur, which is produced in surplus as a by-product in oil refineries. More specifically, modified sulfur concrete, which is made of sulfur, sand, and aggregates, will be used to make artificial fish reef blocks and sewage pipes on a test basis to examine its commercial applicability in UAE. Expectations for the project are high in UAE, as its successful completion would not only provide effective uses of by-product sulfur, but could also create new employment opportunities in the country.

In the preparatory phase, a series of pipes have been installed in Al Ain City (removal of an 80-meter segment of an existing sewage pipeline and installation of sulfur concrete pipes and manholes) and await the commencement of a demonstration test for assessing durability, and the necessary preparations have been made for the installation of an artificial fish reef off the coast of Umm Al Quwain. With the preliminary groundwork thus completed, the ceremony was held on the said dates, with the attendance of dignitaries and officials from both UAE and Japan.

## 1. Ceremony at MRRC (May 10)

The ceremony held at MRRC was attended by Mr. Abdulrazzaq Anwahi, Advisor to the Ministry of Environment & Water; Dr. Ebrahim Jamali, Director of MRRC; Mr. Abdul Karim, President of Board of Directors, Umm Al Quwain Co-operative Society



*Completion ceremony at MRRC*

for Fishermen; and other relevant parties on the UAE side. The Japanese side was represented by Mr. Kazuo Sunaga, Minister, Japanese Embassy in UAE; Mr. Masahiro Yoshida, Director of Nippon Oil Corporation; Mr. Yasuji Kakimoto, Director of Penta-Ocean Construction Co., Ltd.; and Mr. Katsuo Yokoyama, Managing Director of JCCP. Nippon Oil Corporation and Penta-Ocean Construction Co., Ltd. are two companies participating in the project on the Japanese side.

Dr. Osama Wahba, Marine Protected Area & Coral Reefs Specialist, MRRC, opened the event as moderator, then gave the podium to Mr. Abdulrazzaq Anwahi, who delivered an opening speech, followed by Mr. Sunaga, Mr. Yokoyama, Mr. Kakimoto, and Mr. Karim. All the speakers expressed their expectation that the project will further strengthen cooperative ties between UAE and Japan. Mr. Yokoyama also took a moment to briefly describe JCCP activities in UAE. After the opening speeches, Mr. Kota Nakase, Manager, Penta-Ocean Construction Co., Ltd., and Mr. Takeshi Kiyota, Senior Staff, Nippon Oil Corporation, gave a presentation on sulfur concrete technology and

the application of sulfur concrete to artificial fish reefs and sewage pipelines, which captured the attention of all participants. The session held in the auditorium, the tour of MRRC facilities, and the reception, all contributed to promoting greater understanding of the project.

## 2. Courtesy Call on H.E. Dr. Maitha Al Shamsi, Minister of State



*H.E. Dr. Maitha Al Shamsi, Minister of State  
(seated second from right)*

Preceding the ceremony at UAE University, Mr. Yokoyama and the Japanese delegation paid a courtesy call on by H.E. Dr. Maitha Al Shamsi, Minister of State, to thank her for UAE's understanding and support of JCCP activities. Dr. Al Shamsi said that Japan's technical cooperation is indispensable to upgrading technologies at UAE University as well as in UAE as a whole, and expressed her continued expectation of JCCP's support. As Minister of State who plays a central role in the development of science, technology, and education in UAE, Dr. Al Shamsi takes strong interest in issues related to education and technology in the country.

Prof. Rory Hume, Provost of UAE University, was also present to receive the Japanese delegation. In reference to the project, he said he has strong interest in the production of pipes and manholes using sulfur concrete, largely because it was his grandfather who invented the hume pipe.

## 3. Ceremony at UAE University (May 11)

The ceremony held at UAE University was attended by Dr. Maitha Al Shamsi, Prof. Rory Hume, Prof. Abdel-Mohsen Mohamed, and a representative from Abu Dhabi Sewerage Services Company (ADSSC), on the UAE side, and by H.E. Tatsuo Watanabe, Japanese Ambassador to UAE, in addition to members of the Japanese delegation who attended the ceremony at MRRC.

With Prof. Mohamed acting as moderator, the event began with opening speeches by Prof. Hume, Ambassador Watanabe, Mr. Yokoyama, Mr. Yoshida, and the representative from ADSSC.

As a friendly gesture and a sign of hospitality, the UAE University side prepared a cake decorated with the flags of UAE and Japan, and Dr. Al Shamsi, Ambassador Watanabe, and Mr. Yokoyama literally joined hands in cutting the first slice.



*Completion ceremony at UAE University*



*Cutting a cake decorated with the flags of  
UAE and Japan*

As in the ceremony held at MRRC, the presentations on sulfur concrete technology and the application of sulfur concrete to sewage pipelines and artificial fish reefs were received with strong interest by all participants. After the ceremony, the Japanese delegation, along with their UAE hosts, toured the site of the sewage pipe installation work and attended a reception, further promoting greater understanding of the project among all participants.

#### 4. Sewage Pipe Installation

A sewage pipeline managed by ADSSC runs near UAE University in Al Ain, at a depth of approximately 5 meters. This January, a section of around 80 meters along this pipeline was removed, and new pipes and manholes made of sulfur concrete were installed. These components have been re-buried and are now being used as part of the regular sewage pipeline. UAE University is monitoring their applicability.

#### 5. Artificial Fish Reef Installation

An artificial fish reef was installed in the waters off the coast of Umm Al Quwain about one month after the ceremony. A total of 215 fish reef blocks made of sulfur concrete (2.2 tons/block) were stacked three-deep at a depth of 15 meters, 6 kilometers off the coast of Umm Al Quwain. The blocks, which were stored in an MRRC facility, were transported to the port, loaded onto a ship by crane, and installed at sea.

Schools of fish appeared soon after the artificial

fish reef blocks were installed and provided a clear indication of the blocks' effectiveness. Continuous observations will be made to assess the effectiveness and durability of the sulfur concrete fish reef.

On a final note, we would like to extend our deepest appreciation to UAE University, MRRC, the Japanese Embassy in UAE, Nippon Oil Corporation, Penta-Ocean Construction, and all relevant parties for their kind support and cooperation in making the ceremony possible.

<by Hiroshi Iida, Technical Cooperation Dept.>



Local newspaper article on the completion ceremony



Site of sewage pipe installation work in Al Ain (pipes and manholes before being buried)



School of fish swimming around the artificial fish reef installed on the ocean floor

# Support for the Establishment of TAKREER Research Center in UAE

## 1. Project Background

Abu Dhabi Oil Refining Company (TAKREER), an affiliate of Abu Dhabi National Oil Company (ADNOC), is striving to be a leading company in the oil refining industry, by acquiring superior oil refining and facility management technologies. To this end, it has been seeking to improve its technologies, so that it may efficiently solve technical issues relating to further efficiency and optimization of refinery operations.

JCCP commenced a feasibility study on the establishment of a research center at TAKREER in FY2005, with the participation of Idemitsu Kosan Co., Ltd. In June of the same year, the undertaking was approved by H.E. Yousef Omair Bin Yousef, CEO of ADNOC, and thus the four-year project on “TAKREER Research Center (TRC) Establishment” (FY2006 – 2009) was begun.



*Conceptual image of the three-story TRC building*

## 2. Project Overview

The project aims to transfer Idemitsu Kosan’s abundant experience and technologies relating to the operation of research centers to TRC, by providing support in designing equipment/apparatus, formulating a comprehensive project framework in consideration of the organization, functions, and management technologies of the research center, and in developing research center personnel.

So far, a specific short- to medium-term action

plan has been established for the TRC, and efforts have been directed toward the formulation of concrete plans regarding the phased introduction of test/analysis equipment, organizational framework, division of duties within each department, and the assignment and employment of personnel.

As a result, a function- and safety-oriented design has been created for the TRC research building, and the focus of the project has shifted to the introduction of a pilot plant and test/analysis equipment. More specifically, a schedule is being

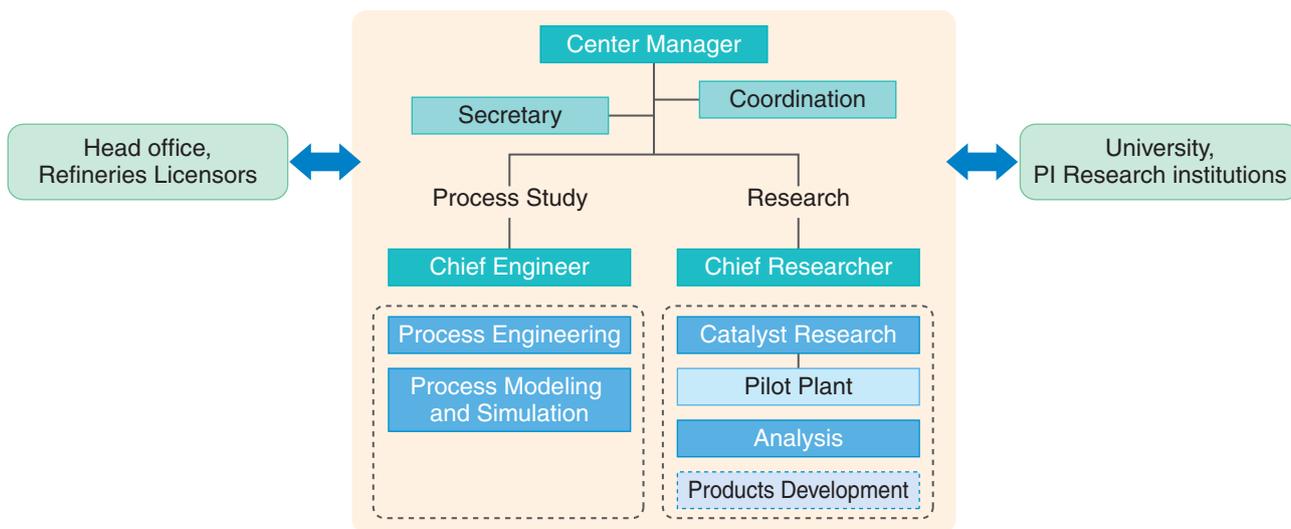
examined for the installation of the test/analysis equipment and pilot plants after technical evaluation of the building specifications and completion of the research building (project to be completed in May 2009).

In the area of human resource development, we are considering the dispatch of advisors and instructors from Japan, as a means to providing technical guidance on the operation of the installed

equipment, as well as guidance for the analysis of acquired data.

We have great expectations that the project will contribute to the development of oil refining technologies in UAE, and further deepen friendly ties between UAE and Japan.

<by Takeyoshi Haishima, Technical Cooperation Dept.>



Organizational chart of the research center (plan)

## Signing Ceremony for the Joint Project on Removal of Acid Gases from Natural Gas Using Membrane Contactors (Phase II)

On May 19, 2008, United Arab Emirate University (UAE University) and JCCP held a ceremony for the signing of a Memorandum of Agreement (MOA) on a joint technical cooperation project slated for implementation in FY2008.

Joint technical cooperation projects are the mainstay of JCCP technical cooperation activities. UAE University and JCCP began implementing these projects in FY2001, with the participation of the UAE oil industry (Abu Dhabi Oil Refining Company (TAKREER)) and the UAE gas industry (Abu Dhabi Gas Liquefaction Co. Ltd. (ADGAS)). They aim to strengthen friendly relations between UAE and Japan, by transferring Japan's technologies and expertise in global warming and environmental pollution countermeasures to UAE University and UAE oil and gas industries.

The project for which the signing ceremony was held constitutes phase 2 of the project on acid gas treatment, which was implemented from FY2005 to FY2007. It will examine the feasibility of employing membrane contactors in the selective removal of acid gases (e.g. CO<sub>2</sub> or H<sub>2</sub>S) from hydrocarbon gas at the laboratory level, applying the Das Island LNG plant as a model. The ultimate goal of the project is to reduce energy consumption by using the membrane separation technology to remove acid gases, in place of the conventional method that uses an amine solution.

In UAE, Abu Dhabi National Oil Company (ADNOC) is strongly promoting a Health, Safety and Environment (HSE) Management Program in the oil sector. Under this scheme, TAKREER, an oil



*Members of the Japanese delegation and UAE University, with H.E. Dr. Maitha Salem Al-Shamsi, Minister of State (center)*

refining company affiliated with ADNOC, and JCCP have jointly implemented projects for wastewater and acid gas treatment within the UAE oil industry, from FY2005 to FY2007, in the effort to enhance technologies for mitigating environmental burden in the Ruwais Refinery of TAKREER.

Based on the results of those projects, UAE University and JCCP decided to implement phase 2 of the project in FY2008, to promote the commercialization of the technology for the selective removal of acid gases from a hydrocarbon gas stream. Following the preparation of a new MOA, the two organizations held the signing ceremony at UAE University on May 19, and officially kicked off the FY2008 project.

Prior to the signing ceremony, Mr. Katsuo Yokoyama, Managing Director of JCCP, and other members of the Japanese delegation paid a courtesy call on Mr. Kazuo Sunaga, Minister at the Embassy of Japan in UAE, to report on the successful completion of the signing ceremony, and to introduce and ask for his cooperation with JCCP activities in UAE.

The signing ceremony was held in an auditorium on UAE University's Al-Maqam campus, with the attendance of Dr. Abdulla Al-Khanbashi, Acting Vice Chancellor and Provost, and other members of the University on the UAE University side, and members of a Japanese delegation headed by Mr. Yokoyama. Amid a friendly atmosphere, Dr. Al-Khanbashi and Mr. Yokoyama signed the MOA with hopes for the project's success, and exchanged commemorative gifts and words of congratulations.

Mr. Takahiko Yamaji, President of Nippon Oil Research Institute Co. Ltd., also attended the ceremony and articulated his firm commitment to the project. Nippon Oil Research Institute is a major participant in a number of JCCP technical cooperation projects, and will be the main implementing company of the new project. Mr. Matsushita, First Secretary at the Embassy of Japan in UAE, attended the ceremony on behalf of Ambassador Takuma Hatano, and relayed the Ambassador's hopes that the project will further promote friendship between UAE and Japan.

On the UAE University side, the ceremony was honored by the attendance of H.E. Dr. Maitha Salem Al-Shamsi, Minister of State. Before being appointed to Minister of State in February 2008, Dr. Al-Shamsi was Assistant Provost for Research of UAE University, and a counterpart for JCCP technical cooperation projects in UAE (she still holds the position of Director of the center for externally funded research activities (eFORS)). At the signing ceremony, she conveyed words of appreciation for JCCP technical cooperation projects.

A dozen or so newspaper journalists and photographers witnessed the ceremony. Articles introducing the event, accompanied by photos, were carried in *Khaleej Times*, a major English-language newspaper in UAE, and on Internet websites.

JCCP looks forward to the successful completion of the project and to the smooth transfer of Japan's technologies in environmental and environment improvement measures, as significant steps in deepening friendly relations between UAE and Japan.

<by Nobuyuki Suyama, Technical Cooperation Dept.>



Exchange of commemorative gifts  
Dr. Abdulla Al-Khanbashi, Acting Vice Chancellor and  
Provost of UAE University (right), and  
Mr. Katsuo Yokoyama, Managing Director of JCCP



Article on the signing ceremony  
(Khaleej Times, May 27, 2008 edition)

## Project on Flare Gas Recovery from Oil Refining Facilities in the UAE

### Background to the Project

Abu Dhabi National Oil Company (ADNOC) in the UAE has initiated a health, safety, and environmental management program in May 1998, and has been actively engaging in environmental countermeasures with the objectives of reducing waste gas and materials and improving energy efficiency. This policy has become a model for nationwide environmental countermeasures in the UAE, and has also prompted the enforcement of the Basic Environmental Law in February 2000.

Under this situation and based on a strong request by the Abu Dhabi Oil Refining Company (TAKREER),

JCCP has implemented a study on the applicability of the flare gas recovery technology at the Ruwais Refinery.

### Overview of the Project

#### Objective

The project sets out to introduce and examine the flare gas recovery system designed to reduce flare gas emission, with the final objectives of achieving effective utilization of flare gas and reducing environmental impact, at TAKREER's Ruwais Refinery.

#### Progress made so far

We have completed the detailed design of the facility and arranging for the procurement of equipment and materials

in FY2006, and are mainly conducting on-site construction work in FY2007.

#### Future plans

We are scheduled to complete the construction and commissioning work of the flare gas recovery system in FY2007. In FY2008, we plan to support operational technologies and conduct an evaluation of the project.

#### Expected results

The project is expected to substantiate the feasibility of reducing gas emissions and improving energy efficiency at the Ruwais Refinery. It will also provide a basis for the application of the system to other units within the refinery, as well as to other refineries under TAKREER.

<by Hitoshi Hirokawa, Technical Cooperation Dept.>

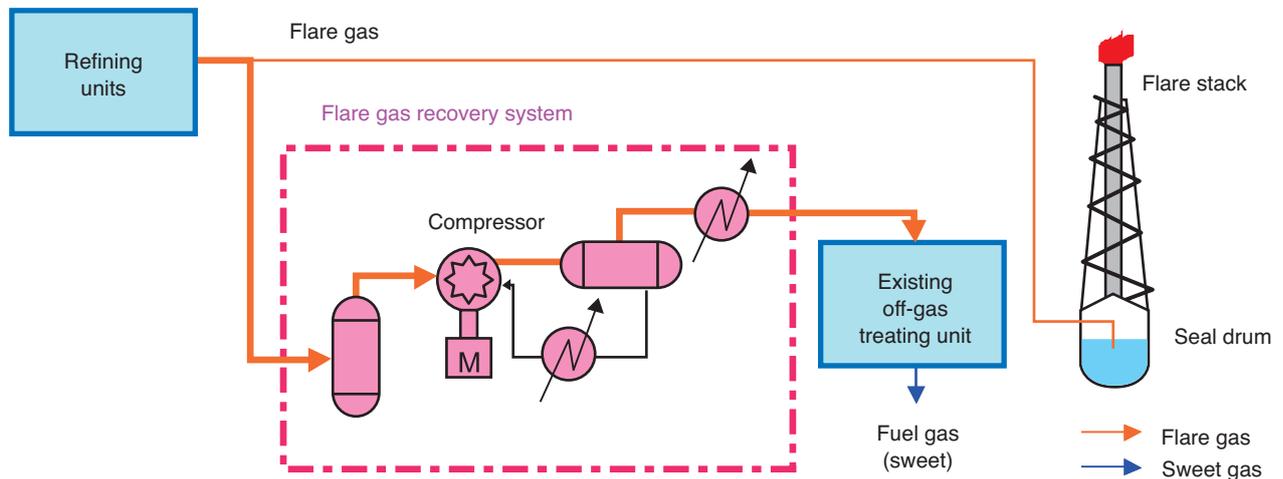


Diagram of the Flare Gas Recovery System

# The Tenth Scientific Council Meeting with UAE University Held in Al Ain

The Tenth Scientific Council Meeting was held on November 5, 2009, at United Arab Emirates University (UAE University) in Al Ain, UAE, with 15 members on the UAE University side headed by H.E. Dr. Maitha Al-Shamsi, Minister of State, and 8 members on the Japanese side represented by Mr. Morihiro Yoshida, Managing Director of JCCP.

At the beginning of the meeting, Dr. Al-Shamsi thanked JCCP for its cooperation in UAE University's research activities. In turn, Mr. Yoshida spoke on behalf of the Japanese side as he reported on the satisfactory results that are being achieved through the cooperative relationship that has been growing stronger between UAE University and JCCP, and expressed his expectations in the project's future development. Thereafter, progress reports were given on the two technical cooperation projects that the two institutions are jointly implementing, followed by questions/answers and evaluations of each. An overview of the projects is provided below.

- **Project on Removal of Acid Gases from Natural Gas using Membrane Contactors, Phase II**  
(Principal Investigator: Dr. Mohamed Al Marzouqi)

The study of membrane contactors that is

underway at UAE University is producing steady results. A module that can withstand long hours of high pressure has been developed, albeit at the laboratory study, and an experiment has succeeded in almost completely removing CO<sub>2</sub> and H<sub>2</sub>S from acid gas at 50 bar. On the Japanese side, Nippon Oil Research Institute Co., Ltd. is assisting in the implementation of the project, and Dr. Masaaki Teramoto and Dr. Hideto Matsuyama of Kobe University are providing technical guidance. On the UAE side, Abu Dhabi Gas Liquefaction Limited (ADGAS) is participating and cooperating as a technical advisor.

- **Project on Development, Design and Evaluation of Advanced Refinery Waste Water Treatment Process**  
(Principal Investigator: Dr. Muftah El-Naas)

Under this project, the optimum conditions for applying a three-step treatment process (Electrocoagulation Unit→Bioreactor Unit→ Adsorption Unit) to oil industry wastewater treatment are being studied at UAE University. On the Japanese side, Nippon Oil Research Institute Co., Ltd. is assisting in the implementation of the project, and on the UAE side, Abu Dhabi Oil Refining Company (TAKREER) is participating



Mr. Morihiro Yoshida, Managing Director of JCCP  
(second from right)



H.E. Dr. Maitha Al-Shamsi, Minister of State  
(second from left)



*Members of the Scientific Council Meeting  
(members from UAE University and Japanese-side members)*

and cooperating as a technical advisor.

Owing to the participation and cooperation of ADGAS and TAKREER, the two projects go beyond the scope of an academic study project to being a project whose results can be used to benefit the oil and gas industries in UAE.

UAE University is rapidly increasing its reputation as an outstanding university in the Middle East region (increased its ranking from 496th in the world in 2008 to 374th in 2009). Along with

this reputation, the awareness of the university as a research institution based in UAE is also expected to increase.

To support and further develop the friendly relations between UAE and Japan, JCCP will continue to approach the oil industry in UAE through the implementation of joint research projects with UAE University and contribute to the promotion of joint industry-academia studies in UAE.

The 11th Scientific Council Meeting is scheduled to be held in May 2010, in Abu Dhabi.

*<by Nobuyuki Suyama, Technical Cooperation Dept.>*



## The Ninth Scientific Council Meeting Held with UAE University

Since FY2001, United Arab Emirates University (UAE University) and JCCP have jointly implemented a number of technical cooperation projects. In FY2009, they cooperated in advancing two ongoing projects: a project on acid gas treatment from natural gas (Phase II), and a project on wastewater treatment in refineries in UAE.

To exchange information on the progress of the projects, UAE University and JCCP held the Ninth Scientific Council Meeting at JCCP Headquarters on May 25, 2009. The meeting is held biannually, alternating the venue between UAE and Japan. This

time, it was held in Japan, and attended by a total of 16 members, with both sides equally represented by 8 members.

Abu Dhabi Gas Liquefaction Company Limited (ADGAS) is participating in the acid gas treatment project, and Abu Dhabi Oil Refining Company (TAKREER) is participating in the wastewater treatment project, as technical advisors. Thanks to their cooperation, the projects are able to go beyond the scope of a regular academic study project, to produce practical results that could be applied to the oil and gas industry in UAE.



*Scientific Council Meeting*



*Clerical meeting*

On the Japanese side, Nippon Oil Research Institute is assisting in the implementation of the projects, and Dr. Masaaki Teramoto and Dr. Hideto Matsuyama of Kobe University are providing technical guidance in the acid gas treatment project.

In the meeting, the members reported on the progress of the projects and held active discussions on plans for FY2009. Both projects were reported to be making steady progress. In the wastewater treatment project, there are plans to examine an advanced treatment process that uses Electrocoagulation treatment, Phenol Biodegradation treatment and Adsorption treatment to provide continuous treatment of wastewater in refineries. The design of a test unit for experimental use will also be studied. In the acid gas treatment project, research on treatment technologies for high-

pressure acid gases (carbon dioxide, sulfur dioxide) is currently underway. Earlier in the project, sample membrane contactors for acid gas separation were successfully created, and were duly acknowledged by Dr. Teramoto as a remarkable achievement. Expectations of future research results also run high in the Middle East.

In addition to participating in the Scientific Council Meeting, the members from UAE University completed a busy schedule during their stay in Japan from May 23 to 28. We held a clerical meeting on the budgets and plans of the two projects, held discussions on details of the implementation plans, and engaged in fruitful exchanges of information for the successful implementation of the two projects.

The Tenth Scientific Council Meeting is scheduled to be held next in November, at UAE University in Al Ain.

*<by Nobuyuki Suyama, Technical Cooperation Dept.>*



*H.E. Dr. Maitha Al Shamsi, UAE Minister of State (seated, right) and Mr. Masataka Sase, Executive Director of JCCP (seated, left)*



*Members of the Scientific Council Meeting (members from UAE University and Japanese-side members)*

## The Sixth Scientific Council Meeting with UAE University Held in Al Ain

On November 4, 2007, JCCP and UAE University co-hosted the Sixth Scientific Council Meeting at UAE University, located in Al Ain, UAE. The two institutions began implementing joint technical cooperation programs in FY2001, and are presently carrying out two programs on wastewater treatment and acid gas treatment.

As partners from the UAE industrial sector, the Ruwais Refinery of Abu Dhabi Oil Refining Company (TAKREER) is supporting the wastewater treatment program, and Abu Dhabi Gas Liquefaction Co. Ltd. (ADGAS) is giving cooperation in the acid gas treatment program.

From Japan, Nippon Oil Research Institute is participating in the implementation of the programs, and Dr. Masaaki Teramoto of Kobe University is providing research guidance and project assistance in the acid gas treatment program.

The Scientific Council Meeting is held biannually, alternating the venue between Japan and UAE. At the sixth such meeting held recently, the members reported on, and actively discussed, the progress of activities that have been made during the first half of FY2007.

The following is an overview of the achievements.

### • Wastewater treatment

In the wastewater treatment program, a new treatment method that combines biological treatment and activated carbon adsorption treatment processes was acknowledged as the optimum method for treating wastewater. Particularly with respect to adsorption treatment, activated carbons made by processing seeds from locally-cultivated dates were determined to be especially effective in adsorbing certain metals.

As a result of a survey on wastewater properties at the Ruwais Refinery, it was

agreed that treatment technologies need to be established for CODs, phenols and sulfuric acid salt.

### • Acid gas treatment

In the acid gas treatment program, a variety of experiments were conducted using hollow fiber membrane as a means of removing carbon dioxide and methane from natural gas. The results of the experiments closely matched a mathematical model that has been developed earlier. In reality, the process would require an increase in pressure, so an experiment was also conducted to demonstrate that carbon dioxide can indeed be removed under increased pressure. The experiments verified the effectiveness of hollow fiber membrane. The members of the program will continue to pursue their efforts to attain a practical process that can take the place of gas-washing with an alkali solution.

<by Nobuyuki Taneda, Technical Cooperation Dept.>



Opening ceremony



Discussion session

# The 28th JCCP International Symposium

## “Innovation of Technology and Management in Oil Downstream: For Security of Oil Supply”



*Panelists and guests of honor*

The 28th JCCP International Symposium was held on January 27 and 28, 2010, under the auspices of the Ministry of Economy, Trade and Industry (METI), and with the attendance of approximately 350 visitors.

### 1. Theme and Goal

The theme of this year’s symposium was “Innovation of Technology and Management in Oil Downstream: For Security of Oil Supply.” Over the medium to long term, the global balance in oil supply and demand is apt to tighten, as a result of the increase in oil consumption particularly in newly emerging economies. Amid this situation, oil producing and consuming countries must share the responsibility of mitigating inordinate increases in oil consumption by promoting advanced utilization of oil without undermining economic growth.

In this year’s symposium, leading authorities from oil producing and consuming countries were invited to exchange views on management and technology innovation toward advanced utilization of oil.

### 2. Overview

#### (1) First Day: Opening Ceremony (January 27)

The symposium opened with an address by Mr. Yaichi Kimura, President of JCCP, and a greeting from the guest of honor, Mr. Masaaki Kimura, Director-General of the Natural Resources and Fuel Department, METI. These were followed by keynote speeches by Mr. Nobuo Tanaka, Executive Director, International Energy Agency (IEA), and Mr. Mohammed A. Al-Omair, Executive Director, Refining and NGL Fractionation, Saudi Aramco.



*Symposium venue*

Mr. Yaichi Kimura, President of JCCP, reiterated the theme of this year's symposium—Innovation of Technology and Management in Oil Downstream: For Security of Oil Supply—and presented a perspective on the issue. He said that we have spent decades developing oil utilization technologies and mechanisms to create today's affluent society, but oil is a limited resource that we must use wisely. The extent to which we can achieve the effective utilization of oil depends on the technical and management capabilities of all of us who work in the oil industry. Mr. Kimura closed his address by emphasizing the importance of technology and management innovation in handing down the precious resource to the next generation.



*Mr. Yaichi Kimura, President of JCCP, giving an opening address*

Mr. Masaaki Kimura from METI spoke as follows: Oil producing countries and Japan have established friendly relationships over many years as the foundation of oil security. However, as oil demand is expected to increase mainly in emerging countries over the medium to long term, one of the priority issues of the worldwide oil industry lies in how to address such changes in the global energy situation. Therefore, in the face of anticipated



*Mr. Masaaki Kimura, Director-General of the Natural Resources and Fuel Department, METI, giving a speech as a guest of honor*

changes in the global oil supply-demand environment, the theme of this symposium holds great significance, as it provides an opportunity to explore how technology and management innovation in the oil downstream sector could prevent the wasteful use of oil and promote its effective utilization to the greatest possible extent as an extremely valuable resource. Moreover, since issues in the oil downstream sector are common issues to oil producing and consuming countries alike, forums such as this symposium, in which various parties assemble to discuss a common theme, are certain to contribute largely to building consensus and stabilizing the global oil supply structure. In the end, Mr. Kimura expressed his expectation that the collective wisdom of oil producing and consuming countries will expand the possibilities of the precious and superior resource called “oil,” for the future of our society.

## (2) Keynote Speeches

Mr. Nobuo Tanaka from IEA gave a keynote speech as follows: Future increases in demand for oil will come mainly from non-OECD countries, or in other words, from developing countries, and oil demand will continue to grow steadily and eventually outpace the production capacity of worldwide suppliers. Inevitably, spare production capacity will become tighter than it is today. Nevertheless, the situation will not cause a sudden insecurity in oil supply as in past oil crises, but will constrict oil supplies in a gradual manner. Experts call this phenomenon “creeping oil crisis\*.” Needless to say, the best way to ensure stable supply of oil while maintaining economic growth is to realize advanced applications of oil, conserve energy, and prevent wasteful oil use.



*Mr. Nobuo Tanaka, Executive Director of IEA, giving a keynote speech*

\* *Creeping oil crisis: an oil crisis that occurs as a result of a gradual constriction of oil supplies over time*



*Mr. Mohammed A. Al-Omair, Executive Director of Saudi Aramco, giving a keynote speech*

Mr. Mohammed A. Al-Omair from Saudi Aramco also gave a keynote speech, firstly presenting an overview of Saudi Aramco's role in the global oil industry. He said that Saudi Arabia has the world's largest reserve of hydrocarbon resources. In order to assure consumers that oil will continue to be a reliable source of energy, Saudi Aramco has striven to secure stable supplies of oil as a leading oil-producing country. Ensuring oil security requires considerable investment, but Saudi Aramco has established a consistent system for the stable supply of oil, from the oilfields to consuming regions. For example, it has maintained its 12 million b/d oil production capacity through the development of oil resources, acquired the capacity to also supply oil products by strengthening its refining capabilities, and invests in Vela International Marine Limited (Saudi Aramco's wholly owned shipping subsidiary). Mr. Al-Omair also spoke about the importance of human resource development, stating that Saudi Aramco has been able to continue the difficult and challenging business of supplying oil, precisely because it is blessed with "people" who constantly pursue higher levels of technology and management. Based on the belief that "people" are the most precious asset of the company, it has spared no investment in human resource development. Saudi Aramco's success today is the result of this policy. Mr. Al-Omair said that Saudi Aramco will continue to contribute to the global stabilization of oil supplies by directing its efforts to developing human resources and achieving advanced utilization of oil based on innovating technologies and management.

### **(3) First Day: Special Lectures (January 27)**

The latter half of the symposium agenda on the first day featured special lectures by Mr. Mubarak S. Al Ketbi, Manager, Crude & Condensate Division, Marketing & Refining Directorate, Abu Dhabi National Oil Company

(ADNOC); Mr. He Zhoyun, Vice President, Economics & Development Research Institute, SINOPEC; and Mr. Pramod Kumar Karunakaran, Managing Director/CEO, Ethylene Malaysia Sdn. Bhd., PETRONAS.

Mr. Al Ketbi of ADNOC said that UAE is not only focusing on the development of renewable energy systems, but also on the development of nuclear power, and has plans to invest 40 billion dollars in nuclear power development by 2017. With the completion of a second unit at the Ruwais Refinery, clean fuel supplies will also be available. Mr. Al Ketbi stressed that UAE will endeavor to secure stable energy supply by comprehensively developing various types of energy.

Mr. Zhoyun of SINOPEC said that oil consumption is increasing in China, and particularly the consumption of automotive fuels such as gasoline and diesel fuel. The country is therefore directing its efforts to creating social systems that promote efficient utilization of oil. For example, it is focusing on developing alternative energy and technologies such as coal liquefaction, bioethanol, biodiesel, hydrogen energy and electric vehicles, and has also implemented a policy for shifting the mainstream transportation mode from automobiles to railways by developing inter-city high-speed railways and inner-city subway networks.

Mr. Karunakaran of PETRONAS spoke about the important role of the oil industry. He explained that PETRONAS commenced operations related to oil development in 1974, and has increased its corporate value and developed into a company that contributes to society by producing petroleum and petrochemical products from hydrocarbons. Although various difficult issues lie ahead, such as rising oil prices and intensifying international competition, Mr. Karunakaran said the oil industry has a responsibility to continue providing stable supplies of oil.

### **(4) Second Day: Discussion Sessions (January 28)**

#### *(i) Session 1 (morning session) "Management Innovation"*

Under the chairmanship of Mr. Takeshi Kurosaki, Executive Corporate Officer in Charge of Petroleum Refining Dept., Japan Energy Corporation, five panelists delivered presentations on management innovation at their company. The panelists included Mr. Masoud Salim Al Msalmy, General Manager, Corporate Support Division, Oman Refineries & Petrochemicals Company (ORPC); Mr. Hashem Y. Al Refaei, Manager, Marketing Research & Administration Division, Marketing

& Refining Directorate, Abu Dhabi National Oil Company (ADNOC); Ms. Nina Nurlina Pramono, Vice President, People Management of Human Resources, PERTAMINA; Mr. A. O. Oniwon, Group Executive Director, Refineries & Petrochemicals, Nigerian National Petroleum Corporation (NNPC); and Mr. Shinji Takasu, General Manager, Refining Technology, Petroleum Refining Dept., Japan Energy Corporation.

In a summary of the panelists' presentations, Mr. Kurosaki noted as follows: In this session, five panelists spoke about management innovation in their respective companies. Each company bears a large social responsibility to ensure stable oil supply, but liberalization and globalization trends have created an environment of intense international competition. Unless the companies embrace technology and management innovation and build a competitive corporate culture, they will not be able to fulfill their responsibility. In all five presentations, "people" were the common key to creating a competitive company. New technologies and management systems may be developed, but they would have no effect if "people" do not change. Therefore, it is important, above all else, for people to interact with each other beyond national and corporate boundaries and to use that experience to mutually acquire the wisdom of "human development."



Session 1 panelists

(ii) *Session 2 (afternoon session) "Technology Innovation"*

Under the chairmanship of Mr. Sei Tange, Executive Vice President and CMO, JGC Corporation, four panelists delivered presentations on technology innovation in their respective companies. The panelists included Mr. Mark G. Lawrence, Head of GTL Product Marketing, Qatar Petroleum Marketing Services (Tasweeq); Mr. Aminallah Eskandari, Managing Director and Chairman of Board of Directors, Hormoz Oil Refining Company (NIORDC);



Session 2 panelists

Mr. Asaad Ahmad Al-Saad, Deputy Chairman & Deputy Managing Director, Mina Al-Ahmadi Refinery, Kuwait National Petroleum Company (KNPC); and Mr. Takashi Yasuda, Executive Officer, Senior General Manager, R&D Division, JGC Corporation.

Mr. Tange summarized the presentations as follows: Today, we listened to presentations on measures for improving the value of hydrocarbons in four countries. A new trend seems to be emerging in both oil producing and consuming countries, to use oil in value-added applications instead of simply burning it as fuel. However, comprehensive capacity to manage diverse technologies is required to continue the trend. Oil producing and consuming countries may have their differences, but they nonetheless share the same objective of seeking more advanced uses of oil and natural gas. We hope to develop new oil energy systems through mutual cooperation.



Q&A session

### 3. Summary

In the closing ceremony, Mr. Masataka Sase, Executive Director of JCCP, summarized the discussions that took place in this year's symposium, which focused on management and technology innovation for security

of oil supply. In regard to management innovation, he indicated that all panelists identified “human resource development” as the key to innovation and raised strong awareness that no company can survive the trend of globalization unless all ranks of personnel, from top management to site workers, unite their strengths. With respect to technology innovation, Mr. Sase said the panelists gave inspiring presentations on the challenges that are being addressed in their respective countries to produce high-value products from all types of hydrocarbon resources, from methane to heavy oil. However, as each country is working independently to attain a goal that is common to both oil producing and consuming countries, Mr. Sase emphasized the significance of all countries coming together to learn from each other in an exchange of information, and

called on all participants to further strengthen their bonds of mutual cooperation in the future.

In this year’s symposium, the keynote speech delivered by Mr. Nobuo Tanaka, Executive Director of IEA, noted that we must prepare to address a “creeping oil crisis,” which distinctively differs from the oil crises of the 1970s. JCCP has consistently focused on stable oil supply as an overriding theme of our annual international symposiums, and feel that the time has come for oil producing and consuming countries to cooperate in achieving technology and management innovation based on their longstanding relationships of trust. For our part, we will strengthen our commitment to serving as a bridge between oil producing and consuming countries and creating opportunities for mutual cooperation.

*<by Hisayoshi Tanda, Administration Dept.>*

### The 28th JCCP International Symposium Program

#### “Innovation of Technology and Management in Oil Downstream: For Security of Oil Supply”

Date	Time	Proceedings
Jan. 27 (Wed)	14:00 – 15:45	Opening ceremony
		Opening address: Mr. Yaichi Kimura, President of JCCP
		Guest of honor speech: Mr. Masaaki Kimura, Director-General, Natural Resources and Fuel Department, Agency for Natural Resources and Energy, METI
		Keynote speeches: Mr. Nobuo Tanaka, Executive Director, International Energy Agency (IEA) Mr. Mohammed A. Al-Omair, Executive Director, Refining and NGL Fractionation, Saudi Aramco
	15:45 – 17:30	Special lectures (1) Mr. Mubarak S. Al Ketbi, Manager, Crude & Condensate Division, Marketing & Refining Directorate, Abu Dhabi National Oil Company (ADNOC) (UAE) (2) Mr. He Zhoyun, Vice President, Economics & Development Research Institute, SINOPEC (China) (3) Dr. Pramod Kumar Karunakaran, Managing Director/CEO, Ethylene Malaysia Sdn. Bhd. (PETRONAS) (Malaysia)
	18:00 – 20:00	Reception
Jan. 28 (Thu)	9:30 – 12:00	Session 1 “Management Innovation”
	13:30 – 16:00	Session 2 “Technology Innovation”
	16:00 – 16:10	Closing address: Mr. Masataka Sase, Executive Director of JCCP

## Keynote Speeches

Country	Organization	Name	Title
Japan	International Energy Agency (IEA)	Mr. Nobuo Tanaka	Executive Director
Saudi Arabia	Saudi Aramco	Mr. Mohammed A. Al-Omair	Executive Director, Refining and NGL Fractionation

## Guest Speeches

Country	Organization	Name	Title
UAE	Abu Dhabi National Oil Company (ADNOC)	Mr. Mubarak S. Al Ketbi	Manager, Crude & Condensate Division, Marketing & Refining Directorate
China	SINOPEC	Mr. He Zhoyun	Vice President, Economics & Development Research Institute
Malaysia	Ethylene Malaysia Sdn. Bhd. (PETRONAS)	Mr. Pramod Kumar Karunakaran	Managing Director/CEO

### Session 1: Management Innovation

**Chairman:** Mr. Takeshi Kurosaki, Executive Corporate Officer in Charge of Petroleum Refining Department, Japan Energy Corporation

Country	Company	Name	Title
Oman	Oman Refineries & Petrochemicals Company (ORPC)	Mr. Masoud Salim Al Msalmy	General Manager, Corporate Support Division
UAE	Abu Dhabi National Oil Company (ADNOC)	Mr. Hashem Y. Al Refaei	Manager, Marketing Research & Administration Division, Marketing & Refining Directorate
Indonesia	PERTAMINA	Ms. Nina Nurlina Pramono	Vice President, People Management of Human Resources
Nigeria	Nigerian National Petroleum Corporation (NNPC)	Mr. A. O. Oniwon	Group Executive Director, Refineries & Petrochemicals
Japan	Japan Energy Corporation	Mr. Shinji Takasu	General Manager, Refining Technology, Petroleum Refining Department

### Session 2: Technology Innovation

**Chairman:** Mr. Sei Tange, Executive Vice President and CMO, JGC Corporation

Country	Company	Name	Title
Qatar	Qatar Petroleum Marketing Services (Tasweeq)	Mr. Mark G. Lawrence	Head of GTL Product Marketing
Iran	Hormoz Oil Refining Company (NIORDC)	Mr. Aminallah Eskandari	Managing Director and Chairman of Board of Directors
Kuwait	Kuwait National Petroleum Company (KNPC)	Mr. Asaad Ahmad Al-Saad	Deputy Chairman & Deputy Managing Director, Mina Al-Ahmadi Refinery
Japan	JGC Corporation	Mr. Takashi Yasuda	Executive Officer, Senior General Manager, R&D Division

# The 27th JCCP International Symposium

## “Future Vision of the Oil Industry: Creating Value from Hydrocarbons and Approaches to New Energy Systems”



*Participants of the symposium*

On January 28 and 29, 2009, JCCP held “The 27th JCCP International Symposium” under the auspices of the Ministry of Economy, Trade and Industry (METI). The two-day event drew an audience of 372 visitors.

### 1. Theme and Goal

The theme of this year’s symposium was “Future Vision of the Oil Industry: Creating Value from Hydrocarbons and Approaches to New Energy Systems.”



*Opening address:  
Mr. Yaichi Kimura, President of JCCP*



*Guest of honor speech:  
Mr. Shinsuke Kitagawa, Director-General,  
Natural Resources and Fuel Department, METI*

Oil consumption is increasing in newly emerging economies, and is adding new strains on the global oil market. Oil-producing and oil-consuming countries must therefore cooperate in addressing the common issue of mitigating the increase in oil consumption, by seeking even more advanced utilization of oil through promotion of energy conservation, introduction of renewable energies, and petrochemical integration.

In this year's symposium, leading engineers from Middle East and Asian oil-producing countries, as well as from Japanese oil companies, were invited to share the initiatives for effective oil utilization that are implemented in their respective countries. By providing a forum for mutual sharing of experience, the symposium aimed to create a common awareness that such personal exchange of information is vital to the efficient introduction of relevant technologies.

## 2. Overview

### (1) First Day: Opening Ceremony (January 28)

The symposium began with an opening address by Mr. Yaichi Kimura, President of JCCP. This was followed by a greeting from the guest of honor, Mr. Shinsuke Kitagawa, Director-General of the Natural Resources and Fuel Department, METI, and a keynote speech by Mr. Nasser D. Al Mahasher, General Manager, Saudi Petroleum, Ltd.

Mr. Kimura stressed the need to appreciate more seriously than ever the true value of oil today, and spoke about the important responsibility of the oil downstream sector in oil-producing and oil-consuming countries. Based on the understanding that the oil refining industry plays an important role in converting oil into petroleum and petrochemical products, Mr. Kimura pointed out that the extent to which we can achieve effective utilization of oil depends on how much we are able to develop advanced oil refining technologies. Therefore, in this respect, we need to renew our awareness that we bear an important responsibility to the next generation.

Mr. Kitagawa of METI stated that creating new values in the oil industry is a common issue to



*Keynote speech:  
Mr. Nasser D. Al Mahasher, General Manager,  
Saudi Petroleum, Ltd.*

oil-producing and oil-consuming countries, and expressed his expectations that fruitful exchanges of views will take place in the symposium.

Mr. Al Mahasher, in his keynote speech, spoke about increasing the value of oil, summarized as follows: Saudi Aramco has the responsibility to provide stable supplies of oil to the world. We have a continuous production capacity of 12 million b/d in the upstream sector. In the downstream sector, we are developing integrated petrochemical refineries, including the PetroRabigh joint venture with Sumitomo Chemical, to increase the value of oil. Oil still exists in relative abundance today, but the precious resource will eventually run dry. Therefore, Saudi Aramco will continue to make every effort to maximize the value of our precious oil resource. Today, we are seeing less implementation of major projects due to the recent global downturn, but Saudi Aramco is looking beyond this short-term trend. We must not lose sight of long-term oil-related needs and opportunities. Companies that are able to keep a steady eye on the future are sure to enjoy even greater success when the global economy recovers.

Mr. Al Mahasher also used the Japanese expression "*a-un no kokyu*," which roughly translates into "being in sync with each other without using gestures or words," and called on everyone to endure together and successfully emerge from the current difficulties to a bright future in the spirit of "*a-un no kokyu*."

**The 27th JCCP International Symposium Program**  
 “Future Vision of the Oil Industry:  
 Creating Value from hydrocarbons and Approaches to New Energy Systems”

Date	Time	Proceedings
Jan. 28 (Wed)	14:00 – 15:00	Opening ceremony
		Opening address: Mr. Yaichi Kimura, President of JCCP
		Guest of honor speech: Mr. Shinsuke Kitagawa, Director-General of the Natural Resources and Fuel Department, Agency for Natural Resources and Energy, METI
		Keynote: Mr. Nasser D. Al Mahasher, General Manager, Saudi Petroleum, Ltd.
	15:15 – 17:40	Guest speech
		(1) Mr. Vikram M. Sampat, Vice President, Petroleum Business, Reliance Industries Limited (India)
		(2) Mr. Seiji Takeuchi, General Manager, Planning and Coordination Office, Rabigh Project, Sumitomo Chemical Co., Ltd. (Japan)
		(3) Dr. Fereidun Fesharaki, Chairman, FACTS Global Energy (United States)
		(4) Mr. Abubakr Amer Al-Saiari, Liaison Coordinator, Human Resources, Qatar Petroleum (Qatar)
	18:00 – 20:00	Reception
Jan. 29 (Thu)	9:30 – 12:00	Session 1 “Challenge of the Petroleum Industry to Seek Maximum Value from Hydrocarbons—Towards the Best Mix of Future Energy Systems—”
	13:30 – 16:00	Session 2 “Challenge of the Petroleum Industry to Seek Maximum Value from Hydrocarbons—Towards Consumer-Producer Cooperation—”
	16:00 – 16:10	Closing address: Mr. Masataka Sase, Executive Director of JCCP

### Keynote Speech

Country	Organization	Name	Title
Saudi Arabia	Saudi Petroleum, Ltd.	Mr. Nasser D. Al Mahasher	General Manager

### Guest Speeches

Country	Organization	Name	Title
India	Reliance Industries Limited	Mr. Vikram M. Sampat	Vice President
Japan	Sumitomo Chemical Co., Ltd.	Mr. Seiji Takeuchi	General Manager, Planning and Coordination Office, Rabigh Project
USA	FACTS Global Energy	Dr. Fereidun Fesharaki	Chairman
Qatar	Qatar Petroleum	Mr. Abubakr Amer Al-Saiari	Liaison Coordinator, Human Resources

## (2) First Day: Special Lectures (January 28)

Following Mr. Al Mahasher's keynote speech, guest speakers Mr. Vikram M. Sampat, Vice President, Petroleum Business, Reliance Industries Limited; Mr. Seiji Takeuchi, General Manager, Planning and Coordination Office, Rabigh Project, Sumitomo Chemical Co., Ltd.; Dr. Fereidun Fesharaki, Chairman, FACTS Global Energy; and Mr. Abubakr Amer Al-Saiari, Liaison Coordinator, Human Resources, Qatar Petroleum, gave special lectures.

Mr. Sampat stated that maintaining competitive strength is extremely difficult to do in the turmoil of today's global economy, and emphasized the importance of enhancing technological capabilities and strengthening business management technologies. Mr. Takeuchi spoke about PetroRabigh, and defined it as a major project that offers three benefits: large-scale equipment, advanced technologies, and inexpensive feedstock, and that aims to contribute to promoting industries and creating employment in Saudi Arabia as a worldwide leader in the chemical industry. Dr. Fesharaki estimated the fair prices of crude oil, and gave note that investments need to be made extremely carefully, especially since so many countries are pushing forward with projects for the construction of refineries and cracking units, that by 2010 or so the global market may become saturated with excessive supplies of oil products. Lastly, Mr. Al-Saiari articulated the importance of human resource development, emphasizing the need to systematically develop outstanding personnel, as they are the key to the success of large-scale projects.



Session 1 panelists: Representing Japan, Kuwait, UAE, and Qatar (from the left)

## (3) Second Day: Discussion Sessions (January 29)

### (i) Session 1 (morning session)

Mr. Keizoh Takeuchi, Director and Senior Vice President, Nippon Petroleum Refining Co., Ltd., chaired Session 1. The panelists included Mr. Howard Bevan, Senior Business Planner, Corporate Planning Department, Qatar Petroleum; Dr. Jihad M. Mohaidat, Technology Department Manager, Industries Unit, MASDAR-Abu Dhabi Future Energy Company; Mr. Ahmad S. Al-Jemaz, Deputy Managing Director, Shuaiba Refinery, Kuwait National Petroleum Company; and Mr. Hiroji Adachi, Executive Officer and General Manager, Technical Service Department, Nippon Oil Corporation.

After the panelists delivered their presentations, Mr. Takeuchi summarized Session 1 discussions as follows: Oil-producing and oil-consuming countries are both actively implementing initiatives for the effective utilization of oil resources. However, in order to bring success to such large projects, a framework of worldwide cooperation based on a global perspective is essential. In this respect, JCCP serves an important role: to more strongly than ever promote training, technical cooperation, and human resource development.

### (ii) Session 2 (afternoon session)

Mr. Junjiro Kuramochi, Director and General Manager, Manufacturing Department, Idemitsu Kosan Co., Ltd., chaired Session 2. The panelists included Mr. Seyed Morteza Elahi, Director of Planning and Projects Control, Pars Oil and Gas Company;



Session 2 panelists: Representing Japan, Saudi Arabia, UAE, China, and Iran (from the left)

Mr. Chaohui Huang, Section Chief, Comprehensive Plan Department, SINOPEC Zhenhai Refining & Chemical Company; Mr. Ahmed Omar Abdulla, Assistant General Manager, Operations, Abu Dhabi Oil Refining Company (TAKREER); Mr. Hussain A. Al-Qahtani, Director, Joint Manufacturing Program, Ras Tanura Integrated Petrochemical Project, Saudi Aramco; and Mr. Katsumi Teraoka, Executive Chief Engineer, Manufacturing Department, Idemitsu Kosan Co., Ltd.

After the panelists delivered their presentations, Mr. Kuramochi summarized Session 2 discussions, and concluded as follows: When considering the finite nature of natural resources, it is imperative that oil-producing and oil-consuming countries mutually pursue the noble use of oil, by promoting oil and petrochemical integration, increasing the value of oil, and saving energy.

**Session 1:** Challenge of the Petroleum Industry to Seek Maximum Value from Hydrocarbons  
—Towards the Best Mix of Future Energy Systems—

**Chairman:** Mr. Keizoh Takeuchi, Director, Senior Vice President, Nippon Petroleum Refining Co., Ltd.

Country	Company	Name	Title
Qatar	Qatar Petroleum	Mr. Howard Bevan	Senior Business Planner, Corporate Planning Department
UAE	MASDAR – Abu Dhabi Future Energy Company	Dr. Jihad M. Mohaidat	Manager, Technology Department, Industries Unit
Kuwait	Shuaiba Refinery, Kuwait National Petroleum Company	Mr. Ahmad S. Al-Jemaz	Deputy Managing Director
Japan	Nippon Oil Corporation	Mr. Hiroji Adachi	Executive Officer and General Manager, Technical Service Department

**Session 2:** Challenge of the Petroleum Industry to Seek Maximum Value from Hydrocarbons  
—Towards Consumer-Producer Cooperation—

**Chairman:** Mr. Junjiro Kuramochi, Director and General Manager, Manufacturing Department, Idemitsu Kosan Co., Ltd.

Country	Company	Name	Title
Iran	Pars Oil and Gas Company	Mr. Seyed Morteza Elahi	Director, Planning and Projects Control
China	SINOPEC Zhenhai Refining & Chemical Company	Mr. Chaohui Huang	Section Chief, Comprehensive Plan Department
UAE	Abu Dhabi Oil Refining Company (TAKREER)	Mr. Ahmed Omar Abdulla	Assistant General Manager
Saudi Arabia	Saudi Aramco Ras Tanura Refinery	Mr. Hussain A. Al-Qahtani	Director, Joint Manufacturing Program, Integrated Petrochemical Project
Japan	Idemitsu Kosan Co., Ltd.	Mr. Katsumi Teraoka	Executive Chief Engineer, Manufacturing Department



*Summary speech:  
Mr. Masataka Sase, Executive Director of JCCP*



*Symposium audience*

### 3. Summary

In closing the symposium, Mr. Sase summarized the two days of discussions as follows: In the Middle East and Asia, there are many plans for the construction of new refineries. Through advanced integration, these refineries are designed under the principle of pursuing added value to the extreme. This situation has made me realize anew that adding value is a common issue for both oil-producing and oil-consuming countries. From the corporate perspective, pursuing added value translates into higher productivity, and from the social perspective, it means achieving efficient use of petroleum, reducing environmental burden, and conserving precious oil resources. Therefore, enhancing the value of oil is an important challenge for both oil-producing and oil-consuming countries, one which must be addressed through mutual cooperation.

Mr. Sase then closed the symposium by articulating JCCP's commitment to promote personnel and technical exchange between oil-producing and oil-consuming countries and contribute to creating new values of oil.

This year's symposium was held amidst the worldwide financial crisis that began last September. However, country representatives agreed that "although projects may see a slight delay due to the temporary fluctuation in the economy, it is important to look ahead to achieve advanced utilization of oil in the long term," and voiced their expectations of Japan's cooperation in developing human resources and corporate culture as a means for bringing those projects to success. To respond to these expectations, JCCP will continue promoting training and technical cooperation programs in the future.

*<by Hisayoshi Tanda, Administration Dept.>*



Participants of the symposium

Topics

## The 26th JCCP International Symposium

### “The Role of the Oil Downstream Sector from the Perspective of Stable Energy Supply”

On February 6 and 7, 2008, “The 26th JCCP International Symposium” was held under the auspices of the Ministry of Economy, Trade and Industry. As the symposium took place just as the crude oil price had exceeded 100 dollars per barrel, it attracted greater attention than ever before, and drew an audience of close to 300 participants.

#### Symposium Theme

This year’s symposium was conducted under the theme, “The Role of the Oil Downstream Sector from the Perspective of Stable Energy Supply—The Necessity and Possibilities of International Collaboration.”

Today, the issue of securing a stable oil supply is a worldwide concern. The objective of the symposium was to therefore seek avenues for

securing a stable supply of oil, through discussions among guests and panelists from Japan and abroad, on issues and countermeasures commonly faced in the oil downstream sector. JCCP hoped to promote the awareness that “it is important for oil-producing and oil-consuming countries to step beyond their roles, to cooperate in resolving issues in the oil industry, while sharing their experience with each other,” and that “promoting cooperation and deepening the engagement between oil-producing and oil-consuming countries is the key to securing a stable energy supply.”

#### Symposium Overview

##### (1) Opening Ceremony (February 6, 2008)

On the first day, the symposium began with an opening address by Mr.

Akira Idemitsu, President of JCCP, followed by a greeting by the guest of honor, Mr. Shinsuke Kitagawa, Director-General of the Natural Resources and Fuel Department, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry (METI), and an introduction of the chairmen and panelists of Sessions 1 and 2 by Mr. Mikio Kojima, Executive Director of JCCP. Following this, Mr. Idemitsu gave a keynote speech.

In his greeting, Mr. Kitagawa first welcomed all the guests from abroad who had come to Japan to participate in the symposium. He then spoke about the significance of the close relationships that oil-producing countries and Japan’s oil downstream sector have built over the years. Today, the crude oil market is undergoing a great change in response to increasing global demands for oil, but



*Guest of honor speech*  
 Mr. Shinsuke Kitagawa, Director-General  
 Natural Resources and Fuel Department  
 Agency for Natural Resources and Energy, METI



*Keynote speech*  
 Mr. Akira Idemitsu, President of JCCP

Japan nonetheless continues to receive a stable supply of crude oil, owing precisely to the strong relationship of trust it has cultivated with oil-producing countries. Representing METI, Mr. Kitagawa also expressed his hopes that JCCP will continue to implement activities that respond to the needs of oil-producing countries, and that the mutually beneficial relationships between JCCP and those countries will continue to grow even stronger.

Mr. Idemitsu, in his keynote speech, stressed the importance of oil and the necessity of ensuring its sustainable supply. He explained that oil is indispensable to automobile, airplanes, and other modern means of transportation, as well as an important petrochemical raw material, from which various types of plastics and chemicals are made. It is a precious resource that must not be depleted by

our generation. Mr. Idemitsu emphasized that it is our responsibility to the next generation, to reconsider the role of the oil downstream sector and ensure a stable oil supply for the future.

**(2) Special Lectures  
 (February 6, 2008)**

Following Mr. Idemitsu's keynote speech, Dr. Ken Koyama, Board Member of The Institute of Energy Economics, Japan, and Mr. Waleed H. Al-Bedaiwi, General Manager, Saudi Petroleum, Ltd., were asked to give a special lecture as guest speakers.

After briefly summarizing today's global energy situation, Dr. Koyama discussed the evolving relationship between the Middle East and Asia. He stated that the Middle East and Asia are gradually forming an inseparable relationship, in which they mutually

depend upon each other. This is because the two regions are the growth centers of the world. Asia's growth could provide an enormous oil market to the Middle East, and growth in the Middle East would allow Asia to import a large supply of oil. In the future, investments are expected to increase in both directions, from the Middle East to Asia, and vice versa, and bring the two regions closer to each other.

Mr. Al-Bedaiwi spoke about the significant relationship between oil-producing and oil-consuming countries, likening the relationship to "the two sides of a coin," which are inseparable from the other. He closed his lecture, by articulating Saudi Aramco's strong vow to join hands with its partners in the oil downstream sector, to uphold its responsibility of providing a stable supply of oil.



*Special lecture*  
 Dr. Ken Koyama, Board Member  
 The Institute of Energy Economics, Japan



*Special lecture*  
 Mr. Waleed H. Al-Bedaiwi, General Manager  
 Saudi Petroleum, Ltd.

### (3) Discussion Sessions

(February 7, 2008)

The second day of the symposium featured Session 1 discussions in the morning and Session 2 discussions in the afternoon. They arrived at the following conclusions.

#### 1) Session 1

*Theme: Management Issues in the Oil Downstream Sector for Contributing to Globally Stable Supply of Energy*

The chairman of Session 1, Mr. Isao Kusakabe, Executive Officer

& General Manager, International Ventures Department, Cosmo Oil Co., Ltd., summarized Session 1 discussions as follows: "Many countries today are experiencing rapid economic growth, a situation that will make the world ever more oil-dependent in the future. At

### 26th JCCP International Symposium Program

The Role of the Oil Downstream Sector from the Perspective of Stable Energy Supply

Date	Time	Proceedings
Feb. 6 (Wed)	2:00 – 3:00 pm	Opening ceremony <ul style="list-style-type: none"><li>• Opening address: Mr. Akira Idemitsu, President of JCCP</li><li>• Guest of honor speech: Mr. Shinsuke Kitagawa, Director-General, Natural Resources and Fuel Department, Agency for Natural Resources and Energy, METI</li><li>• Introduction of session chairmen and panelists: Mr. Mikio Kojima, Executive Director of JCCP</li><li>• Keynote speech: Mr. Akira Idemitsu, President of JCCP</li></ul>
	3:15 – 5:40 pm	Special lectures <ul style="list-style-type: none"><li>• Dr. Ken Koyama Board Member, The Institute of Energy Economics, Japan</li><li>• Mr. Waleed H. Al-Bedaiwi General Manager, Saudi Petroleum, Ltd.</li><li>• Mr. Sultan Al-Mehairi Director, Marketing &amp; Refining, Abu Dhabi National Oil Co. (ADNOC)</li></ul>
	6:00 – 8:00 pm	Reception
Feb. 7 (Thu)	9:30 am - 12:00 pm	Session I "Management Issues in the Oil Downstream Sector for Contributing to Globally Stable Supply of Energy"
	12:00 – 1:30 pm	Lunch break
	1:30 – 4:00 pm	Session II "Technological Issues in the Oil Downstream Sector for Contributing to Globally Stable Supply of Energy"
	4:00 – 4:10 pm	Closing greeting: Mr. Mikio Kojima, Executive Director of JCCP

### Special Lectures

Country	Organization	Name	Title
Japan	The Institute of Energy Economics, Japan	Dr. Ken Koyama	Board Member Director, Strategy and Industry Research Unit
Saudi Arabia	Saudi Petroleum, Ltd.	Mr. Waleed H. Al-Bedaiwi	General Manager
UAE	Abu Dhabi National Oil Co. (ADNOC)	Mr. Sultan Al-Mehairi (on behalf of Mr. Hashem Y. Al-Refaei, Marketing Research & Administration Manager)	Director, Marketing & Refining



Session 1 panelists  
(From the right: Indonesia, Oman, Qatar, UAE, Japan)

Session 2 panelists  
(From the right: Iran, Kuwait, Nigeria, Saudi Arabia, Japan)



the same time, however, we are facing a number of serious issues, such as drastic increases in crude oil prices, environmental issues that call for stringent regulations, growing demands for petroleum products, and the need to seek measures for securing a stable oil supply. Given this situation, urgent attention must be directed to expanding and upgrading refinery facilities and developing human resources. As Japan and oil-producing countries share the same oil downstream issues, we must harness our efforts to secure a globally stable supply of oil. Relationships of trust that are born from such collaboration would also provide greater 'energy security.'"

## 2) Session 2

### ***Theme: Technological Issues in the Oil Downstream Sector for Contributing to Globally Stable Supply of Energy***

The chairman of Session 2, Mr. Keiichi Matsumoto, Director & Senior Executive Officer of Toyo Engineering Corporation, identified the following three technical issues from among various issues confronting the oil

downstream sector in each country, as common issues that have a particularly large impact on a globally stable supply of energy.

The first issue is the growing demand for gasoline and diesel oil, and measures for satisfying that demand, such as increasing heavy oil cracking capacity and adopting deep desulfurization technologies. In every country, demands for transportation fuel, such as gasoline and diesel oil, are increasing, while demands for heavy oil are decreasing. For this reason, there is an urgent need to construct and expand the capacities of facilities that crack heavy oil and convert it to gasoline and diesel oil. Desulfurization technologies are also sought, to produce petroleum products that comply with environmental standards that are becoming more and more stringent the world over.

The second issue is the decrease in heavy oil demand and the increase of value-added petroleum products. As a countermeasure to the decreasing demand for heavy oil, heavy oil should either be converted to light oil, by introducing a cracking unit, or to higher value-added products, such as by introducing a residual oil direct desulfurization unit, solvent dewaxing unit, or IGCC, to produce thermal power, steam energy, electric power, or synthetic gas.

The third issue is safety and environmental measures. Ensuring safety requires the proper maintenance management of facilities, utilization of appropriate tools, and awareness-raising of employees. Environmental measures should not only focus on preventing air and water pollution, but must also pay due consideration to other issues, such as the reduction of industrial waste.

#### (4) Summary

Lastly, Mr. Kojima summarized the two days of discussions and posed a thought for everyone to consider. He stated that the oil downstream sector

must fulfill an important role in securing a globally stable supply of energy. “Therefore,” he asked, “shouldn’t the players in the downstream sector mutually cooperate and make active

efforts to serve as a bridge between oil-producing and oil-consuming countries?” The symposium came to an end on this thought-provoking note.

*<by Hisayoshi Tada,  
Administration Dept.>*

**Session I:** Management Issues in the Oil Downstream Sector for Contributing to Globally Stable Supply of Energy  
Chairman: Mr. Isao Kusakabe, Executive Officer & General Manager, International Ventures Department, Cosmo Oil Co., Ltd.

Country	Company	Name	Title
Indonesia	PT PERTAMINA	Mr. Gigih Prakoso	Manager, Corporate Business Planning and Development
Qatar	Qatar Petroleum	Dr. Ali Hamed Al-Mulla	Manager, Corporate Environment and Sustainable Development
Oman	Oman Refinery Company L.L.C.	Mr. Said Waleed Q. Al-Zadjali	Manager, Procurement, Contracts & Inventory
UAE	Abu Dhabi Oil Refining Co. (TAKREER)	Mr. Sultan Saeed Al-Muhairi	Abu Dhabi Refinery Division Manager
Japan	Cosmo Oil Co., Ltd.	Mr. Hirohiko Kato	General Manager, International Business Dept.

**Session II:** Technological Issues in the Oil Downstream Sector for Contributing to Globally Stable Supply of Energy  
Chairman: Mr. Keiichi Matsumoto, Director, Senior Executive Officer, General Manager, Plant Engineering Center, Toyo Engineering Corporation

Country	Company	Name	Title
Iran	National Iranian Oil Refining and Distribution Company (NIORDC)	Mr. Amin Allah Eskandari	Director, Refining Affairs
Kuwait	Kuwait National Petroleum Co.	Mr. Mohammed Ghazi Al-Mutairi	Deputy Managing Director, Mina Abdulla Refinery
Nigeria	Nigerian National Petroleum Corporation	Engr. Onochi A. Anyaoku	Group Executive Director, Refining and Petrochemicals Directorate
Saudi Arabia	Saudi Aramco	Mr. Ali Alhazmi	Superintendent, Riyadh Refinery Operation Division
Japan	Toyo Engineering Corporation	Mr. Tomomichi Tomita	General Manager, Process Systems Engineering Division



*Scene of the Symposium*



*Closing address  
Mr. Mikio Kojima, Executive Director of JCCP*

# The 18th Joint GCC-Japan Environment Symposium

## —Environment & Water Resources for Our Future—

The 18th Joint GCC-Japan Environment Symposium was jointly organized with Bahrain Centre for Studies & Research (BCSR), and was held over a three-day period from February 8 to 10 in Bahrain, under the theme, “Environment & Water Resources for Our Future.”

### Background

JCCP has held the Joint GCC-Japan Environment Symposium annually to provide a forum for information exchange among environmental experts in the GCC countries and Japan, and fiscal 2009 marked the 18th convening of the symposium.

### Overview

Some 230 participants from the GCC countries and Japan, the largest number ever, attended the opening ceremony, which was held on the 8th. They included such key figures as H.E. Dr. Mohammed J. K. Alghatam, Chairman of the Board of Trustees of BCSR; Dr. Abdulla M. Alsadiq, Secretary-General of BSCR; Dr. Eion Turnbull, Deputy Chief Executive (Refining & Marketing) of the Bahrain Petroleum Company (BAPCO), which provided special assistance in implementing the symposium by hosting a BAPCO-sponsored reception on the evening of February 8; H.E. Mr. Hideo Sato, Ambassador of Japan to Bahrain; and

Dr. Junzo Kasahara, Professor Emeritus at the University of Tokyo (and leader of the Japanese delegation). Dr. Alsadiq, Dr. Turnbull, Ambassador Sato and Mr. Morihiro Yoshida, Managing Director of JCCP, each gave an opening address.

Dr. Alsadiq thanked the guests for attending the symposium, and expressed his expectations that the symposium will provide hints for resolving water resource and climate change issues in the GCC region. He noted that, as environmental issues are a large concern to the GCC countries where water resources are limited, it is highly meaningful to have Japanese and GCC experts mutually share their knowledge and exchange views on issues of concern to the region in this symposium.

Dr. Turnbull emphasized our responsibility to seriously address environmental issues today as leaders in the field, although whether we succeed or not in doing so can only be judged by the next generation. He said he was confident that technological innovations that will be introduced in the symposium would bring us new possibilities.

Ambassador Sato noted that this environment symposium, launched in 1992 as a greening seminar and held for roughly 20 years since, provides an opportunity to address the issue of global warming, particularly in the GCC region where environmental issues have become pronounced after the Gulf War. He encouraged



*Commemorative photo at the opening ceremony*

all participants to learn and benefit from the knowledge of the Japanese and GCC experts.

Mr. Yoshida, after giving a brief introduction of JCCP and an overview of JCCP technical cooperation projects and training programs, asserted that Japan's advanced environmental technologies would be effective in addressing environmental issues that are raising widespread concern in the GCC countries, and stressed the importance of this symposium.

Three keynote lectures followed the opening speeches. On the Japanese side, Dr. Kasahara gave a lecture under the title, "An innovative method for the 4D monitor of storage in CCS (Carbon dioxide Capture and Storage) and oil and gas reservoirs and aquifers." On the Bahrain side, lectures were given by Mr. Essa G. Al-Ansari, General Manager of Major Engineering Projects at BAPCO, and Prof. Waleed Al-Zubari, Vice-President of Academic Affairs at Arabian Gulf University.

After the keynote lectures, 19 Japanese GCC experts gave presentations in four separate discussion sessions.

■ February 8

Session 1: Energy and Gas Industry and Sustainability

Session 2: Water Resources and Environmental Protection

■ February 9

Session 3: Climate Change and Global Warming

Session 4: Future Perspective for Energy, Water and Environment

Many of the presentations given by GCC experts focused on "water" and "the environment." This is understandable, since the symposium was originally designed as a greening seminar. However, it also indicated the GCC countries' consistently strong interest and concern in issues related to the environment and water resources.



*Discussion session*

A closing ceremony was held on the 9th following the final discussion session. Dr. Mohammed S. Al-Ansari, Director of the Publication & Data Warehouse at BCSR and Chairperson of the Organizing Committee of the Environment Symposium, and M. Nakamura, Manager of the Technical Cooperation Dept. at JCCP, officially closed this year's symposium after thanking all symposium participants and everyone from BCSR and BAPCO for their cooperation.

On the 10th, the Japanese delegation visited a BAPCO refinery, accompanied by many people from the Bahrain side. There they visited the Low Sulphur Diesel Production Control Center among other facilities, and recognized anew Bahrain's strong commitment to environmental conservation.

On the 7th, the day before the opening of the environment symposium, the JCCP Secretariat held a press conference at BCSR to present an overview of JCCP activities and explain details of the environment symposium. Dr. Alghatam, Dr. Alsadiq, Dr. Al-Ansari, Mr. Yukio Ishibiki, Second Secretary of the Japanese Embassy in Bahrain, and six Japanese lecturers also lent their presence to the event.

## Summary

The participants of the environment symposium engaged in active discussions in the four discussion sessions. GCC experts took particular note of the presentations on Japan's advanced environmental technologies as potential solutions to their environmental challenges.

Members on the JCCP side hope that this environment symposium has helped deepen relationships between oil-related companies and organizations in the GCC region and JCCP. Moreover, public recognition of JCCP in the GCC countries has increased, owing to local media coverage of the press conference and symposium.

*<by Makoto Nakamura, Technical Cooperation Dept.>*



*Press conference*

## The 18th Joint GCC-Japan Environment Symposium

No.	Country	Name	Organization
<b>Session 1: Energy and Gas Industry and Sustainability</b>			
Chairpersons: Prof. Hidenori Yahiro, Graduate School of Science and Engineering, Ehime University, Japan Dr. Mohammed S. Al-Ansari, Bahrain Centre for Studies & Research			
1	Saudi Arabia	Mr. Mohammad A. Hajri	Saudi Aramco
2	Japan	Mr. Shigeyuki Funada	Cosmo Oil Co., Ltd.
3	Bahrain	Mr. Ijaz Ashraf	The Bahrain Petroleum Company
4	Bahrain	Dr. Tarek Ghalwash	Bahrain Centre for Studies & Research
<b>Session 2: Water Resources and Environmental Protection</b>			
Chairpersons: Dr. Muhammad Al-Rashed, Kuwait Institute for Scientific Research Eng. Nassema Al-Marzouqi, Water Distribution Directorate, Bahrain			
1	Kuwait	Dr. Mohammad Al-Murad	Kuwait Institute for Scientific Research
2	Bahrain	Dr. Khaled Burashid	Electricity & Water Authority
3	Saudi Arabia	Dr. Alaadin A. Bukhari	King Fahd University of Petroleum & Minerals
4	Oman	Dr. Mahad Said Baawain	Sultan Qaboos University
5	Qatar	Dr. Kamel Mostafa Amer	Ministry of Environment
<b>Session 3: Climate Change and Global Warming</b>			
Chairpersons: Dr. Waheeb Al-Naser, University of Bahrain Dr. Ali Hamad Al-Mulla, Qatar Petroleum			
1	UAE	Dr. Sayed A. M. Marzouk	UAE University
2	Japan	Dr. Ken-ichi Fujimoto	Kitakyushu International Techno-cooperative Association
3	Japan	Ms. Hikari Egami	JGC Corporation
4	Bahrain	Dr. Mohammed S. Al-Ansari	Bahrain Centre for Studies & Research
5	Bahrain	Dr. Majeed Safar Jasim	University of Bahrain
<b>Session 4: Future Perspective for Energy, Water and Environment</b>			
Chairpersons: Eng. Ebrahim Al-Kaabi, Electricity and Water Authority, Bahrain Dr. Ken-ichi Fujimoto, Kitakyushu International Techno-cooperative Association, Japan			
1	Japan	Dr. Kayoko Tsuruga	JGI, Inc.
2	Bahrain	Dr. Waheeb Al-Naser	University of Bahrain
3	Bahrain	Dr. Nader Al-Masri	Bahrain Centre for Studies & Research
4	Japan	Prof. Hidenori Yahiro	Graduate School of Science and Engineering, Ehime University
5	Bahrain	Prof. Ibrahim Abdel Gelil	College of Graduate Studies, Arabian Gulf University



*Symposium venue*



*One of the Japanese lecturers: Ms. Hikari Egami,  
JGC Corporation*

# The 17th Joint GCC-Japan Environment Symposium

## (The 4th Joint KISR-JCCP Environment Symposium)



*Participants of the symposium*

JCCP and Kuwait Institute for Scientific Research (KISR) jointly held the 17th Joint GCC-Japan Environment Symposium (the 4th Joint KISR-JCCP Environment Symposium) from February 2 to 4, 2009. The symposium was held in Kuwait City, under the theme, “Water Resources in the GCC and Environmental Challenges.”

This symposium has been held annually in a GCC country as a forum for information exchange among

environmental experts in the GCC countries and Japan, and was held for the 17th time this year.

The opening ceremony was held on the 2nd, with the attendance of more than 200 people from the GCC countries and Japan. They included such key figures as Dr. Najji M. Al-Mutairi, Director General of KISR, Mr. Jamal Al-Nouri, Managing Director – Planning of Kuwait Petroleum Corporation (KPC) who provided special assistance in implementing



*Dr. Najji M. Al-Mutairi, Director General, KISR (left), Mr. Masataka Sase, Executive Director of JCCP (right)*



*Dr. Takeo Kikkawa, Professor at Hitotsubashi University Graduate School (leader of Japanese delegation)*



Mr. Jamal Al-Nouri, Managing Director – Planning, KPC (left), Dr. Muhammad F. Al-Rashed, Director, Water Resource Division, KISR (center)



Dr. Al-Mutairi (left), H.E. Mr. Masatoshi Muto, Ambassador of Japan to Kuwait (right)

the symposium, H.E. Mr. Masatoshi Muto, Ambassador of Japan to Kuwait, and Dr. Takeo Kikkawa, Professor at Hitotsubashi University Graduate School of Commerce and Management (leader of the Japanese delegation). Dr. Al-Mutairi, Mr. Al-Nouri, H.E. Ambassador Muto and Mr. Masataka Sase, Executive Director of JCCP, each gave an opening address.

Dr. Al-Mutairi acknowledged that environmental issues are of growing concern to the GCC countries where water resources are limited, and stressed how important and meaningful it is for experts from Japan and the GCC countries to exchange views and engage in serious discussions on environmental issues. He also expressed his wish that matters discussed in this symposium will provide clues to addressing issues concerning water resources and climate change in the GCC countries.

Mr. Al-Nouri noted that holding the symposium in Kuwait this year was well-timed, as it coincided with KPC's company-wide undertaking to address environmental issues, and said that he was looking

forward to the presentations.

H.E. Ambassador Muto explained that Japan experienced serious public pollutions in the 1960s and 1970s, but has overcome those issues through its own efforts, and is presently applying the knowledge it has acquired through that experience to the Kuwait Gulf Treatment Project that is being implemented jointly with the Kuwait Ministry of Higher Education. He also expressed his wish that the symposium will encourage more Japanese companies and organizations to address environmental issues in Kuwait and other GCC countries, and produce significant achievements.

Mr. Sase firstly gave a brief introduction of JCCP, followed by an overview of JCCP technical cooperation projects and training programs implemented in Kuwait. He then explained the effectiveness of Japan's advanced environmental technologies in addressing environmental issues that are becoming of increasing concern in the GCC countries, and emphasized the importance of this environment symposium.



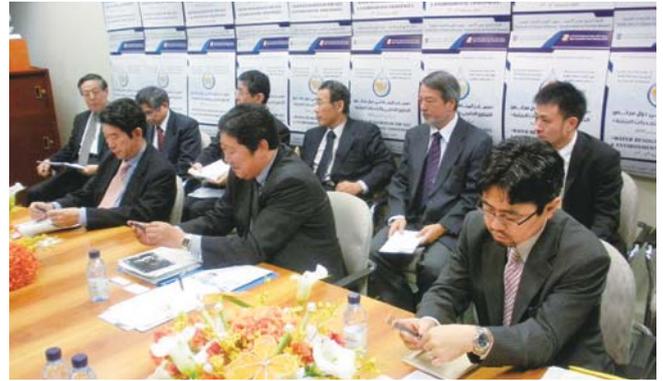
Symposium venue



Symposium session



Press conference at KISR



Japanese delegation at the press conference

The last but not the least item of the opening ceremony was Dr. Kikkawa's keynote lecture titled "Energy Conservation and Technological Innovation: Japan's Contribution to Cool Earth." The lecture focused on the "Cool Earth 50" initiative, which Japan had proposed in May 2007 as a post-Kyoto framework. Dr. Kikkawa stated that achieving an appropriate balance between global environmental conservation and economic growth is essential to realizing the "Cool Earth 50" initiative, and that this balance could be effectively achieved by promoting energy conservation and technological innovation such as Carbon Dioxide Capture and Storage (CCS) and Enhanced Oil Recovery (EOR) technologies. Dr. Kikkawa also introduced the "Top Runner Program" and "Sector by Sector Approach," which are Japan's unique methods for reducing greenhouse gases toward realization of "Cool Earth 50." He explained that the former is producing steady results in the residential, commercial and transportation sectors, and that the latter is proving effective in industrial sectors.

Discussion sessions were held on the 2nd and the 3rd. A total of 18 presentations were given under four themes: (i) Renewable Energy for Water Treatment and Desalination; (ii) Clean Development Mechanisms (CDM); (iii) Protection and Management of Water Resources; and (iv) Oil & Gas Industry and Environmental Issues, and were followed by active discussions. Presentations on Japan's advanced

environmental technologies seemed to attract the strong interest of all GCC experts.

On the 3rd, a closing ceremony was held following the completion of the second day of discussions. Dr. Khaled Hadi, Manager, Hydrology Department, representing KISR (on behalf of Dr. Muhammad F. Al-Rashed, Director, Water Resource Division), and Mr. Mitsuyoshi Saito, Councilor for JCCP, summarized the two days of discussions and proposed twelve recommendations concerning the symposium presentations. In closing, Mr. Koichi Ito, Deputy General Manager, expressed his deep appreciation to KISR, KPC and all participants, on behalf of JCCP.

On the 4th, we visited the exhibition center and oil field (artificial oil lake created on the Burgan Oil Field) of Kuwait Oil Company (KOC), which appeared to symbolize the deep commitment of Kuwait's oil-related companies and organizations



Local newspaper article on the environment symposium (Arab Times)



Local newspaper article on the press conference (Al Watan)

toward the environment.

In this environment symposium, Mr. Al-Nouri, Managing Director – Planning of KPC, not only attended the opening ceremony, but also generously hosted a KPC-sponsored reception on the evening of the 2nd. We hope that the occasion of this environment symposium has helped deepen relationships between oil-related companies and organizations in Kuwait and JCCP.

Prior to the symposium, a press conference was held at KISR on February 1, with the attendance of Dr. Al-Rashed, Director, Water Resource Division

of KISR, Mr. Takanori Yamashita, First Secretary at the Embassy of Japan in Kuwait, and eight Japanese lecturers. The JCCP Secretariat gave a statement on the environment symposium, as well as introduced an overview of JCCP and JCCP activities in Kuwait. The local newspapers ran many articles on the press conference and environment symposium, and helped increase public recognition of JCCP in Kuwait.

We would like to extend our deepest appreciation to everyone who has cooperated in the successful implementation of this symposium.

*<by Makoto Nakamura, Technical Cooperation Dept.>*

### List of speakers

No.	Country	Name	Organization
<b>Session 1: Renewable Energy for Water Treatment and Desalination</b>			
Chairperson: Dr. Muhammad F. Al-Rashed, Kuwait Institute for Scientific Research (KISR) Prof. Katsuyuki Fujinawa, Shinshu University			
1	Kuwait	Dr. Essam El-Sayed	Kuwait Institute for Scientific Research (KISR)
2	Japan	Mr. Eiji Wada	Kitakyushu International Techno-cooperative Association
3	Japan	Mr. Kei Omura	NTT Data CCS Corporation
4	Japan	Mr. Sueo Nagasawa	Water Re-use Promotion Center
<b>Session 2: Clean Development Mechanism (CDM)</b>			
Chairperson: Prof. Morihiro Kurushima, Toyo University Mr. Mohammad Al-Fodari, Kuwait Oil Company (KOC)			
5	Japan	Prof. Morihiro Kurushima	Toyo University
6	Kuwait	Dr. M. M. Oskay	Chevron Company
7	Saudi Arabia	Dr. Mansor Kashir	Saudi Aramco (ARAMCO)
8	UAE	Dr. Ali H. Al-Marzouqi	UAE University (UAEU)
<b>Session 3: Protection and Management of Water Resources</b>			
Chairperson: Dr. Alaadin Bukhari, King Fahd University of Petroleum & Minerals (KFUPM) Mr. Mohamed Al-Senafy, Kuwait Institute for Scientific Research (KISR)			
9	Kuwait	Dr. Meshan Al-Otaibi	Ministry of Electricity and Water
10	Japan	Prof. Katsuyuki Fujinawa	Shinshu University
11	Bahrain	Dr. Nader Al-Masri	Bahrain Center for Studies & Research (BCSR)
12	Saudi Arabia	Dr. Nassim Al-Abed	King Fahd University of Petroleum & Minerals (KFUPM)
13	Oman	Mr. Saleh Said Mohammed Al-Shoukri	Ministry of Environment and Climate
14	Kuwait	Dr. Amr Fadlelmawla	Kuwait Institute for Scientific Research (KISR)
<b>Session 4: Oil &amp; Gas Industry and Environmental Issues</b>			
Chairperson: Dr. Ali Hamad Al-Mulla, Qatar Petroleum (QP) Mr. Fahad Al-Dihani, Kuwait National Petroleum Company (KNPC)			
15	Kuwait	Mr. Fadhel A. Al-Ali	Kuwait Petroleum Corporation (KPC)
16	Japan	Dr. Kazuo Okamura	Shimizu Corporation
17	Qatar	Mr. Said Abdi Yusuf	Qatar Petroleum (QP)
18	Japan	Mr. Takaaki Izumi	Nippon Oil Research Institute Co., Ltd.

# The 16th Joint GCC-Japan Environment Symposium

## (The 4th Joint KFUPM-JCCP Environment Symposium)



*Participants of the symposium*

The 16th Joint GCC-Japan Environment Symposium (the 4th Joint KFUPM-JCCP Environment Symposium) was held in Dhahran, Saudi Arabia, from January 28 to 30, 2008, by the joint sponsorship of JCCP and King Fahd University of Petroleum & Minerals (KFUPM). The main theme of the symposium was "GCC Environment and Sustainable Development."

The symposium is held annually in a

GCC country under basic environmental themes, and provides a forum for discussions among experts in the environment field.

An opening ceremony officially opened the symposium on the 28th. It was attended by H.E. Dr. Khaled bin Saleh Al-Sultan, Rector of KFUPM, Dr. Sahel N. Abdul-Jauwad, Vice Rector of KFUPM, Mr. Isam A. Bayat, Vice President, Engineering Services,

Saudi Arabian Oil Company (Saudi Aramco), and H.E. Hiroshi Oka, Chargé d'Affaires, Embassy of Japan to Saudi Arabia, in addition to more than 140 participants. H.E. Dr. Al-Sultan, Mr. Bayat, H.E. Mr. Oka, and Mr. Katsuo Yokoyama, Managing Director of JCCP, each gave an opening address.

H.E. Dr. Al-Sultan strongly acknowledged that environmental considerations are essential to the



*H.E. Dr. Khaled bin Saleh Al-Sultan, Rector of KFUPM*



*Mr. Isam A. Bayat, Vice President of Saudi Aramco*



H.E. Hiroshi Oka, Chargé d'Affaires, Embassy of Japan to Saudi Arabia



Mr. Katsuo Yokoyama, Managing Director of JCCP

sustainable development of the GCC countries, and expressed high expectations that the symposium will discuss topics of particular relevance to the environment in the region, such as water resources and climate change.

Mr. Bayat commented on the timeliness of holding this environment symposium in Saudi Arabia, just at a time when Saudi Aramco is making company-wide efforts to address environmental issues, and said he was looking forward to what would be discussed.

H.E. Mr. Oka stated that Japan and the GCC countries have a long-standing relationship in the energy sector, but a relationship of cooperation is rapidly evolving in the environment sector as well. He said that he is extremely pleased to see a strengthening of relationships between JCCP and the national oil companies, research institutions, and universities in the GCC countries, in

the environment sector.

Mr. Yokoyama, after giving a brief overview of JCCP technical cooperation projects in Saudi Arabia, stated that it was a great pleasure to be able to hold this environment symposium in the GCC countries each year, and emphasized the fact that environmental issues cannot be solved by one country's efforts alone, but requires global level initiatives.

Discussion sessions held on the 28th and 29th featured 15 presentations on four topics: (i) Sustainable Environmental Development; (ii) Oil Industry and Environmental Issues; (iii) Environmental Rehabilitation; and (iv) Research and Development in Environment. Active discussions took place in each session.

On the 29th, a closing ceremony was held following the completion of the discussion session. Representing KFUPM, Dr. Walid A. Abderrahman,

Professor, Water Resource Management, summarized the two days of sessions, and representing JCCP, Koichi Io, Deputy General Manager, Technical Cooperation Department, took the opportunity to thank KFUPM, Saudi Aramco, and all participants for their participation in the symposium.

During the two days of discussion sessions, some participants from the GCC countries asked whether the Japanese lecturers could also deliver a presentation at an environmental conference to be held in their respective countries. The participants apparently found the presentations on Japan's advanced environmental technologies to be highly beneficial.

On the 30th, we visited a coastal mangrove nursery at Saudi Aramco's Ras Tanura Refinery. We saw the nursery as an indication of Saudi Aramco's strong commitment to the environment.



Opening ceremony



Symposium session

In this environment symposium, Mr. Bayat, Vice President of Saudi Aramco, not only attended the opening ceremony, but also hosted a reception for all guests (on the 28th). Taking the opportunity of his generous cooperation, we hope to further deepen JCCP's relationship with Saudi Aramco.

On January 27, the day prior to holding the symposium, we held a



Symposium venue

press conference at KFUPM. With the attendance of Dr. Abdul-Jauwad, Vice Rector of KFUPM, H.E. Mr. Oka, and five Japanese lecturers, we made an announcement on the environment symposium scheduled to be held the next day, and provided an overview of JCCP activities in Saudi Arabia. News of the press conference received coverage in the local newspaper, and contributed to increasing JCCP's profile in Saudi Arabia.

We extend our deepest appreciation to everyone who has cooperated in the successful implementation of this symposium.

<by Koichi Ito,  
Technical Cooperation Dept.>

List of Speakers

No	Country	Name	Organization
<b>Session 1: Sustainable Environmental Development</b>			
<b>Moderator: Dr. Kenichi Fujimoto, Kitakyushu International Techno-cooperative Association (KITA) &lt;Japan&gt;</b>			
1	Japan	Dr. Takehiko Matsui	Tottori University
2	Kuwait	Dr. Amr Fadlemawla	Kuwait Institute for Scientific Research (KISR)
3	Bahrain	Dr. Nader El-Masri	Bahrain Center for Studies & Research (BCSR)
<b>Session 2: Oil Industry and Environmental Issues</b>			
<b>Moderator: Prof. Abdul Malik Al AlShaikh, King Saud University (KSU) &lt;Saudi Arabia&gt;</b>			
4	Japan	Mr. Masayuki Aida	Nippon Oil Corporation
5	UAE	Dr. Muftah H. El-Naas	UAE University (UAEU)
6	Japan	Dr. Masaharu Tasaki	Shimizu Corporation
7	Qatar	Dr. John Kilani	Qatar Petroleum (QP)
<b>Session 3: Environmental Rehabilitation</b>			
<b>Moderator: Dr. Mohammed Al Ansari, Bahrain Center for Studies and Research (BCSR) &lt;Bahrain&gt;</b>			
8	Japan	Dr. Kenichi Fujimoto	Kitakyushu International Techno-cooperative Association
9	Saudi Arabia	Dr. Hussein Al-Beshrey	Royal Commission for Jubail
10	Oman	Dr. Andy Yaw Kwarteng	Sultan Qaboos University (SQU)
11	Saudi Arabia	Dr. Ahmad S. Bajahlan	Royal Commission for Yanbu
<b>Session 4: Research and Development in Environment</b>			
<b>Moderator: Prof. Abdulaziz M. Al Bassam, King Saud University (KSU) &lt;Saudi Arabia&gt;</b>			
12	Saudi Arabia	Dr. Walid Abderrahman	King Fahd University of Petroleum & Minerals (KFUPM)
13	Japan	Dr. Ryoji Ohba	Mitsubishi Heavy Industries, Ltd.
14	Saudi Arabia	Dr. Khaled Al-Damegh	King Abdulaziz City for Science & Technology (KACST)
15	Saudi Arabia	Dr. William G. Conner	Saudi Aramco



Local newspaper article on the press conference

## Courtesy Visit with H.E. Mr. Yousef Omair Bin Yousef, CEO of ADNOC

On November 3, 2009, Mr. Morihiro Yoshida, Managing Director of JCCP, paid a courtesy call on H.E. Mr. Yousef Omair Bin Yousef, Chief Executive Officer of Abu Dhabi National Oil Company (ADNOC), and other key figures in the Emirate of Abu Dhabi, UAE.

The Emirate of Abu Dhabi is one of the seven emirates of the United Arab Emirates, which was formally established in 1972. It is situated facing the Gulf, and is blessed with abundant oil and gas resources that support its economy. To Japan, Abu Dhabi is an extremely important crude oil supplier, providing crude oil supplies that are equivalent to roughly 25% of Japan's total oil consumption. Given this situation, JCCP has provided continuous cooperation to ADNOC and Abu Dhabi Oil Refining Company (TAKREER) through the years since its establishment in 1981 by implementing technical cooperation projects and training programs.

In the courtesy visit to H.E. Mr. Yousef Omair Bin Yousef, Mr. Yoshida first expressed his greetings as the new managing director of JCCP appointed last August. He then described JCCP's contributions to ADNOC and TAKREER, namely in the latest technical cooperation project on flare gas recovery, the TAKREER research center establishment project, and the project on application of sulfur concrete technology, and thanked the CEO for his continuous understanding and cooperation.

H.E. Mr. Yousef Omair Bin Yousef offered words of appreciation to JCCP for implementing technical cooperation projects and training programs that have contributed greatly to expanding business and developing human resources at ADNOC and TAKREER, and voiced his expectations for their further continuation and development.

Mr. Yoshida also mentioned JCCP's strong desire to expand its cooperation in the areas of environmental measures and energy conservation, in which needs are hereafter expected to grow in UAE as in the rest of the global community. To this, H.E. Mr. Yousef Omair Bin Yousef replied by



*Courtesy visit with H.E. Mr. Yousef Omair Bin Yousef, CEO of ADNOC*

*Mr. Morihiro Yoshida, Managing Director of JCCP (left)  
H.E. Mr. Yousef Omair Bin Yousef, CEO of ADNOC (center)*

describing an environmental improvement project that is based on culturing coral reefs in seas near oilfields and refineries, and said he would like JCCP to cooperate if the opportunity arises.

After his visit to ADNOC, Mr. Yoshida paid a call on Mr. Jasem Ali Al-Sayegh, General Manager of TAKREER. Mr. Al-Sayegh said he is grateful to JCCP for its implementation of technical cooperation projects and training programs in Abu Dhabi, including the flare gas recovery project and the TAKREER research center establishment project. He then said that his participation in a JCCP course in 1987, when he was young, and his experience in Japan has greatly benefited his career thereafter.

Mr. Yoshida also made a courtesy visit to the Japanese Embassy in the UAE and met with H.E. Mr. Tatsuo Watanabe, Ambassador, to give a brief account of the accomplishments of JCCP's contribution to ADNOC, TAKREER and UAE University over the years and an overview of the latest projects that are being implemented in UAE. Ambassador Watanabe, saying he is familiar with JCCP activities, praised JCCP for the contributions it has made in UAE, and encouraged JCCP to more widely and actively introduce details of its activities both inside and outside the country.

*<by Shoichiro Yagi, General Manager, Middle East Office>*

# Visits to Southeast Asia and the Middle East by Mr. Sase, Executive Director of JCCP

Marking the occasion of his appointment in July 2008 as the new Executive Director of JCCP, Mr. Masataka Sase made visits to oil-producing countries in Southeast Asia in September 2008 following the summer holidays, and to oil-producing countries in the Middle East in October 2008, after the end of Ramadan. In addition to paying calls on counterpart organizations to introduce himself and to thank them for their participation in JCCP training activities and technical cooperation programs, Mr. Sase held frank exchanges of views with the leaders

of those organizations on a wide range of topics, including today's rapidly changing situation in the global oil market, future business prospects in oil-producing countries, and areas for improvement in JCCP activities. As Mr. Sase was not able to visit all JCCP counterpart countries in the two regions during his first trip, he wishes to make additional visits to those countries he has not yet visited at his earliest opportunity and strengthen relationships across the board.

## Middle East Oil-Producing Countries

### 1. UAE

#### (1) Abu Dhabi National Oil Company (ADNOC)

On October 16 (Thu.), Mr. Sase visited ADNOC, and met with Mr. Mubarak S. Al Ketit, Manager, Crude and Condensate Division.

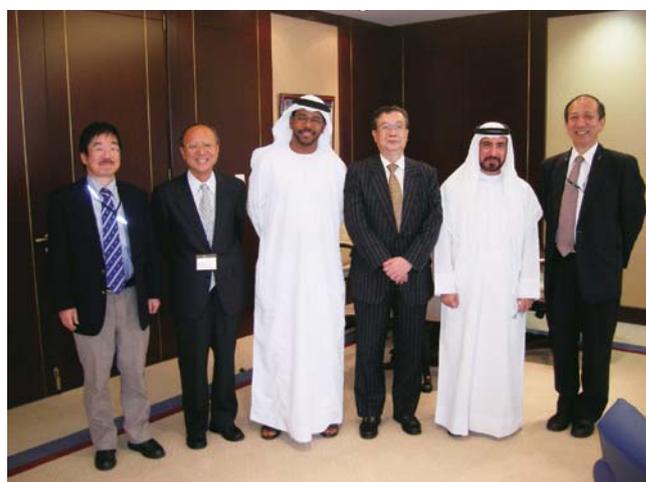
UAE is Japan's second-largest supplier of crude oil, following Saudi Arabia, supplying one-fourth of the total amount of oil consumed in Japan, and to UAE, Japan is an important importer of crude oil. The two countries have maintained a cooperative relationship since the formal establishment of UAE in 1971.

Mr. Sase was not able to meet directly with H.E. Mr. Yousef Omair Bin Yousef, CEO, for an urgent meeting during this visit to ADNOC, but received a message from the CEO through Mr. Al Ketit, stating that Japan is important to ADNOC, as a country playing a central role in the global oil business, and expressing his wish to continue strengthening ADNOC's friendly ties with JCCP and promoting personal exchanges.

#### (2) Abu Dhabi Oil Refining Company (TAKREER)

In the afternoon of October 16 (Thu.), Mr. Sase visited TAKREER Headquarters, and met with Mr. Ahmed O. Abdulla, Assistant General Manager, Operations, and Mr. Ismail Al Mulla, Human Resources and Administration Manager.

TAKREER was established in 1999, to take over



*Mr. Ahmed O. Abdulla, Assistant General Manager, Operations (third from left), and Mr. Ismail Al Mulla, Human Resources and Administration Manager (second from right)*

the responsibility of refining operations previously undertaken by ADNOC. Including the period during which it was a refining division under the management of ADNOC, its relationship with JCCP goes back 27 years.

Mr. Sase received warm words of appreciation from Mr. Abdulla, for his role in providing numerous young officer candidates with a meaningful forum for learning about Japanese corporate management through JCCP courses, and for the invaluable opportunity to meet people from many different oil-producing countries not only in the Middle East, but from Asia, Africa, and South America as well, and to establish an extensive network of professionals in the oil industry.

## 2. Oman

### (1) H.E. Dr. Mohammed Hamed Saif Al-Rumhy

On October 18 (Sat.), Mr. Sase paid a courtesy call on H.E. Dr. Mohammed Hamed Saif Al-Rumhy, Minister of Oil and Gas.

This year, state-run Oman Refinery Company (ORC) is celebrating its 23rd anniversary since the commencement of operations in 1985. JCCP has been supporting ORC since the beginning, particularly in the development of staff members. Hereafter, the company must prepare for an inevitable shift of power to the next generation, as seasoned employees reach retirement age, as well as upgrade its refineries by introducing large-scale cracking units and integrating refinery and



*H.E. Dr. Mohammed Hamed Saif Al-Rumhy,  
Minister of Oil and Gas (right)*

petrochemical operations. Developing outstanding engineers capable of addressing such major business challenges is a management issue that begs close attention in the near future, and one that Minister Al-Rumhy believes will greatly benefit from further cooperation with JCCP.

### (2) Oman Refineries and Petrochemicals Company (ORPC)

After paying a call on H.E. Dr. Al-Rumhy, Mr. Sase visited ORPC, and met with Mr. Adel Al Kindy, CEO, and Mr. Masoud Al Msalmy, GM, Corporate Support.

Oman is currently planning the construction of a new refinery at Duqm, which would be the country's third refinery following the Mina al-Fahal and Sohar Refineries. It is to be a state-of-the-art refinery equipped with a residue cracking unit and an integrated petrochemical complex, in order to increase the value of Oman's oil.

Increasing the value of oil is a priority issue in both oil-producing and oil-consuming countries. "The creation of new oil industries is for the common benefit of oil-producing and oil-consuming countries," stated Mr. Al Kindy, who also expressed his hopes that JCCP will continue to act as a catalyst in promoting mutual exchanges of information while contributing to the development of the oil downstream sector.

## 3. Iran

### (1) National Iranian Oil Refining and Distribution Company (NIORDC), Refinery Affairs Division

On October 20 (Sat.), Mr. Sase visited NIORDC to meet with Mr. A. Eskandari, Director, Refinery Affairs, and Mr. S. Mahjoubi, Technical Studies Manager.

In Iran today, demand for oil products, and particularly gasoline, is increasing at a rapid rate, and oil companies are hard-pressed to expand refinery capacities and increase gasoline production. Given this situation, NIORDC is considering expanding the capacities of its nine existing refineries and building seven new refineries, thereby doubling



*Mr. A. Eskandari, Director, Refinery Affairs, NIORDC (center)*

its current refining capacity. It is also working to increase the value of its refineries by introducing a residue cracking unit and other facilities.

Mr. Eskandari noted that the development of outstanding personnel is key to bringing these large projects to successful fruition, and expressed his expectations of receiving continued cooperation from JCCP through regular courses and technical cooperation projects.

### **(2) NIORDC Human Resources Division**

In the afternoon of October 20 (Sat.), Mr. Sase visited NIORDC's Human Resource Division, and met with Mr. H. Ghorbani, Director of Human Resources.

NIORDC is planning to sequentially separate its refineries and cede them to the private sector. In preparation for this move, the Human Resource Division is busy promoting the development of human resources and improving employee productivity. Having himself participated in a tailor-made program on human resource development held in Japan last February, Mr. Ghorbani is keen to have many more staff members study Japanese-style human resource development through JCCP, and requested JCCP to continue providing such pertinent training programs for Iran in the future.

### **(3) Iranian Ministry of Oil**

After visiting NIORDC's Human Resource Division, Mr. Sase visited the Iranian Ministry of

Oil to pay a call on Mr. Y. Javadinia, GM, Petroleum Ministry Office.

Mr. Javadinia has participated in a JCCP regular course twice in the past. Based on what he has learned, he has created a textbook on Japanese-style human resource development, and personally gives lectures on the topic to young executive candidates. He emphasized that it is important that Japan and Iran share learning experiences through JCCP courses, and expressed his gratitude to JCCP for its cooperation.

## **4. Qatar**

### **(1) Qatar Petroleum (QP), Refining Directorate**

In the morning of October 22 (Wed.), Mr. Sase visited QP, and met with Mr. Hussain M. Al-Ishaq, Director Refining, Refining Directorate, who assumes leadership on the Qatar side in the JCCP technical cooperation project on "Efficiency Improvement in the Mesaieed Refinery in Qatar."

Thirty years ago in 1978, Japan and Qatar established a joint venture company called Qatar Steel Corporation (QACSO) through which, Mr. Al-Ishaq noted, Qatar has learned many things from Japan. Even today, large-scale projects are underway in Qatar, for the construction of oil, LNG, and petrochemical plants that utilize the country's abundant reserves of oil and natural gas. Because Qatar has a small population, the success of these large-scale projects hinges on enhancing



*Mr. Hussain M. Al-Ishaq, Director Refining, QP (right)*

the capacity of each and every individual involved. Based on this awareness, Mr. Al-Ishaq expressed his strong wish that JCCP continue to extend its cooperation to Qatar, as a central player in the transfer of Japan's refinery management expertise and refinery technologies to Qatar.

## **(2) QP Qatarization Steering Committee**

In the morning of October 23 (Thu.), Mr. Sase visited with Mr. Essa Rashed Al Kaabi, Chairman of QP's Qatarization Steering Committee.

Qatar is moving forward with the development of its oil and natural gas resources on a large scale, and is launching a number of major projects, including the export of LNG overseas via pipeline from its refineries. The Qatarization Committee has a large responsibility in this grand design, to foster Qatari personnel.

Mr. Al Kaabi, acknowledging that JCCP regular courses are unique programs that offer the opportunity

to learn about various aspects of the oil industry directly from Japanese oil companies, asked JCCP to continue providing regular courses through which Qatari citizens may acquire hands-on experience in Japanese-style corporate management.

Mr. Sase's recent visits to oil-producing countries in Southeast Asia and the Middle East have allowed him to personally meet key figures in those countries, reconfirm friendly relations between JCCP and its counterpart organizations, and obtain invaluable views on future JCCP activities. Based on the relationships of trust JCCP has cultivated with oil-producing countries around the world over the 27 years since its founding, we shall make continuous efforts to further enhance our training and technical cooperation programs.

*<Middle East: Hisayoshi Tada, Administration Dept.>*

## H.E. Dr. Maitha Al-Shamsi, UAE Minister of State, Visits Japan



*Dr. Al-Shamsi at JCCP, with Mr. Masataka Sase, Executive Director of JCCP*

As part of the FY2008 JCCP VIP Invitation Program, JCCP has invited H.E. Dr. Maitha Al-Shamsi, UAE Minister of State, to Japan, from November 15 to 21, 2008.

Before being appointed to Minister of State and Research Advisor at UAE University in February 2008, Dr. Al-Shamsi has held prominent positions at the university. She assumed the positions of Deputy Vice Chancellor in 1990, Vice Chancellor in 2000, and Assistant Provost for Research in 2004. In these capacities, she actively promoted the development of higher education in UAE and has made a significant number of achievements in that area. In addition to her current position as Minister of State, Dr. Al-Shamsi holds various other important posts, including Managing Director of

the Dubai Women's Establishment and President of the Marriage Fund, and plays a central role in the development of science, technology and education, and women's issues, in particular, in UAE.

UAE and Japan enjoy a close relationship based on crude oil and natural gas, as well as engage in active cooperation issues. The two countries began implementing technical cooperation projects in FY2001, and UAE University, in particular, has been, and continues to be, an active participant in these joint research projects. To discuss the progress of ongoing activities, JCCP and UAE University hold a scientific council meeting biannually, with Dr. Al-Shamsi heading the UAE University side.

In addition to attending the 7th Scientific Council Meeting in Japan, Dr. Al-Shamsi also used the

opportunity of her visit to Japan to call on oil-related research institutes and governmental institutions in Japan.

### **1. At JCCP Headquarters (November 17)**

Upon receiving Dr. Al-Shamsi at JCCP Headquarters, Mr. Masataka Sase, Executive Director of JCCP, congratulated Dr. Al-Shamsi on her appointment as Minister of State. He and Mr. Katsuo Yokoyama, Managing Director of JCCP, then exchanged views with Dr. Al-Shamsi on oil-related issues and JCCP activities in general.

### **2. Scientific Council Meeting (November 17)**

Members from UAE University, the JCCP Technical Cooperation Department, Nippon Oil Research Institute, a corporate participant in the joint research projects with UAE University, and Dr. Masaaki Teramoto of Kyoto Institute of Technology gathered at JCCP Headquarters to take part in the 7th Scientific Council Meeting. The members held active discussions on the progress of activities in the study on wastewater treatment in UAE refineries and the study on acid gas treatment in UAE's natural gas industry, that are being implemented as part of the FY2008 program.



*Scientific Council Meeting in session*

### **3. Visit to Nippon Oil Corporation (November 18)**

At the Central Technical Research Laboratory, Dr. Al-Shamsi was warmly welcomed by Mr. Hajime Okazaki, General Manager, senior researchers of the laboratory, and Mr. Takahiko Yamaji, President of Nippon Oil Research Institute. After receiving warm words of welcome from Mr. Okazaki and a general overview of the laboratory, Dr. Al-Shamsi toured the facilities where research is being conducted on RECOSUL, a type of modified-sulfur concrete developed to make effective use of sulfur, which is currently being applied to a demonstration study in UAE. She toured other parts of the laboratory as well, while listening avidly to technical explanations of various studies, including those relating to catalyst assessment bench plants and new developments in fuel cells, and at one point, appeared particularly impressed with the knowledge and eloquent explanations given by young female researchers. Dr. Al-Shamsi was also invited to test ride a fuel-cell vehicle, and showed strong interest in its development.

A lively discussion session with all members concerned concluded Dr. Al-Shamsi's visit to the laboratory.



*Dr. Al-Shamsi touring the research facilities*



*Dr. Al-Shamsi receiving an explanation from female researchers of the laboratory*

#### **4. Courtesy Call on the Vice Minister of Economy, Trade and Industry (November 19)**

Vice Minister Takaichi warmly welcomed Dr. Al-Shamsi on her first visit to Japan after being appointed Minister of State, expressing her appreciation of Dr. Al-Shamsi's role in promoting friendly relations between UAE and Japan over many years, as well as her pleasure in meeting Dr. Al-Shamsi in person.

Ms. Takaichi emphasized the two country's relationship of mutual trust and cooperation, mentioning that UAE and Japan have formed strong bonds of cooperation through development projects in the oil upstream sector, as well as in a wide range of other sectors, including personal exchanges and development not only in relation to crude oil trade, but also through educational and inter-university exchange programs.

Dr. Al-Shamsi noted that JCCP and UAE have been implementing technical cooperation projects for 7 years now, and a number of university-based cooperation programs have emerged from them. As many of these programs have largely benefited from knowledge obtained from Japan, Dr. Al-Shamsi expressed her strong wish that the two countries continue to cooperate in performing joint technical projects in the future.

The two women also shared their views on the importance of family and home, and agreed that

this meeting presented a good opportunity to further strengthen the friendly relationship between UAE and Japan.



*Meeting with Ms. Sanae Takaichi, Vice Minister of Economy, Trade and Industry*

#### **5. Visit to the Japan Institute of Workers' Evolution (November 19)**

The Japan Institute of Workers' Evolution aims to improve the welfare of female workers by initiating activities for promoting child-rearing education among female workers and improving employment management practices. As it is one of the areas in which Dr. Al-Shamsi has particularly strong interest, she had been looking forward to this meeting with Ms. Nobuko Matsubara.



*Meeting with Ms. Nobuko Matsubara, Chairperson of Japan Institute of Workers' Evolution*

The meeting began with Ms. Matsubara expressing her immense pleasure in meeting Dr. Al-Shamsi. As key figures in women's issues in UAE and Japan, Dr. Al-Shamsi and Ms. Matsubara exchanged in-depth views on women's education and marriage issues in both countries.

## 6. Visit to the Embassy of UAE in Japan (November 19)

On the final day of Dr. Al-Shamsi's stay in Japan, H.E. Ambassador Saeed Alnouais kindly hosted a banquet for Dr. Al-Shamsi at the Embassy of UAE in Japan, inviting Ms. Yuriko Koike, member of the House of Representatives, executives from the Japanese Ministry of Economy, Trade and Industry, the presidents of JCCP member companies, ambassadors of eight Middle East countries, and JCCP board members.

We believe that this invitation program has offered Dr. Al-Shamsi a good opportunity to gain first-hand experience in Japan's latest technologies while deepening her understanding of oil and energy trends in Japan. Furthermore, we feel there was significant meaning in having such an important



*With the ambassadors of Middle East countries in Japan*

person as Dr. Al-Shamsi, who plays a central role in promoting science and technology in UAE, gain a better understanding and appreciation of Japan by establishing close ties with Japanese leaders in various fields.

JCCP extends its profound appreciation to everyone at the Embassy of UAE in Japan, the Ministry of Economy, Trade and Industry, the Ministry of Foreign Affairs, the Japan Institute of Workers' Evolution, Nippon Oil Corporation, and Nippon Oil Research Institute, for their generous support and cooperation in the invitation program.

*<by Kenji Ikushima, Technical Cooperation Dept.>*

# Mr. Kojima, Executive Director of JCCP, Visits the Middle East

—Iran, Qatar, UAE, Saudi Arabia—

Between January and March 2008, Mr. Mikio Kojima, Executive Director of JCCP, visited Iran, Qatar, UAE, and Saudi Arabia, to reaffirm basic principles for strengthening its relations with those countries, through policy dialogues with the heads of national oil companies.

As outlined below, Mr. Kojima received full understanding and agreement regarding the reorganization of JCCP and its basic policies for future cooperation activities, and successfully paved the way toward strengthening ties between JCCP and the four countries.

## I. Iran (January 20 – 24, 2008)

On January 22, Mr. Kojima visited NIORDC (National Iranian Oil Refining & Distribution Co.) and met with Mr. Amin Allah Eskandari, Director Refining Affairs. Mr. Kojima first thanked Mr. Eskandari for agreeing to participate in the JCCP International Symposium that was scheduled to be held the coming February, despite his busy schedule. He then discussed the strong cooperative relationship that

exists between NIORDC and JCCP in training activities, and explained that JCCP receives many NIORDC participants to JCCP regular courses each year. Mr. Kojima also gave a brief account of the Expert Service (ES) program that was implemented last year and an overview of the Study Tour (ST) program that was scheduled to be implemented in February, and encouraged NIORDC to make further use of JCCP regular courses and tailor-made courses in the future. In response, Mr. Eskandari expressed his deep appreciation of the cooperative efforts of JCCP, and requested their continued cooperation in establishing even closer ties between the two organizations. In the area of human resource development, Mr. Eskandari specifically requested JCCP's cooperation in cultivating human resources capable of creating basic refinery designs, as well as human resources qualified to engage in project and safety management activities at NIORDC. The two leaders agreed to continue exchanging views, in search of the best means of future cooperation.

On January 23, Mr. Kojima visited NIOPDC (National Iranian Oil Products

Distribution Co.) and met with Mr. S. N. Shahnazizadeh, Managing Director. Mr. Kojima first thanked Mr. Shahnazizadeh for his participation in a JCCP International Symposium in the past, when Mr. Shahnazizadeh had been Managing Director of Esfahan Oil Refining Company. The two leaders then discussed NIOPDC's participation in JCCP regular courses, and agreed to work toward further strengthening ties between the two organizations.

Also on January 23, Mr. Kojima paid a call on H.E. Akio Shirota, Ambassador, and Mr. Fujisawa, First Secretary, at the Embassy of Japan in Iran. Mr. Kojima gave an overview of his meeting at NIORDC, and described JCCP's reorganization efforts and future policies for strengthening relations with oil-producing countries in the Middle East. Ambassador Shirota noted that Iran has abundant human resources, and heartily agreed that providing continuous cooperation through JCCP tailor-made courses and technical cooperation would be key to building strong ties between the two countries.

*<by Takashi Hori, Operations Dept.>*



*Meeting at NIORDC  
Front row, right: Mr. Amin Allah Eskandari,  
Director Refining Affairs*



*With H.E. Ambassador Akio Shirota  
at the Embassy of Japan in Iran*

## II. Qatar and UAE (February 10 – 15, 2008)

### 1. Qatar

On February 12, Mr. Kojima met with H.E. Abdullah Bin Hamad Al-Attiyah, Deputy Prime Minister and Minister of Energy and Industry, and Chairman and Managing Director of Qatar Petroleum (QP). Mr. Kojima first expressed his deep gratitude to his Excellency for his strong leadership in the Joint GCC-Japan Environment Symposium, which was held last year, then discussed the favorable relationship of growing cooperation between QP and JCCP, with reference to the large increase that has been observed in the number of QP participants to regular courses, particularly over the past five years. Mr. Kojima also gave an overview of the ST and ES programs held last year, and finally emphasized the significant role of JCCP in further solidifying the

cooperative relationship between the two organizations, and in increasing synergistic effects from the combination of training and technical cooperation activities. Deputy Prime Minister Al-Attiyah expressed his profound appreciation of JCCP cooperation, and declared his full support for further expanding the relationship between the two organizations. Sheikh Abdulaziz Bin Jassim Al-Thani, Director, Administration, QP, also stressed the two organizations' shared views on strengthening bonds between QP and JCCP.

Mr. Kojima also held meetings with Mr. Essa Al-Kaabi, Director, Qatarization, QP, and members of the Human Resource Department. The members of the meetings agreed to make good use of both regular courses and tailor-made courses, and articulated their wishes to further strengthen QP's cooperative relationship with JCCP.

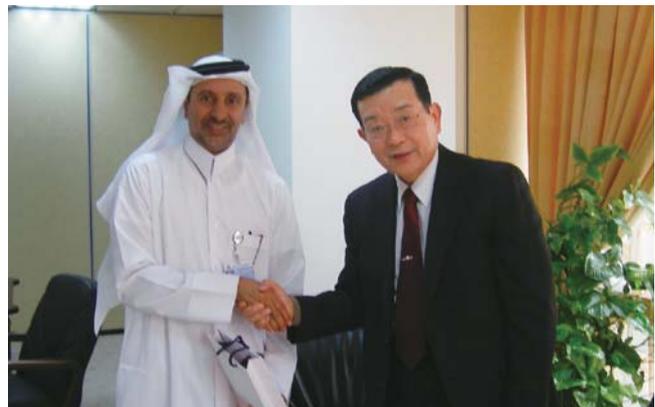
They also requested JCCP's continued support in the numerous large-scale projects that are being implemented across the energy industry in Qatar today.

### 2. UAE

On February 13, Mr. Kojima met with H.E. Yousef Omar Bin Yousef, CEO of Abu Dhabi National Oil Company (ADNOC). While ADNOC and JCCP are enjoying a good cooperative relationship through the implementation of significant projects, including projects for flare gas recovery and the establishment of a research center, Mr. Kojima stated that he would like to develop stronger ties between ADNOC/TAKREER and JCCP, by implementing JCCP's new scheme of tailor-made courses. H.E. Yousef Omar Bin Yousef responded by first expressing his deep appreciation of JCCP activities, and upon agreeing



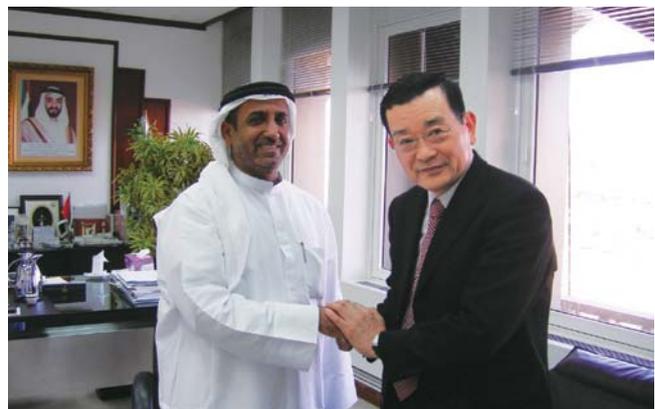
At QP  
H.E. Abdullah Bin Hamad Al-Attiyah,  
Deputy Prime Minister and Minister of Energy and Industry  
(second from right) and Sheikh Abdulaziz Bin Jassim Al-Thani,  
Director, Administration (right)



At QP  
With Mr. Essa Al-Kaabi, Director, Qatarization



At ADNOC  
With H.E. Yousef Omar Bin Yousef, CEO (center)



At ADNOC  
With Mr. Abdulla Saeed Al-Badi, Human Resources Director



At TAKREER  
With Mr. Jasem Ali Al-Sayegh, General Manager

that tailor-made courses are indeed an extremely interesting scheme, requested working-level discussions for their implementation in the future.

Mr. Kojima also met with Mr. Abdulla Saeed Al-Badi, Human Resources Director. Mr. Al-Badi listened with interest to Mr. Kojima's proposal for implementing tailor-made courses, but based on the reason that sending an entire group of supervisor-level officers to Japan at once would pose some difficulties, he stated that he would prefer to begin with ES programs. In fact, Mr. Al-Badi mentioned that he would like JCCP to implement a number of ES courses on different themes and for different groups of participants.

On February 14, Mr. Kojima met with Mr. Jasem Ali Al-Sayegh, General Manager of Abu Dhabi Oil Refining Company (TAKREER), who accepted Mr. Kojima's proposal for implementing a tailor-made program with enthusiasm, and encouraged working-level

### 3. Embassy of Japan in Qatar and UAE

Mr. Kojima took the opportunity of his visit to Qatar and UAE to pay a call on the Embassy of Japan in the two countries. In Qatar, he met with H.E. Ambassador Yukio Kitazume and Mr. Homma, First Secretary, and in UAE, he met with H.E. Ambassador Takuma Hatano and Mr. Inokuchi, First Secretary, to give an overview of his meetings at QP and ADNOC, and to explain the restructuring of JCCP and future policies. In regard to tailor-made courses, both Ambassadors expressed their concern that it could be difficult for a number of personnel to simultaneously leave their workplaces for a substantial period of time to participate in tailor-made courses in Japan, and that perhaps ES programs could be more readily implemented, in this respect. Ambassador Hatano suggested dispatching experts to

discussions for developing effective programs. The two leaders concurred on the significance of utilizing tailor-made programs to strengthen the cooperative relationship between JCCP and ADNOC/TAKREER.

ADNOC's Petroleum Institute (PI). According to Ambassador Hatano, ADNOC and TAKREER personnel are highly interested in learning about field management in Japan, so it may be a good idea to have Japanese experts visit the working environment at ADNOC and TAKREER, point out potential problem areas, and provide guidance on improvement measures.

<by Koji Hori, Administration Dept.>

## III. Saudi Arabia (February 29 – March 5, 2008)

### 1. Saudi Aramco Ras Tanura Refinery

In the morning of March 2, Mr. Kojima attended a tailor-made seminar that had begun the previous day at the Ras Tanura Refinery. He gave a speech that emphasized his strong wish to strengthen ties with Saudi Aramco, and with the Ras Tanura Refinery in particular, Saudi Aramco's mother refinery, and exchanged views with refinery officers on future JCCP cooperation. (For details, see "Tailor-made Program on Refinery Plant Maintenance Held in Saudi Arabia," on pages 18-20 of this newsletter.)

In the meeting with Mr. Mohammed S. Al-Gusaier, Vice President, Refining, Mr. Kojima extended his gratitude to all who supported and cooperated in implementing the first tailor-made seminar at the refinery, but declared



With H.E. Ambassador Yukio Kitazume  
at the Embassy of Japan in Qatar



With H.E. Ambassador Takuma Hatano (center)  
at the Embassy of Japan in UAE



*At the Ras Tanura Refinery  
With Mr. Mohammed S. Al-Gusaier, Vice President*

that this is “only the beginning” of the new phase of JCCP cooperation, and that JCCP intends to continue enhancing its activities in the future. Mr. Al-Gusaier expressed his appreciation of JCCP activities, saying that refinery personnel who have participated in past JCCP courses have returned to the refinery not only with new technical knowledge, but also with a keen interest in Japanese corporate culture, as a result of having been exposed to a refinery work environment where employees of their same generation work with pride and responsibility. He stated that he would therefore like to continue sending refinery personnel to take part in JCCP regular courses. Mr. Al-Gusaier also requested the development of a new cooperation scheme that would allow longer-term onsite experience and guidance, and Mr. Kojima promised to explore the best means of responding to the request based on the foundation

of the tailor-made scheme.

## **2. Saudi Aramco Head Office**

In the afternoon of March 2, Mr. Kojima visited the Saudi Aramco Head Office and met with Mr. Abdulaziz F. Al-Khayyal, Senior Vice President, Industrial Relations. Mr. Kojima paid a call on Mr. Al-

Khayyal last January, to clarify JCCP’s desire to strengthen its ties with Saudi Aramco, and to ask for Saudi Aramco’s cooperation in sending participants to regular courses and implementing tailor-made programs. As a result, through Mr. Al-Khayyal’s kind offices, JCCP has received 36 participants from Saudi Aramco in FY2007, the largest number from the company since JCCP first launched regular courses, and has implemented a tailor-made seminar at the Ras Tanura Refinery. Mr. Kojima gave an overview of those achievements, and deeply thanked Mr. Al-Khayyal for his generous cooperation and thoughtful consideration.

Mr. Al-Khayyal in turn expressed his high expectations of JCCP activities. He stated that Saudi Aramco has a responsibility of providing a stable supply of oil to the world, and must maintain the world’s highest level of safe and stable operations. To this

end, he hopes to send as many Saudi Aramco personnel to participate in JCCP regular courses, not only to acquire technology and knowledge, but also to gain first-hand experience in “Japan’s wonderful corporate culture,” founded on responsibility and discipline.

The meeting ended with the two leaders agreeing that the successful implementation of the recent tailor-made seminar is merely the first step toward the strengthening of cooperative ties between the two organizations, and that they shall build upon that success to deepen cooperative efforts based on a “face-to-face” relationship of mutual trust.

Mr. Kojima again visited the Saudi Aramco Head Office in the afternoon of March 3, to meet with Mr. Adil A. Al-Tubayyeb, Vice President, Marketing, Supply & Joint Venture Coordination. Mr. Al-Tubayyeb played a central role in establishing the Saudi Aramco Tokyo Office, and possesses a deep understanding of the relationship between Saudi Arabia and Japan. He took part in a lecture event in Japan sub-hosted by JCCP last December, and spoke to attending executive officers from energy-related companies in Japan, on the significance of Japan-Saudi Arabia cooperation in securing a stable supply of oil. Mr. Waleed H. Al-Bedaiwi, General Manager, Saudi Petroleum, Ltd., who had temporarily returned to Saudi Arabia from Japan, also joined the meeting.

In the meeting, Mr. Al-Tubayyeb



*At the Saudi Aramco Head Office  
With Mr. Abdulaziz F. Al-Khayyal, Senior Vice President*



*At the Saudi Aramco Head Office  
With Mr. Adil A. Al-Tubayyeb, Vice President*

explained that the population in the Middle East is increasing so rapidly today that the Greater Middle East Region, composed of the traditional Middle East countries and neighboring countries, is certain to become a major oil-consuming region in the near future. As the Middle East region also has the world's largest hydrocarbon reserves, it is poised to become a major supplier of petroleum and petrochemical products, in addition to crude oil. As a result, Mr. Al-Tubayyeb predicts that the Middle East region will develop into a global hydrocarbon trading hub. This significant information came at an opportune time for JCCP, as it is presently in the process of creating an action plan that identifies the direction of its efforts for strengthening relations with the countries of the Middle East.

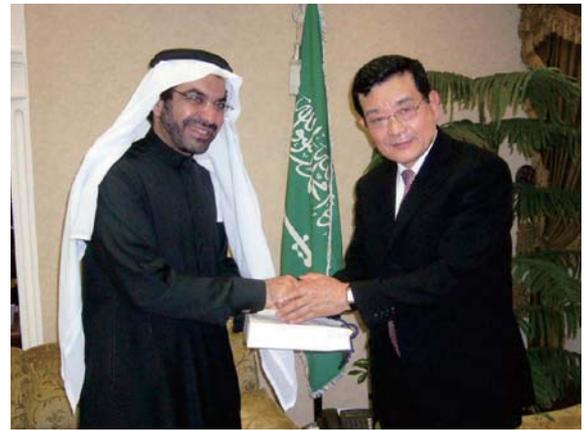
### **3. King Fahd University of Petroleum and Minerals (KFUPM)**

In the morning of March 3, Mr. Kojima paid a courtesy call on H.E. Dr. Khaled S. Al-Sultan, Rector of KFUPM. The university has been acting as JCCP's partner in implementing various technical cooperation projects,

including the HS-FCC development project, and is an important counterpart of JCCP's in Saudi Arabia.

After fondly reminiscing about Dr. Al-Sultan's visit to Japan in FY2004 under JCCP's VIP Invitation Program, Mr. Kojima expressed his gratitude to Dr. Al-Sultan, for warmly receiving Dr. Hideshi Hattori, Professor Emeritus at Hokkaido University, under the Long-term Research Dispatch Program, and for his cooperation in holding the Joint GCC-Japan Environment Symposium last January. Dr. Al-Sultan graciously accepted Mr. Kojima's words of appreciation, saying that building trust is the hardest part about establishing relationships, but "JCCP and KFUPM are way past that stage," and have entered a new stage where the two organizations should strengthen their bonds based the foundation of mutual trust that they have built over the years.

The follow-up meetings held between January and March allowed Mr. Kojima



*With H.E. Dr. Khaled S. Al-Sultan, Rector, at KFUPM*

to spend more time to exchange views on a wider range of issues than before, with key persons in oil-related organizations in major oil-producing countries. The role of the Middle East is increasing in importance to Japan, as well as to the entire world, in securing a stable supply of oil. Expectations of JCCP have also increased, accompanying this trend, and cooperation requests have diversified. JCCP intends to take into consideration the recent series of dialogues that Mr. Kojima has held with oil industry leaders in the Middle East, as well as various other relevant factors, to develop new, enhanced cooperation schemes in the future.

*<by Hisayoshi Tanda, Administration Dept.>*

# Mr. Katsuo Yokoyama, Managing Director of JCCP, Visits the Middle East

Mr. Katsuo Yokoyama, Managing Director of JCCP in charge of technical cooperation projects, traveled to the Middle East twice, between October-end and November 2007, and visited a total of six countries in the region. This was Mr. Yokoyama's first visit to the Middle East, since his appointment as managing director in July 2007. He attended important ceremonies, paid calls on various counterparts to introduce himself and exchange views on future implementation of technical cooperation projects. Major details of his visits are presented below.

## I. Oman, Iran, UAE (October 26 – November 8, 2007)

### 1. [Oman] Contract Signing Ceremony with ORC <October 30, 2007>

Mr. Masoud Salim Al-Msalmy, General Manager of Oman Refinery Company LLC (ORC), and Mr. Katsuo

Yokoyama signed a memorandum of agreement (MOA) for the joint implementation of the "Study for Process and Operational Improvement in Mina Al-Fahar Refinery in Oman" (FY2007 – 2009). The study aims to enhance process and operational performance levels at the Mina Al-Fahar Refinery, so that ORC may better respond to the increasing demand for

oil in Oman. Over many years, JCCP has continued to introduce Japan's oil refining technologies to ORC, as a fundamental part of its technical cooperation activities, and has built a strong cooperative relationship with ORC. Based on this proven track record, ORC and JCCP have agreed to implement the joint study project.

The signing ceremony took place



Greetings by Ambassador Keiji Omori



Greetings by Mr. Tsuyoshi Kamijo, Deputy Director, METI



Exchange of the MOA  
Left: Mr. Masoud Salim Al-Msalmy, General Manager of ORC  
Right: Mr. Katsuo Yokoyama, Managing Director of JCCP



Exchange of commemorative gifts  
Center: Mr. Yasushi Hotta, President, Cosmo Research Institute Inc.  
Right: Mr. Msalmy, General Manager of ORC

in a reception room at the Grand Hyatt Hotel in Muscat, Oman. H.E. Keiji Omori, Ambassador of Japan to Oman, and Mr. Tsuyoshi Kamijo, Deputy Director of the Petroleum Refining and Reserve Division, the Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry (METI), honored the ceremony with their presence, and spoke briefly on the project's significant role in strengthening the friendly relationship between the two countries and in promoting personnel exchanges. Mr. Msalmy and Mr. Yasushi Hotta, President of Cosmo Research Institute Inc., a participant company in the project, also delivered words of gratitude and expectations for the successful completion of the project, and thanked all parties concerned for their cooperation. Mr. Yokoyama delivered a greeting and extended his appreciation to all parties. The local newspaper covered news of the ceremony, and contributed to increasing public recognition of the JCCP technical cooperation project in Oman.

**2. [Oman] Visits to H.E.**

**Dr. Mohammed Bin Hamad Bin Saif Al-Rumhy, Minister of Oil and Gas, and Sultan Qaboos University <October 31, 2007>**

On the day following the signing ceremony, Mr. Yokoyama paid a visit



*MOA signing ceremony  
Senior ORC officials, Mr. Nitta, Secretary at the Japanese Embassy in Oman, JCCP members, and members from Cosmo Research Institute Inc., with Ambassador Omori and Deputy Director Kamijo*

to H.E. Dr. Mohammed Bin Hamad Bin Saif Al-Rumhy, Minister of Oil and Gas, to thank him for his cooperation and ask for his continued support of JCCP activities in Oman. Dr. Al-Rumhy spoke favorably about his experience in participating in a technical cooperation project implemented by the Petroleum Energy Center (predecessor of JCCP's technical cooperation department) in 1996, when he was an associate professor at Sultan Qaboos University. He welcomed the developments that JCCP projects have made in Oman since then, and expressed his wish to maintain friendly relations with JCCP.

Dr. Al-Rumhy also explained that

he has been inviting large numbers of university students from Japan to Oman every year since the 1990s, to promote a deeper understanding of Oman. He wishes to extend this activity not only to workers in oil and gas companies in Japan, but to people in many other sectors as well. More recently, Dr. Al-Rumhy has taken strong interest in Japan's technologies for reducing CO<sub>2</sub> emissions, and appears to have large expectations of Japan.

Following the visit to the Ministry of Oil and Gas, Mr. Yokoyama visited Sultan Qaboos University, where he had the opportunity to meet with H.E. Dr. Saud Nasser Ali Al-Riyami, Vice



*At the Omani Ministry of Gas and Oil  
Right: H.E. Dr. Mohammed Bin Hamad Bin Saif Al-Rumhy, Minister of Gas and Oil*



*At Sultan Qaboos University  
Second from right, front row: H.E. Dr. Saud Nasser Ali Al-Riyami, Vice Chancellor*

Chancellor, and verify the progress of a JCCP project that is currently being implemented jointly with the university.

**3. [Iran] Courtesy Call on Mr. Mohammad Reza Nematzadeh, Deputy Minister of Petroleum and President of National Iranian Oil Refining and Distribution Company (NIORDC), and Visit to National Iranian Oil Company (NIOC) <October 29, 2007>**

In Iran, Mr. Yokoyama paid a courtesy call on Mr. Mohammad Reza Nematzadeh, Deputy Minister of Petroleum and President of NIORDC, and senior officials of NIORDC. Mr. Yokoyama discussed JCCP's achievements in relation to its training courses and the huge number of participants who have so far participated in them, as well as exchanged views with the NIORDC members on future NIORDC support in implementing JCCP technical cooperation projects in Iran. Mr. Nematzadeh responded in a positive manner, expressing his intentions of prioritizing human resource development as an issue of company-wide importance, based on his previous experience working at National Petrochemical Company (NPC).

Mr. Yokoyama also visited National Iranian Oil Company (NIOC), a major



At NIOC  
Left: Mr. S.M.A. Khatibi Tabatabai,  
Vice Executive Director

producer and distributor of oil and gas in Iran, and paid a courtesy call on Mr. S.M.A. Khatibi Tabatabai, Vice Executive Director for International Affairs.

**4. [UAE] Visit to Mr. Jasem Ali Al-Sayegh, General Manager of TAKREER <November 6, 2007>**

In UAE, Mr. Yokoyama visited Abu Dhabi Oil Refining Company (TAKREER), to pay his respects to Mr. Jasem Ali Al-Sayegh, General Manager, as the new managing director of JCCP, and to thank him for TAKREER's cooperation in JCCP projects. Mr. Al-Sayegh expressed his appreciation of JCCP projects and his expectations of further cooperation from JCCP in developing engineers and conducting joint projects.

**5. Visits with Other Senior Officials <November 3 – 7, 2007>**

In addition to the above figures, Mr. Yokoyama also met with senior officials and leaders of other companies and institutions in Oman and UAE, and exchanged views on their cooperation and implementation of future JCCP activities. Other gentlemen with whom Mr. Yokoyama greeted included Mr. Ahmed Mohammed Al-Haddabi, Acting CEO of Sohar Refinery Company in Oman; H.E. Dr. Hadeef Bin Jouan Al Dhahiri, Vice Chancellor, and H.E. Dr. Maitha Salem Al Shamsi, Assistant Provost for Research Affairs, of UAE University; and Mr. Ali Mohd. Al Jaber, Division Manager of TAKREER's Ruwais Refinery.

The Sixth Scientific Council Meeting with UAE University was held on November 4 and 5, during Mr. Yokoyama's visit to UAE. An article on the details of the meeting is provided in the Topics section of this newsletter.

*<by Wataru Maekawa,  
Technical Cooperation Dept.>*

**II. Saudi Arabia, Qatar, Kuwait (November 15 – 30, 2007)**

**1. Contract Signing Ceremony with King Abdulaziz City for Science and Technology (KACST) <November 19, 2007>**

H.H. Dr. Turki bin Saud bin Mohammed Al-Saud, Vice President of KACST, and Mr. Katsuo Yokoyama signed a memorandum of agreement (MOA) to conduct a project on "Experimental Application of InSAR Technology in Saudi Arabia to Assess the Effect of Reservoir Activity on Surface Subsidence" (FY2007 – 2008). The signing ceremony took place at the head office of KACST in the Kingdom of Saudi Arabia.

In FY2006, JCCP conducted a preliminary study on the assessment of partial ground deformation (upthrust



At NIORDC  
Right: Mr. Mohammad Reza Nematzadeh,  
Deputy Minister of Petroleum and  
President of NIORDC



Presenting a commemorative gift from  
JCCP to TAKREER  
Left: Mr. Jasem Ali Al-Sayegh,  
General Manager



MOA signing ceremony with KACST  
 Right: H.H. Dr. Turki bin Saud bin Mohammed Al-Saud, Vice President  
 Center right: Dr. Mohammed ibn Ibrahim Al-Suwaiyel, President  
 Center left: H.E. Shigeru Nakamura, Japanese Ambassador to Saudi Arabia



and subsidence) in Saudi Arabia, using InSAR (interferometric synthetic aperture radar) analysis technology, which numerically analyzes InSAR data (microwave data reflected from a satellite) to assess ground deformation. As KACST has taken a strong interest in the technology, JCCP has promptly initiated a study for the creation of a system for technical transfer and data processing, and designed the study with the objective of developing and transferring technology that is capable of managing risks to oil facilities and areas caused by ground deformation in Saudi Arabia.

The signing ceremony was attended by Dr. Mohammed ibn Ibrahim Al-Suwaiyel, President, H.H. Dr. Turki bin Saud bin Mohammed Al-Saud, Vice

President, and Dr. Tariq A. Alkhalifah, Director, on the KACST side; and by H.E. Shigeru Nakamura, Ambassador of Japan to Saudi Arabia, Mr. Masanori Tsuruda, First Secretary, and Mr. Tadanori So, Second Secretary, from the Japanese Embassy in Saudi Arabia, as well as Mr. Hirokazu Kanai, Executive Director of Nichiyo Engineering Corporation, and a representative from Central Computer Services Co., Ltd. (CCS), as representatives of participant companies on the Japan side.

Firstly, Dr. Al-Suwaiyel expressed his appreciation and his sincere wishes for the success of the project and for the further deepening of the cooperative relationship between JCCP and KACST. Dr. Al-Saud also expressed his gratitude for the implementation of the “extremely

Article featured in the local newspaper: “KACST and JCCP have signed an MOA for a joint study, with the attendance of H.E. Ambassador Nakamura”

significant technical project,” and conveyed his expectations of its successful completion as well as his hopes that it will lead to the implementation of many other cooperation projects in the future. Ambassador Nakamura stressed the significance of Saudi-Japan technical cooperation as declared by then Prime Minister Shinzo Abe during his visit to Saudi Arabia in spring 2007, and expressed his hopes for the successful implementation of the project, as well as thanked all parties concerned for their cooperation. Mr. Yokoyama, after delivering a few words of greetings as



Exchange of commemorative gifts  
 Right: H.H. Dr. Turki bin Saud bin Mohammed Al-Saud, Vice President  
 Center: H.E. Shigeru Nakamura, Japanese Ambassador to Saudi Arabia



At the signing ceremony  
 Center: Dr. Mohammed ibn Ibrahim Al-Suwaiyel, President

the new managing director of JCCP, pronounced his commitment to the project, and thanked KACST for its continued cooperation over many years. On behalf of the participant companies, Mr. Kanai from Nichiyo Engineering Corporation expressed his firm resolve to carry out the project with success and steadily transfer the InSAR technology to KACST.

After both leaders of the project signed the agreement, presentations were given on example applications of the InSAR technology. KACST reported on an effective application of the InSAR technology in capturing ground deformations caused by an earthquake that had previously struck the northwestern part of the country. The representative from CCS used actual case examples to show how the InSAR technology could be used to capture deformations of the ground surface. The ceremony ended on a successful note, and was covered by local newspapers. Implementation of the project is expected to promote further understanding of JCCP activities in Saudi Arabia.

## 2. Visits to JCCP Counterparts in Saudi Arabia, Qatar, and Kuwait

### (1) King Fahd University of Petroleum and Minerals (KFUPM)

<November 20, 2007>

Mr. Yokoyama met with H.E. Dr.



Attendees of the meeting with KNPC

Center: Mr. Sami F. Al-Rushaid, previous Chairman of KNPC (current Chairman of KOC)  
 Second from left: Mr. Fahed Fahhad Al-Ajimi, Deputy Managing Director  
 Third from left: Mr. Asa'ad Ahmad E. Al-Saad, Deputy Chairman

Khaled S. Al-Sultan, Rector, and Dr. Sahel N. Abdul-Jauwad, Vice Rector, and thanked KFUPM for its past cooperation in JCCP activities. The Rector stated that "the university has participated in the HS-FCC project, so investigating the commercialization of the HS-FCC technology is a welcome development, from which the university expects great results."

### (2) Saudi Aramco

<November 21, 2007>

Mr. Yokoyama met with Mr. Isam A. Al-Bayat, Vice President, and Dr. Omar S. Abdul-Hamid, Manager, to thank them for their long years of cooperation in JCCP activities, and to seek further development of the cooperative relationship between Saudi Aramco and JCCP. Saudi Aramco thanked JCCP for

its generous support and cooperation, and exchanged views on future technical cooperation projects.

### (3) Kuwait National Petroleum Company (KNPC)

<November 28, 2007>

Mr. Yokoyama first paid a visit to KNPC and exchanged views on technical cooperation projects with Mr. Sami F. Al-Rushaid, previous Chairman of KNPC, Mr. Asa'ad Ahmad E. Al-Saad, Deputy Chairman, and Mr. Fahed Fahhad Al-Ajimi, Deputy Managing Director.

### (4) KNPC's Mina Abdulla Refinery (MAB)

<November 29, 2007>

Mr. Yokoyama met with Mr. Mohammad Ghazi Al-Mutairi, Deputy



Exchange of commemorative gifts  
 Left: H.E. Dr. Khaled S. Al-Sultan, Rector



Exchange of commemorative gifts  
 Left: Mr. Isam A. Al-Bayat, Vice President



*Attendees of the meeting at KNPC's Mina Abdulla Refinery Center: Mr. Mohammad Ghazi Al-Mutairi, Deputy Managing Director  
Second from left: Mr. Ousama H. Shammass, Manager*



*Attendees of the meeting at KISR  
Second from left: Dr. Nader Al-Awadhi, Deputy Director General  
Right of Mr. Yokoyama: Ms. Marafi, Manager  
Third from right: Dr. Abdulhameed Al-Hashem, PRSC Director*

Managing Director, and Mr. Ousama H. Shammass, Manager, and exchanged views on the progress, issues, and future strategies of the “Development Study of Residue Hydrocracking to Distillate in KNPC ARD Units (Phase II),” a three-year project that KNPC and JCCP launched in FY2005.

**(5) Kuwait Institute for Scientific Research (KISR)**  
**<November 28 & 29, 2007>**

Mr. Yokoyama met with Dr. Nader Al-Awadhi, Deputy Director General, and Dr. Abdulhameed Al-Hashem, Director of the Petroleum Research & Studies Center (PRSC), and thanked them for KISR’s long years of cooperation in JCCP activities. Drs. Al-Awadhi and Al-Hashem outlined future issues that KISR, including the PRSC, needs to address in the future, and exchanged views on various cooperation issues. They also expressed

their deep appreciation for the technical cooperation they have received from JCCP to date.

A contract signing ceremony with Qatar Petroleum (QP) was held on November 26, during Mr. Yokoyama’s visit to Qatar. An article of the ceremony is provided in the Technical Cooperation Section of this newsletter.

*<by Takeyoshi Haishima,  
Technical Cooperation Dept.>*

# Survey of Downstream Trends in UAE and Qatar

From October 9 to 16, 2009, a survey of downstream trends was conducted in UAE and Qatar, by S. Yagi, General Manager of the JCCP Middle East Office, and K. Takayama, JCCP Training Department, with the cooperation of Mr. Masashi Onishi from Cosmo Research Institute and Mr. Katsuhiko Sasao from JGC Corporation. The four-member team mainly visited human resource development departments to gain an overview of training facilities, programs, and other such aspects of training institutions in the two countries, and to identify needs for JCCP training programs.

## 1. UAE

### (1) ADNOC Technical Institute

In the morning of October 11, the survey team visited the ADNOC Technical Institute (ATI), a training center established by UAE to promote opportunities for employment in the ADNOC Group. After warmly welcoming the survey team on its first visit to ATI by JCCP, Mr. Omar Al Hamed, ATI Manager, and other members took the time to explain about ATI's training programs and to guide the Japanese team on a tour of the facilities.



At ADNOC Technical Institute



At Petroleum Institute

### (2) Petroleum Institute

In the afternoon of October 11, the survey team visited the Petroleum Institute (PI), an industrial college established by ADNOC as a center of research and education for the oil and gas industry in UAE. The opportunity to meet with Dr. Michael M. Ohadi, Provost and Acting President, Dr. Dennis A. Siginer, Assistant Provost and Director of Arts and Sciences, and many other high-ranking officers of PI proved to be an invaluable experience to the survey team.

### (3) TAKREER

On the following day, the survey team visited the TAKREER Head Office in the morning to



At TAKREER



*At QP Training Center*



*At the QP Mesaieed Refinery*

hold an interview with Mr. Ahmed Mohamed Al Gattan, Manager Training and Career Development Department, Human Resources and Administration Division, and a number of other members. The TAKREER members responded to the survey team's detailed questions with kind understanding.

## 2. Qatar

### (1) Qatar Petroleum (Training Center)

On October 14, the survey team visited the Qatar Petroleum Training Center and exchanged views with Mr. Mohamed Normarzuki Bin Yaacob, Senior Supervisor–Short Tech. Training, Corporate Training, who attended to the survey team with kindness and courtesy despite his extremely busy schedule.

### (2) Qatar Petroleum Mesaieed Refinery

On October 15, the survey team visited Qatar Petroleum's Mesaieed Refinery, where they met with Mr. Abdulaziz M. Al-Khoori, Operations Manager, Refining-Operations, and other members. As a graduate of a JCCP course himself, Mr. Al-Khoori spoke fondly about his JCCP experience. He also talked about his requests and frank opinions of JCCP, and made the meeting an extremely meaningful one to the survey team.

## 3. Impressions

The survey team is hopeful that the visits to ATI and PI for the first time have laid the foundation

for the establishment of a friendly cooperative relationship between each of those institutions and JCCP. With respect to TAKREER and QP, JCCP has enjoyed longstanding friendships with the two companies, but the survey team felt a need for JCCP to step up its efforts in order to better respond to their specific needs.

Lastly, the survey team would like to take this opportunity to thank everyone concerned for their generous cooperation and effort in making this survey mission possible.

*<by Kazuko Takayama, Training Dept.>*

### A Japanese delegation visits ADNOC Technical Institute

Within the context of efforts to strengthen mutual cooperation between JCCP and ADNOC, a delegation from the Japanese Center for Petroleum Cooperation (JCCP) visited ADNOC Technical Institute (ATI) on 11 October 2009, to get acquainted with the educational and training programs at the institute.



ADNOC News

*Local newspaper article on the survey team's visit to ATI*



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