



# JCCP NEWS

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Topics

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## Mr. Sase, Executive Director of JCCP, Visits China, Saudi Arabia, and Bahrain

Mr. Masataka Sase, Executive Director of JCCP, visited China, Saudi Arabia, and Bahrain in April and June 2009, to hold policy dialogues with the top management of national oil companies in those countries, as part of JCCP's effort to promote mutual exchanges, understanding, and cooperation with oil-producing countries.

### 1. China

Mr. Sase paid a call on SINOPEC's Head Office and Zhenhai Refining & Chemical Company, and the CNPC Head Office in April 2009. There he exchanged views on the latest topics in the oil industry with Mr. Wan Tianpu, President of SINOPEC, head office executives of CNPC, and the president and department directors of the Zhenhai Refining & Chemical Company under SINOPEC.



*Mr. Wan Tianpu, President of SINOPEC (center)*

## (1) SINOPEC Head Office

Mr. Sase visited the SINOPEC Head Office in the morning of April 21 to meet with Mr. Wan, and received warm words of appreciation for his visit. Mr. Wan also said that Japan's assistance has played a large role in SINOPEC's growth, and expressly thanked JCCP for its many years of cooperation.

The two leaders then exchanged views on the future direction of SINOPEC and JCCP. In regard to future JCCP activities, they agreed that it is becoming increasingly necessary for JCCP to create new opportunities for exchanges of views and to address new needs in response to the times. Based on this awareness, they discussed issues relating to environmental conservation, energy saving, and enhancement of refinery performance, as topics of particular interest for the future.

Mr. Wan also gave a general overview of new challenges that SINOPEC is currently addressing, including the development of a new type of fuel (ethanol) from raw materials derived from cellulose, and the development of automotive fuel by coal liquefaction. As China is expected to accumulate an almost inexhaustible supply of unused resources, there is great meaning to utilizing them effectively as potential sources of energy. Mr. Wan acknowledged SINOPEC's strong interest in this new sector as an essential part of its future.

In his closing remarks, Mr. Wan expressed his hopes that JCCP and SINOPEC will continue to nurture and develop their cooperative relationship. He emphasized the importance of exploring new avenues of interaction and understanding by mutually identifying needs and requests, while at the same time maintaining the foundation of mutual exchange that the two organizations have established to date.

## (2) CNPC Head Office

In the afternoon of April 21, Mr. Sase paid a call on the CNPC Head Office, and met with Ms. Pei Ying, Deputy Director General, Ms. Lu Ying, Director, International Cooperation, and Mr. Suo Zheng, International Cooperation.

Mr. Sase noted that interactions between CNPC and JCCP began with the establishment of JCCP,



*At the CNPC Head Office*

and JCCP has long supported mutual understanding between China and Japan. Given their close relationship, Mr. Sase congratulated CNPC on its significant growth within the strong and steady development of China's national oil industry.

In response, Ms. Pei thanked JCCP for its many years of cooperation, as well as articulated CNPC's future expectations of JCCP in relation to its latest challenges and initiatives. She also described some of the background to CNPC's recent business expansion. For example, she mentioned how activities in the upstream sector have increased with the reorganization of the company in 1988 (spin-off from SINOPEC), and how its scope of activities has expanded to include natural gas and renewable energies and has boosted CNPC into a diversified global company.

At the end of the meeting, Ms. Pei shared her thoughts on the shape of mutual cooperation between oil-producing and oil-consuming countries and international relationships within global society, saying that relationships between oil-producing and oil-consuming countries, the status of national oil companies, and the role of international oil majors are constantly changing as each player continues to pursue its business in the global arena. Also noting the fluctuation of crude oil prices and its heavy impact on the global market, she remarked that the cooperative relationship between CNPC and JCCP must also reflect such economic and environmental

changes. To this end, Ms. Pei strongly emphasized the need to hold frequent exchanges of views between the two organizations.

### (3) SINOPEC Zhenhai Refining & Chemical Company

On April 22, Mr. Sase visited the SINOPEC Zhenhai Refining & Chemical Company, and was warmly welcomed by Mr. Jiang Zhenghong, President, Mr. Chen Jian, Vice President, JCCP graduates, and staff members.

Mr. Jiang opened the meeting with words of appreciation to JCCP for receiving many participants to JCCP courses over the years. Mr. Sase, after briefly describing his meeting with Mr. Wan Tianpu at the SINOPEC Head Office, expressed his gratitude for the opportunity to observe first-hand the site of Zhenhai Refining & Chemical Company, SINOPEC's largest refinery, and duly acknowledged the refinery's efforts to maintain steady growth and development into the future.



*At the SINOPEC Zhenhai Refining & Chemical Company*



*Mr. Jiang Zhenghong, President of SINOPEC Zhenhai Refining & Chemical Company (center)*

In summarizing the refinery's 34 years of accomplishment since its establishment, Mr. Jiang recited three achievements—the greatest crude oil throughput, highest level of technology, and lowest refining cost, in all of China. Last year, when Chinese Premier Wen Jiabao visited the refinery, he referred to these three achievements as the government's official view of the refinery. This acknowledgement has provided a source of pride to the refinery.

Before bringing the meeting to a close, Mr. Jiang once again expressed his appreciation for JCCP's 28 years of cooperation, and wished for the further growth of SINOPEC and JCCP through continued exchanges of views.

Mr. Sase's visit to China provided a timely opportunity to exchange views on the future of JCCP activities and other significant issues with the relevant departments of SINOPEC and CNPC, in advance of a summit-level conference between China and Japan that was scheduled to be held in Beijing the following week.

*<by Shintaro Miyawaki, Training Dept.>*

## 2. Saudi Arabia and Bahrain

Mr. Sase visited Saudi Arabia and Bahrain in early June 2009.

JCCP regularly encourages Saudi Arabia's active participation in JCCP regular courses and promotes requests for the implementation of customized programs. Based on a previously conducted survey of needs, JCCP organized a

Customized Program-Overseas (CPO seminar) on refinery safety management and TPM last year, and hopes to implement customized programs again this year and into the future. The objective of Mr. Sase's recent visit to Saudi Arabia was to exchange views with the Ras Tanura Refinery on its past relationship with JCCP and future expectations of

JCCP activities. Mr. Sase also paid a call on SHARQ (Eastern Petrochemical Co.), a lucrative joint venture company launched by Saudi Arabian and Japanese companies, and on the Japanese embassy in Bahrain, where the next GCC-Japan Environment Symposium is scheduled to be held.

### **(1) Saudi Aramco's Ras Tanura Refinery**

In the morning of June 1, Mr. Sase visited Saudi Aramco's Ras Tanura Refinery, where he engaged in discussion with Mr. Mutleb K. Al Shammeri, General Manager, and other refinery executives.

Addressing all the key executives of the refinery attending the meeting, Mr. Sase firstly thanked Saudi Aramco for its generous cooperation and support of JCCP activities over many years. He then articulated JCCP's future policies aimed at promoting activities that reflect the rapid changes in the global economic environment, and addressed complicated issues concerning energy and the environment. Assuring an enhancement of activities, Mr. Sase asked Saudi Aramco, as one of JCCP's most important partners, for its support and cooperation in strengthening their mutual ties.

Mr. Al Shammeri thanked JCCP in turn for its many contributions over the years, and reported that Saudi Aramco's active participation in JCCP courses since last year has increased an awareness of the significance and benefits of JCCP courses. He also said he wishes to actively and systematically send participants to JCCP courses as an effective means of human resource development.

After the meeting, Mr. Sase toured the refinery site.



*At the Ras Tanura Refinery*

### **(2) SHARQ**

In the morning of June 2, Mr. Sase paid a call on SHARQ (Eastern Petrochemical Co.), located in Al-Jubail Industrial City, to hold a meeting with Mr. Mohammad M. Al-Jabri, President of Eastern Petrochemical Co.

SHARQ is a joint venture between SABIC (Saudi Basic Industries Corporation) and SPDC Ltd. in Japan. It specializes in producing polyethylene and ethylene glycol using ethylene supplied by Saudi Aramco. It is also one of the largest companies within the massive Al-Jubail Industrial City, and is well known as a successful Saudi-Japan joint venture displaying remarkable growth.

On the day of the meeting, Mr. Sase first received a summary of SHARQ's present operating status from Mr. Kazuhiko Kato, an employee of Mitsubishi Corporation who is stationed in Saudi Arabia. After conferring with Mr. Kato, Mr. Sase met with Mr. Al-Jabri and discussed the relationship between JCCP and Saudi Aramco and details concerning JCCP activities. Mr. Al-Jabri, on the other hand, shared the following information:

- (1) SHARQ was established in 1981 as a joint venture between SABIC and Saudi Petrochemicals Development Co., Ltd. (now known as SPDC Ltd.). Under the Saudi-Japan cooperative framework, it has enjoyed robust growth and success in the areas of training of Saudi operation staff, plant construction, test operation, technical assistance, and product sales. Mr. Al-Jabri himself has received training in Japan when SHARQ was first established, and continues to apply his Japanese training experience to his management of SHARQ today.
- (2) SHARQ's corporate motto is "safety, quality, and teamwork." With "Safety first" as a catchphrase, the company had achieved a no-accident record of 20 million man-hours by 2007. It has also directed a great deal of effort to employee training, with the result that 97% of all employees today are Saudi Arabians.
- (3) Future challenges of the company lie in transferring frontline technologies to young engineers, and in passing on the spirit and



At SHARQ

expertise of the first generation (those who know Japan and the launching of the company) to the next generation.

### (3) Japanese Embassy in Bahrain

In the morning of June 3, Mr. Sase visited the Japanese embassy in Bahrain and met with H.E. Ambassador Takeshi Kondo.

To begin, Mr. Sase gave a brief summary of the objectives of his recent trip and the status of JCCP activities. He then exchanged views mainly on the GCC-Japan Environment Symposium, which is slated to be held next in Bahrain from February 8 to 10, 2010, and received an affirmative response from the ambassador to his request for cooperation.

Ambassador Kondo, on his part, informed Mr. Sase about a project that is being planned by the Bahrain Ministry of Oil and Gas for the establishment of an “energy conservation center,” and revealed that the ministry has requested Japanese cooperation in the project.

On his recent visit to the Ras Tanura Refinery, Mr. Sase engaged in fruitful discussions with major executives of the refinery in a relaxed and friendly

atmosphere, and learned that there is a growing awareness of the significance of JCCP courses within Saudi Aramco. Of particular interest was Saudi Aramco’s urgent need to address future issues, such as the development of human resources in response to new capital investments being made in the construction and addition of facilities in the petrochemical sector, and the mass retirement of the baby-boomer generation. As in Japan, workers of that generation will hereafter be retiring en masse, and by 2013, it is expected that workers with less than five years of experience will account for 30% of all employees at Saudi Aramco. The issue of generational change also came up in the meeting at SHARQ, bringing to light an awareness that the transfer of technology from the old generation to the new is regarded as a priority issue that is indispensable to the survival and growth of the company.

Through his visits to Saudi Arabia and Bahrain, Mr. Sase reconfirmed the friendly relationship between JCCP and the two countries, and has gained a new perspective on future issues.

*<by Yoshiaki Ueno, Training Dept.>*



At the Japanese Embassy in Bahrain

# 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



*Completion ceremony at MRRC*

Society 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



# Signing Ceremony for the Project on “Mild Hydro-cracking of LCO & Evaluation of Gas Oil HDS Catalysts” in Saudi Arabia

On May 17, 2009, JCCP and King Fahd University of Petroleum and Minerals (KFUPM) held a ceremony for signing a Memorandum of Agreement (MOA) on the joint technical cooperation project, “Mild Hydro-cracking of LCO & Evaluation of Gas Oil HDS Catalysts,” in Saudi Arabia.

The objective of the project is to lay the basic groundwork for the development of mild hydro-cracking technology toward the effective utilization of the surplus of light cycle oil (LCO) that is expected to grow in the future, and to develop a technology for the evaluation of catalysts that are used to produce low-sulfur diesel fuel with a sulfur content of less than 10ppm from Saudi Arabia’s high-sulfur heavy crude oil.

For the first time in a JCCP technical cooperation project, a Japanese university (Kyushu University) has participated as a member of a consortium headed by Nippon Oil Research Institute Co., Ltd.

Dr. Sahel N. Abdul-Jauwad, Vice Rector for Applied Research, and Mr. Katsuo Yokoyama, Managing Director of JCCP, signed the agreement in the ceremony, which was also attended by Mr. Fumio Iwai, Minister, and Mr. Toshiki Nagano, First Secretary, from the Embassy of Japan in Saudi Arabia, and Dr. Isao Mochida, Professor at Kyushu University.

Preceding the signing, Mr. Iwai gave a congratulatory speech in Arabic, and Mr. Yokoyama, Dr. Abdul-Jauwad, and Dr. Mochida each offered a few words of greeting in English. After signing the agreement, Mr. Yokoyama

presented a commemorative gift to Dr. Abdul-Jauwad, and brought the ceremony to a successful close.

The project will be implemented in the following four stages, over a period of three years, from April 1, 2009 to March 31, 2012.

## 1. Patent and Literature Survey

The latest patents and technical literature relating to the project will be surveyed, to establish a roadmap for the project using the acquired information.

## 2. Installation of Testing and Analysis Apparatus

The following three types of testing and analysis apparatus will be installed.

- i) Micro-testing unit
- ii) Gas chromatograph with atomic emission detector (GC-AED)



*Signing ceremony: Dr. Sahel N. Abdul-Jauwad, Vice Rector for Applied Research (seated right)*

iii) High-performance liquid chromatograph (HP-LC)

The micro-testing unit will be used to evaluate catalyst performance. The GC-AED and HP-LC will analyze the feed oils that will be loaded in the testing unit and the oil products derived from the catalyst performance test conducted in the micro-testing unit.

### 3. Analysis of Gas Oil and Light Cycle Oil (LCO)

Various types of feed samples from Saudi Arabian crude oil will be acquired by distillation and used to produce gas oil. LCO, a by-product of fluid catalytic cracking, will also be used as gas oil feed. These feed samples will be analyzed by a method proposed by Kyushu University. Lastly, they will be loaded in the micro-testing unit to induce a reaction, and the derived desulfurized oil will be analyzed by the same method used to analyze the feed samples.

### 4. Catalyst Performance Evaluation

Experimental catalysts will be researched and their performance evaluated in the micro-testing unit, in reference to commercial catalysts. Initially, commercial catalysts will be evaluated with gas oil feed and LCO, to gain an understanding of desulfurization trends.

Following the ceremony, the Japanese delegation toured the research facilities at KFUPM, then paid a courtesy call on H.E. Dr. Khaled S. Al-Sultan, Rector of the University. Dr. Al-Sultan explained that, on learning of Kyushu University's participation in the project, he pushed back the boundaries of his university's organization and instructed two up-and-coming young faculty members from the Chemical Engineering Department (Dr. K. Al-Hooshani, Associate Professor, and Dr. M. Al-Daous, Associate Professor) to join the project members on the KFUPM side. More so than previous projects, he said he hopes this project will further evolve in the future as a mutual sharing of intellectual knowledge.



*Mr. Yokoyama presenting a commemorative gift to Dr. Sahel N. Abdul-Jauwad, Vice Rector for Applied Research, KFUPM*



*H.E. Dr. Khaled S. Al-Sultan, Rector of KFUPM, presenting a commemorative gift to Mr. Fumio Iwai, Minister of the Japanese Embassy in Saudi Arabia*

After enjoying a pleasant exchange of views, Mr. Yokoyama presented a commemorative gift to Dr. Al-Sultan, who in turn, presented a commemorative gift to Mr. Iwai.

A brief overview of the project was introduced in three local newspapers the following day, based on a press release distributed to the media.

This project marks a milestone as the first JCCP technical cooperation project that includes a university on both the Saudi and Japanese sides. We hope that the successful completion of the project will contribute to the further development of friendly ties between our two countries.

*<by Hiroaki Hara, Technical Cooperation Dept.>*

# FY2009 JCCP Program Seminar

The FY2009 JCCP Program Seminar (TCJ-1-09) was held over an eight-day period, from July 8 to 15. The seminar invites JCCP counterpart managers from state-run oil companies in oil-producing countries to visit JCCP and exchange views with JCCP personnel regarding future plans for regular courses in Japan and dispatch of expert services abroad. It also aims to promote greater understanding of JCCP in oil-producing countries by offering JCCP counterparts an opportunity to personally experience Japan and JCCP.

## 1. Participants

The eight participants of the seminar consisted mainly of managerial personnel of human resource management departments, with an average age of 45. They were from Indonesia (PERTAMINA), Iran (NIORDC), Kazakhstan (KazMunayGas), Libya (NOC), and Saudi Arabia (Saudi Aramco), five countries that also participated in last year's seminar. We believe that the significance of the seminar has begun to be acknowledged in major oil-producing countries.

## 2. Seminar Content

### (1) Regular Course Experience

To give participants of the program seminar a general idea of what regular course participants usually go through, we had them experience the entire flow of a regular course, including an orientation session, opening ceremony, administrative guidance,

lectures on “overview of Japan’s oil industry” and “Japanese language and society,” and closing ceremony. We also provided a visit to a refinery and a cultural field trip as we do in our regular courses.

### (2) Information Exchange on Human Resource Development Programs in Each Country

We asked each participant to deliver a presentation to an audience composed of people from JCCP member companies and JCCP personnel, on a general overview of their company, its human resource development policies, and its evaluation and requests of JCCP training programs. Through these presentations, we have gained a better understanding of our counterparts, and have acquired invaluable information regarding their evaluation and requests of JCCP, which we intend to use to improve our future training programs.

### (3) Overview and Discussion on JCCP’s Future Training Activities

Seeking to promote active utilization of FY2010 JCCP regular courses and FY2009/2010 customized programs (Customized Program-Overseas (CPO) and Customized Program-Japan (CPJ)), we outlined the annual schedule of FY2010 regular courses and gave a detailed summary of customized programs. We also discussed requests, improvements, and matters for confirmation related to JCCP training programs as a whole.

Particularly in regard to CPO/CPJ, we sought to identify specific needs in each country, by giving a detailed description of common themes—refinery



*Presentation venue*



*Individual discussions on CPO/CPJ*



At Idemitsu Kosan Co., Ltd., Tokuyama Refinery



Seminar participants

management, human resource management, human resource development, energy conservation, upgrading of heavy oil, environmental management, maintenance management, and advanced process control—and proposing a sample implementation schedule. From the participants we learned that there are strong needs in the areas of TPM (Total Productive Maintenance/Management), safety management, DCS (Distributed Control System), and TQM (Total Quality Management) for managers, and therefore plan to use this information to make even more specific CPO/CPJ proposals in the future.

As a result of implementing a program seminar every year, we have gained a more accurate understanding of the needs and issues facing each country, and believe we are making significant progress in providing CPO/CPJ on themes that could contribute to solving those issues.

### 3. Summary

The eight-day seminar provided the participants with an ideal opportunity to strengthen their relationship with the JCCP staff, and their exposure to Japanese society and culture helped them to gain a better perspective of Japan. We hope their experience will promote their further participation in JCCP programs.

As described below, the seminar has benefited both JCCP and participating countries, and has accomplished its intended objectives.

(1) The participants have deepened their

understanding of Japan and JCCP, and have established a close, trusting relationship with the JCCP staff. We are hopeful that their new perspective will encourage them to more actively promote the use of JCCP training programs in the future.

As part of the seminar, a visit was made to Idemitsu Kosan Co., Ltd.'s Tokuyama Refinery, where refinery staff gave a lecture on human resource development and provided a tour of the site. In terms of offsite training experience, the visit was more than expected, and received high marks from all participants.

- (2) To promote greater implementation of CPO/CPJ that are designed to respond specifically to each country's needs, we held a discussion with each participant, with their approval, to establish details for their possible implementation.
- (3) We have obtained information on the organizational structure and human resource development policies of each participant country, as well as their evaluations and requests regarding JCCP training activities.

We will carefully analyze and assess the fruits of this year's program seminar, so that we may not only improve next year's seminar, but also offer even better training programs in the future.

Lastly, we thank Idemitsu Kosan's Tokuyama Refinery for its thorough response and support, and extend our deepest appreciation to everyone who put in a lot of time and effort in helping us implement an efficient and effective seminar.

<by Takashi Hori, Operations Dept.>

# Interviews with JCCP Counterparts (Saudi Arabia & Oman)

To produce a promotional DVD of JCCP, JCCP has interviewed Mr. Fareed Z. Kamfar, Maintenance Manager (then), Ras Tanura Refinery, Saudi Aramco, and Mr. Masoud S. Al-Msalmy, General Manager, Corporate Support, Oman Refinery and Petrochemicals Company, on their views of JCCP activities seen from an oil-producing country. Since the views the two gentlemen shared with us are highly valuable and enlightening, we introduce some excerpts from the interviews below.

## 1. Saudi Arabia

### Mr. Fareed Z. Kamfar

Maintenance Manager (then), Ras Tanura Refinery, Saudi Aramco

*Interviewer:* Mr. Kamfar, thank you very much for accepting this interview. You participated in a JCCP course once in 1984, so you are one of our oldest participants and are probably very familiar with JCCP activities. What has impressed you most, in your first participation in a JCCP course in 1984 and your second in 2008?

*Mr. Kamfar:* I was 25 or so when I participated in a JCCP course for the first time in 1984. The JCCP course was my window to Japan's culture and business environment.

Since then, I began to read books, attend lectures, and watch TV programs on Japan to become more familiar with Japan. After my last visit to Japan in October 2008, I personally began giving lectures about Japanese culture and how business is run in Japan.

There are many differences between Japan and the Middle East. We live by the Middle Eastern culture and receive the influence of the Western business culture. We cannot fully understand how the Japanese conduct business unless someone who has a perspective on both cultures provides a link. Only then can we see the true picture of Japanese business practices. Therefore, we need someone who would make that effort.

I cannot say that I understand Japan to the



*Mr. Fareed Z. Kamfar,  
Maintenance Manager (then)*

level that is necessary to provide that link, but I think I have gained a good understanding of Japanese business practices. I see that Japanese businesses are founded on a culture that values personal relationships, and have learnt the concept, "trust before business," from Japan. In our business environment, business comes first, then trust. This is probably one of the greatest differences between how business is conducted in Japan and the Middle East.

I have also learnt that Japanese companies place importance on educating their employees to further improve business. To us, this is a completely different approach to conducting business.

These are some of the brief impressions I have of the past 25 years of exposure to Japanese culture.

*Interviewer:* What do you think is the most distinctive feature of JCCP programs, compared to those of other training institutions?

*Mr. Kamfar:* This is an interesting question.

We have oil, and we have the money to buy anything we need, be it technology, hardware, or training. However, we cannot buy people's minds and brains.

Japan has a precious resource that we do not have-human resources. We could benefit a lot if we can manage to tap into that resource. In this respect, I think JCCP is unique in that it shows and teaches us the importance of human resources and how we may apply that knowledge to the Middle East.

Many people in the Middle East still do not know much about Japan. However, creating more opportunities to experience Japan could cultivate more interest in learning about the country. Japan has good business practices, successful businesses, and high-quality products. From there, we take an interest in Japan and wish to know more. Therefore, what I think is outstanding about JCCP is that it taps into people's brains and minds. It is a remarkable approach. For me, JCCP is the only window through which I can see Japanese culture, but I am hopeful that this window will expand and become a large gateway to Japan in the future.

*Interviewer:* How has JCCP contributed to Saudi Aramco in the past?

*Mr. Kamfar:* Many practices in Japan are similar to what we have, in terms of culture, society, and values, so it is not necessarily difficult to introduce Japanese practices to Saudi Arabia and adopt them at Saudi Aramco.

The Japanese are good at working together as a team. That is not to say that only the

Japanese engage in teamwork, because so do many other countries throughout the world. However, I think the Japanese particularly excel at teamwork.

As a result of adopting the idea of teamwork from Japan and beginning to work in teams, we are seeing large improvements in work efficiency compared to working as individuals. For example, we have an OME (Operation Maintenance Engineering) team in our company whose members are producing greater results by working as a team than as individuals.

Quality is another element. As all products produced by the Japanese are of high quality, by bringing that concept to our environment, we could also take our business to a higher quality level. The Japanese are diligent, and strive to deliver their work with precision. I think it is admirable that they spend a lot of time and energy performing their work but also enjoy it. We also believe that enjoying one's work is an important element in our jobs.

We are adopting many Japanese practices in our company. This past January, we had JCCP staff hold a TPM seminar. As TPM is a new concept to Saudi Aramco, it made a large impact on the participants, and we saw a lot of energy in the workshop. Even during the seminar, they gave instructions over the phone to start implementing TPM in their workplaces. They said they were glad they participated in the seminar, and that they wish to apply what they had learned to their own workplace. I think this would be a starting point for the implementation of TPM at Saudi Aramco, and in this way, what JCCP has been delivering since its founding has had a large impact on Saudi Aramco.

*Interviewer:* What future expectations do you have of JCCP?

*Mr. Kamfar:* I have been thinking about this since I visited Japan last October. We buy a lot of

Japanese products, including technologies and cars, because they provide high quality. However, we cannot buy the Japanese spirit and mind. I think Japan needs to open its small window and create a larger gate. I ask this not only of JCCP, but the entire country of Japan and its government.

I would like to make three proposals on how the Japanese can capture the minds of people in the Middle East by performing business in the Japanese way. Firstly, Japan could come to the Middle East and invest in education, and particularly in universities and vocational schools. This would capture the heart of every mother in Saudi Arabia, because they would want their children to receive a higher education and to have greater job opportunities. It would also open our window wider to Japanese business and culture.

Another proposal concerns the media. When we wish to learn about Japan, we need to read a book, see somebody who would lecture about Japan and Japanese business styles, or visit Japan. However, if there are programs on satellite TV that introduce Japanese culture and business, we could study about Japan more conveniently. Japan needs to make a stronger approach to penetrate the wall separating us.

Finally, I would also like Japan to bring to the Middle East businesses that will touch our lives. Such businesses would make us more familiar with the Japanese style of doing business, or at least allow us to experience for ourselves the true value of Japanese business. For example, American and European fast-food shops and coffee shops are changing the newer generation in the way they eat, the way

they behave, the way they interact with others, and the way they conduct themselves. In the same way, Japan should establish a presence in our daily lives, in order to understand us more. Japan has done an outstanding job of selling cars and IT, but it needs to make more effort to transform people's lifestyles.

This pertains not only to JCCP, but to all Japanese. Through the collective efforts of all Japanese people, I am certain you can make it happen.

*Interviewer:* I understand that managerial personnel at Saudi Aramco do not have their name on their uniform, but what made you decide to have your name on your uniform?

*Mr. Kamfar:* My last visit to JCCP in October 2008 had a profound impact on my personal actions. I saw that in Japanese refineries and industries, the management approaches the employees, whereas in our business, the management has employees come to them. After returning to my country, I decided to spend 70% of my time with my subordinates, and to put my name on my uniform so they can easily identify me. In Japan, personal relationships among employees and the trust that is born from those relationships are extremely important to success in doing business. Based on this understanding, I want everyone at the refinery to know me not as refinery manager, but as an individual. This is why I have my name on my uniform, and not my title.

*Interviewer:* Thank you very much for sharing your invaluable views.

*Mr. Kamfar:* Thank you.

## 2. Oman

### Mr. Masoud S. Al-Msalmy

General Manager, Corporate Support, Oman Refinery and Petrochemicals Company

*Interviewer:* Mr. Al-Msalmy, what has impressed you most when you visited Japan?

*Mr. Al-Msalmy:* First of all, I would like to thank JCCP for all the assistance it has given to ORPC. Now, the relationship between ORPC and JCCP goes back 27 years, beginning just when the refinery was commissioned.

I have maintained ties with JCCP over the past 27 years, and have seen how JCCP programs have evolved with the advancement of Japanese technologies, and how our people have benefited from them. The technology we have acquired through those programs has provided the basis for the technology that we have today.

However, what I have found most impressive was JCCP's flexibility in responding and adjusting to our business needs and technological level.

*Interviewer:* What do you consider is the best feature of JCCP programs, compared to those of other training institutions?

*Mr. Al-Msalmy:* From the standpoint of a refinery, we find that JCCP programs come nearest to being tailor-made to suit our on-site technical needs. Not many organizations in the world do. While most of the programs offered by other organizations are generic, JCCP programs are refinery-specific, and are what we seek as a refining company.

I have also seen participants of JCCP programs take advantage of the opportunity of those programs to gain an intercultural experience. They meet their counterparts from many other countries and learn from them, in addition to learning from the instructors of the programs. They exchange ideas and share problem cases that have occurred at



*Mr. Masoud S. Al-Msalmy,  
General Manager, Corporate Support*

their respective refineries and how they have solved those issues.

I have a specific example of how something that one of our engineers learned from the JCCP course in which he participated benefited us greatly. The knowledge he gained has been applied to our refinery. We were thinking that we would need to spend a large amount of money on solving the relevant issue, but with the solution our engineer came back with, we spent almost nothing, and still we were able to solve the issue. We appreciate the fact that JCCP provides opportunities to network with other participants in oil-producing countries.

*Interviewer:* What do you want your staff to learn at JCCP?

*Mr. Al-Msalmy:* Japan as a whole is respected for the way it values people. The Japanese style of business is unique, particularly at the supervisory level. Since it has proven successful in many ways, we would like our people to learn from Japan's vast experience.



Our people have taken part in many JCCP technical programs, but I would like them to realize that they need to achieve a balance between technical programs and supervisory level programs. This is because I believe that simply possessing technical knowledge is not enough. People need to take advantage of the knowledge they have. To do so, it is important that supervisors, or those poised to become supervisors, draw out knowledge from their staff and utilize it in their work.

I would like to see us adopt the strengths of Japanese management style to a much greater extent, by providing our people with greater opportunities to learn about Japanese supervisory skills at JCCP.

I would also like to see technical training programs become more extensive. When considering the distance between Japan and Oman and the time it takes to travel between the two countries, I would like to see fewer visits to workshops and plants in Japan. I recognize the advantage of such visits, but I think classroom sessions can also expose participants to both Japan's technical expertise and personal management skills.

I am fond of the Japanese management style. I just think that if JCCP provides a good balance of technical and supervisory programs that are both extensive and meaningful, JCCP programs as a whole would come to have an even greater impact.

*Interviewer:* How has JCCP contributed to ORPC in the past?

*Mr. Al-Msalmy:* If there is any company that

should be grateful to JCCP, it is ORPC. Like I have said earlier, almost our entire technical staff has participated in a JCCP program. We are able to do what we do today owing precisely to their JCCP experience. Even those who have gone on to become supervisors, area supervisors, and process managers have received JCCP training in the past. We sincerely appreciate the role JCCP has played in developing our personnel.

We would like to maintain this mutual cooperation with JCCP, so that we may continue to take advantage of JCCP facilities and programs and learn about Japan's technologies and experience.

*Interviewer:* What future expectations do you have of JCCP?

*Mr. Al-Msalmy:* I think JCCP has created for itself a unique platform of training programs that allows participants from various countries and various positions in different companies to create a global network of knowledge-sharing. It would be interesting if JCCP would take another step forward and create an electronic network, so that participants of JCCP programs could keep in touch with each other, discuss issues they face in their plants in a timely manner, and perhaps create occasions to visit each other. I think this would bring a significant change to how we conduct business. I would really like to see a phenomenal change in the platform of knowledge-sharing. I would really like to see this happen, and on our end, we are ready to provide whatever assistance is needed.

# 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

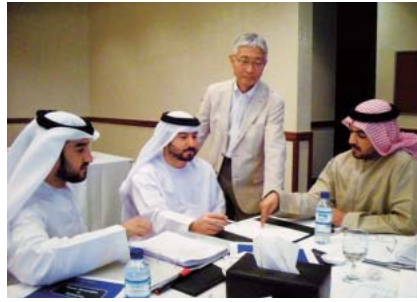
Japan has a long history in energy conservation. Especially since 1979, when the Act on the Rational Use of Energy (Energy Saving Law) came into effect in the wake of the second global oil crisis, the entire nation has shown consistent efforts to save energy. Therefore, we organized this seminar with 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.>*

## JCCP Regular Courses Completed in April – July 2009

### TR-1-09 Online Analyzer and its Utilization in Control

Period: April 7 – April 24, 2009  
No. of participants: 14  
Country of participants: Indonesia, Iran, Libya, Malaysia, Mexico, Myanmar, Nigeria, Oman, Pakistan, Saudi Arabia, UAE, Vietnam, Yemen



### TR-2-09 Petroleum Marketing

Period: April 7 – April 24, 2009  
No. of participants: 15  
Country of participants: Indonesia, Kuwait, Kazakhstan, Libya, Nigeria, Oman, Pakistan, Russia, Thailand, UAE, Vietnam, Yemen



### TR-3-09 Upgrading Processes of Heavy Oil

Period: April 7 – April 24, 2009  
No. of participants: 13  
Country of participants: Indonesia, Iran, Kazakhstan, Kuwait, Libya, Mexico, Nigeria, Vietnam, Yemen



### TR-4-09 Human Resource Management

Period: May 12 – May 29, 2009  
No. of participants: 14  
Country of participants: Indonesia, Iran, Kuwait, Malaysia, Myanmar, Oman, Pakistan, Saudi Arabia, Thailand, Vietnam



### TR-5-09 Essential Petroleum Refining for Process Engineers

Period: May 12 – May 29, 2009  
No. of participants: 14  
Country of participants: China, Indonesia, Iran, Kuwait, Malaysia, Nigeria, Oman, Vietnam, Yemen



**TR-6-09 Diagnostic Techniques and Maintenance for Rotary Machinery**

Period: May 12 – May 29, 2009  
No. of participants: 17  
Country of participants: Indonesia, Iran, Kuwait, Malaysia, Nigeria, Oman, Thailand, UAE, Vietnam



**TR-7-09 Refinery Management**

Period: June 2 – June 16, 2009  
No. of participants: 12  
Country of participants: China, Indonesia, Iran, Kuwait, Libya, Oman, Pakistan, Saudi Arabia, UAE, Vietnam



**TR-8-09 DCS Fundamentals and Applications**

Period: June 2 – June 19, 2009  
No. of participants: 12  
Country of participants: China, Indonesia, Iran, Kuwait, Libya, Myanmar, Nigeria, Pakistan, Vietnam, Yemen



**TR-9-09 Safety Management for Refineries**

Period: June 23 – July 10, 2009  
No. of participants: 17  
Country of participants: China, Indonesia, Iran, Kuwait, Libya, Myanmar, Nigeria, Saudi Arabia, Thailand, UAE, Vietnam, Yemen



**TR-10-09 Material Problems and Their Countermeasures**

Period: June 23 – July 10, 2009  
No. of participants: 13  
Country of participants: China, Indonesia, Iran, Kuwait, Pakistan, Qatar, Saudi Arabia, UAE, Vietnam, Yemen





Total: 141 participants

# FY2010 JCCP Course Schedule


In FY2010, JCCP will offer 23 courses, including 21 regular courses (TR) and 2 intensive courses (IT), as shown below.

Course No.	Course title	Period
TR-1	Petroleum Marketing	Apr 6 – Apr 23, 2010
TR-2	Upgrading Processes of Heavy Oil	Apr 6 – Apr 23, 2010
TR-3	DCS Fundamentals and Applications	Apr 6 – Apr 23, 2010
TR-4	Human Resource Management (HRM)	May 11 – May 28, 2010
TR-5	Essential Petroleum Refining for Process Engineers	May 11 – May 28, 2010
TR-6	Diagnostic Techniques and Maintenance for Rotary Machinery	May 11 – May 28, 2010
TR-7	Refinery Management	Jun 1 – Jun 15, 2010
TR-8	Safety Management for Refineries	Jun 22 – Jul 9, 2010
TR-9	Maintenance Management	Jun 22 – Jul 9, 2010
TR-10	Environmental Management for Refineries	Sep 28 – Oct 15, 2010
TR-11	Material Problems and Their Countermeasures	Sep 28 – Oct 15, 2010
TR-12	Advanced Field Devices and Control	Sep 28 – Oct 15, 2010
TR-13	Petroleum Marketing and Product Delivery	Oct 19 – Nov 5, 2010
TR-14	Gas Processing for LNG	Oct 19 – Nov 5, 2010
TR-15	Project Management for Mechanical Engineers	Oct 19 – Nov 5, 2010
TR-16	Training Management	Nov 22 – Dec 9, 2010
TR-17	Information and Control Systems Utilized in Refineries	Nov 22 – Dec 9, 2010
IT-1	Turnaround and Inspection (T&I)	Nov 29 – Dec 9, 2010
TR-18	Energy Saving for Profitability Improvement	Jan 11 – Jan 28, 2011
IT-2	Petroleum Marketing and Physical Distribution	Jan 18 – Jan 28, 2011
TR-19	Quality Management of Refinery Products	Feb 8 – Feb 25, 2011
TR-20	Inspection and Reliability Evaluation	Feb 8 – Feb 25, 2011
TR-21	Advanced Process Control on DCS	Feb 8 – Feb 25, 2011

 Marketing and Physical Distribution of Petroleum Products, HRM

 Petroleum Refining Processes

 Facility Inspection

 Computer and Instrumentation Control Technologies



## 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)*

Tidings from the JCCP Middle East Office  
to the Japanese People

## “Life in the Middle East and the Local Oil Situation”

**Shoichiro Yagi**  
General Manager, JCCP Middle East Office



The Emirate of Abu Dhabi, where the JCCP Middle East Office is located, is extremely important to Japan as a supplier of one-fourth of the total amount of crude oil that Japan imports from abroad. I currently reside in Abu Dhabi City to support JCCP activities in the Middle East, and would like to introduce the oil situation here in relation to people's lifestyles (cars and gasoline).

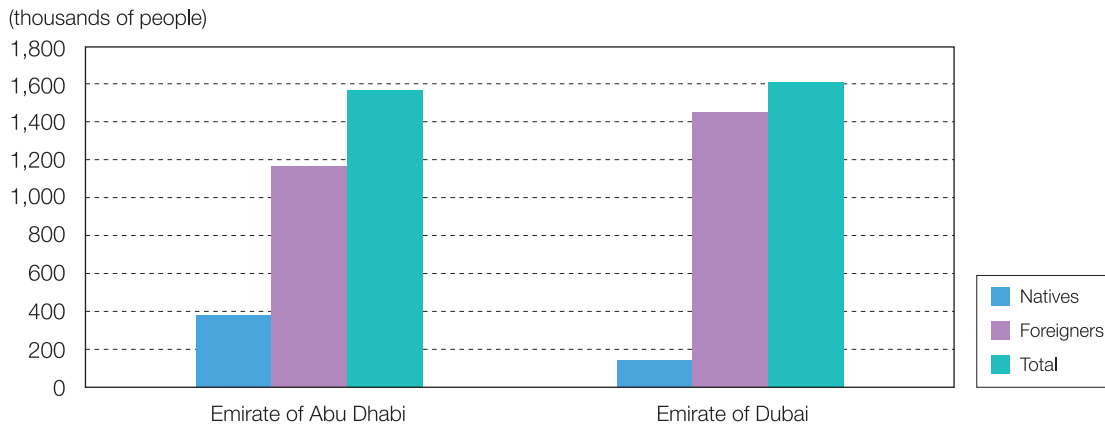
Like other countries in the Middle East, Abu Dhabi has long, hot summers, with high temperatures even during the other seasons. A car is therefore indispensable for commuting to work, going shopping, or for enjoying an outing during the holidays. However, driving a car here in Abu Dhabi differs from driving a car in Japan, and takes some getting used to. First of all, cars drive on the right-hand side of the road, although this is really not a problem as long as I pay careful attention at intersections. What surprised me most was the speed of traffic on general roads. For example, where the speed limit on a general road is 60 km/hr, most people drive at speeds that considerably exceed that limit. In fact, many drive at the kind of speed I would normally expect on a Japanese highway. Moreover, since there are no merge lanes connecting side roads to main roads, it takes skillful timing to directly merge into the speeding traffic.

As shown by the graph on the next page, 75% (1.17 million) of Abu Dhabi's total population of 1.56 million are foreigners, and only 25% (390,000) are Abu Dhabi citizens. Due to the diverse nationalities of people driving in Abu Dhabi, driving manners are certainly diverse as well, with each driver displaying the manners of his own country. I understand that

even greater diversity is seen in Dubai, which has an even larger population of foreigners. Given this situation, driving on Abu Dhabi's crowded roads could wear out one's nerves, unlike driving in Japan where traffic runs smoothly thanks to everyone displaying uniform manners.

Be that as it may, driving in Abu Dhabi can also be fascinating, despite the wear on one's nerves. This is because you always find yourself driving through beautiful landscapes. Abu Dhabi City is an island surrounded on all sides by the sea, so it has many coastal roads. Alongside a beautiful, emerald-green ocean, these roads offer an exhilarating driving experience. In other areas, the streets are impressively lined with date trees. The entire country was originally desert land and had few green trees, but Sheikh Zayed, the previous ruler of Abu Dhabi, had greenified roadside areas using the country's vast wealth earned from oil. Normally, trees cannot grow in arid deserts, but because Abu Dhabi is blessed with abundant sunshine and strong sunlight, trees are able to grow verdant leaves as long as they are amply watered every day. Therefore, vibrant green trees can be seen throughout the year even in Abu Dhabi, in places that receive ample supplies of water.

On the weekends, I often take a drive with my family to enjoy the beautiful scenery of Abu Dhabi. Buying a car also has its own appeal. Because Abu Dhabi is a tax-free economy, no consumption tax, vehicle acquisition tax, or other vehicle-related taxes are imposed on whoever wishes to buy a car, local or foreigner alike. Another convenience to driving a car in Abu Dhabi is the low price of gasoline. Cars here run on 98- and 95-octane gasoline. Since the price of



*Comparison of populations in Abu Dhabi and Dubai (2008)*

98-octane gasoline is as low as 40 yen/liter, we can casually afford to take even long-distance drives. By the way, 90-octane gasoline is also available for taxis. These gasoline types are ADNOC's key products, and are somewhat extravagant, as they are produced using high-quality condensate and Murban crude oil. Japanese refineries import various types of crude oil from oil-producing countries around the world and use them to produce same-quality gasoline, however the difference is that Abu Dhabi, as an oil-producing country, can produce gasoline from fewer varieties of feedstock that are available in the country.

ADNOC Distribution, a petroleum product-marketing company under ADNOC, exclusively operates all service stations in Abu Dhabi and sells gasoline and diesel fuel. Note that in Dubai and the other emirates of UAE, petroleum-marketing companies such as EPPCO, EMARAT, and ENOC also provide their services in addition to ADNOC Distribution.

Incidentally, ADNOC Distribution operates more than 150 modern service stations throughout UAE, which is roughly the same size as Hokkaido, with the Emirate of Abu Dhabi claiming 87% of its total land area (although Abu Dhabi City occupies only around 0.15% of the entire emirate and the rest is mostly desert). Yet, this is not to say that you can find a service station most anywhere, as in the urban regions of Japan. When taking a long drive, you need to fill your tank at any service station you happen to pass by well before you run low on gas, or else you may run out of gas in the middle of the desert and run the risk of dehydration. ADNOC Distribution has

plans, however, to construct more service stations in response to the growing demand for gasoline and diesel fuel accompanying an influx of people attracted to Abu Dhabi's robust economy, which is strongly supported by its earnings from crude oil sales even in the wake of the global financial crisis.

Although oil consumption may be increasing in Abu Dhabi, the emirate has abundant reserves of crude oil feedstock such as Murban, Upper Zakum, and Umm Shaif, which are predicted to last about another 100 years at today's production rate. Given its current standing, Abu Dhabi will undoubtedly continue to be one of Japan's most important trading partners. At the same time, I am certain that JCCP's technical cooperation in such areas as the upgrading of refining technology and environmental measures will also continue to benefit Abu Dhabi into the future.



*Mr. Shoichiro Yagi, General Manager of the JCCP Middle East Office (in front of a modern service station on the outskirts of Abu Dhabi City)*

## The 27th JCCP International Symposium Keynote and Special Speech Summaries

“The 27th JCCP International Symposium” was held on January 28 and 29, 2009 under the theme, “Future Vision of the Oil Industry.” For your reference, we have provided below the summaries of the keynote speech and three special speeches that were delivered at the symposium.

Mr. Nasser D. Al Mahasher from Saudi Arabia described Saudi Arabia’s three major areas of responsibilities as the following: (1) the provision of a reliable and stable supply of petroleum to global markets; (2) contribution to the economic development and diversification of the Saudi economy; and (3) operation based on commercial considerations and profitability. Mr. Vikram M. Sampat from India stated that we need the following four factors in order to increase competitiveness: (1) business excellence regarding feedstock and products; (2) supply chain flexibility; (3) technology innovation; and (4) environmental preservation. Dr. Fereidun Fesharaki from the United States cautioned that the refining industry needs to be very careful in making future decisions, because the upswing on the refining side may be “slow in coming.” Mr. Abubakr Amer Al-Saiari from Qatar explained that Qatar will continue to work with its partners in the educational field and other fields to further promote Qatarization and develop human resources in the energy sector.

### Keynote Speech

## “Hydrocarbon Development in Saudi Arabia: Maximizing Value, Maximizing Benefits”

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

At Saudi Aramco, the notion of a “tripod” encapsulates the company’s three major areas of responsibilities. These are: first, the provision of a reliable and stable supply of petroleum to global markets; second, contributions to the economic development and diversification of the Saudi economy; and third, operation based on commercial considerations and profitability.

The understanding that we must strive to simultaneously fulfill each of these objectives means not only striking a balance between meeting domestic energy needs and supplying

global markets, for example, but also seeking out opportunities which contribute to all three goals.

In the upstream sector, we will achieve a massive 1.2 million barrel per day production capacity addition later this year. This includes some 1.5 million barrels a day of spare capacity.

Further downstream, the company is engaged in a series of refinery expansions and the development of grassroots refining facilities, in conjunction with partners both at home in the Kingdom and abroad. In addition to the PetroRabigh joint venture with Sumitomo Chemical, we are also

applying the integrated refining-petrochemical model in China's Fujian Province, in conjunction with SINOPEC and ExxonMobil. At Ras Tanura Refinery, we are working with Dow Chemical on the Ras Tanura Integrated Project for construction of a large petrochemical complex. While these integrated facilities help us increase profitability and diversify the product portfolio in the Kingdom, the projects also provide additional benefits to the local economy. These include new job opportunities for local investors and a hub for the growth of domestic industrial clusters.

While the current global economic downturn has impacted the short-term commercial outlook for some of these projects, these initiatives were designed with a long-term vision. We are well aware that these facilities will have to be profitable over the next several decades, not just over the next year or two, and we believe the fundamentals of these various downstream projects remain strong.

Of course, the ability to see these projects through hinges upon the abilities, skills and dedication of individuals and teams hard at work in all parts of the business. That in turn requires proactive human resources development efforts and a slate of educational programs. Our human resource efforts also include developing a corporate culture that encourages self-development by employees, a commitment to lifelong learning, and an innovative approach to business and operational challenges. The emphasis on people and their development will continue, and the company will continue to invest significantly in the men and women who call themselves "Aramcons."

To tackle all of the challenges and opportunities we face, we are working with a wide range of businesses and institutions related to energy, such as other oil companies; specialized oilfield service firms; leading petrochemical corporations; engineering, procurement and construction contractors; advanced research laboratories; and universities and educational institutions. I take an enormous degree of satisfaction from the fact that so many of those business partners and related institutions are based here in Japan.

Petroleum is a plentiful but an ultimately depleting



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

resource, and at Saudi Aramco we are working hard to maximize the value of the Kingdom's precious hydrocarbons to fulfill our obligations in each area of our strategic tripod.

Today, we are witnessing what many analysts are terming the most serious worldwide economic downturn in generations. Major developed economies are in the midst of a recession, growth has flagged in the developing nations, and some of the world's best-known financial, industrial and commercial enterprises have been laid low. The current crisis is certainly remarkable not only for its severity but also for its widespread scope. Those of us working in the petroleum industry have seen the effects of the slowdown firsthand, with sagging demand and crude oil prices which are roughly a third of the levels we saw last summer. Moreover, funding for major projects has become scarcer due to lower revenues and tighter credit markets.

However, at Saudi Aramco we believe it is imperative to look beyond the short-term volatility in both the global economy and the oil markets, and we understand that the long range prospects for energy in general remain robust. The world's population will continue to grow, and as standards of living in the developing world continue to rise, so will demand for energy in general, and in particular for petroleum.

While short-term cost containment and reexamination of activities and projects is certainly

in order given the current economic crisis, we must not lose sight of the long-term needs and opportunities for petroleum. That is why intelligent, targeted, and selective investments all along the petroleum value chain are so essential, and why the decisions that will be made across our industry in the next year or two will be so critical.

On the upside, crises always bring opportunities. Forward looking companies will be able to position themselves for even greater success once the global economy recovers, if they continue to look at the big picture and the next decade or two, rather than focusing on just the next quarter or two. On the downside, there is a risk that underinvestment in vital infrastructure today will result in supply shortfalls and tight petroleum and refining markets

tomorrow, once demand recovers, as it inevitably will.

When I look to the long-term trends for energy and petroleum, I remain bullish on the prospects for the global oil industry, and feel privileged to continue playing the liaison role between Saudi Aramco and the hydrocarbon industries in Japan as well as in this part of the world.

My message to you this year is *A-un no Kokyu*. *A-un no Kokyu* means that people are on the same wavelength when they are doing something together, a relationship people can communicate without gestures or words, anticipating each other's movement. Ladies and gentlemen, let us endure together and overcome the current difficulties for our bright future through the spirit of *A-un no Kokyu*!

## Special Lecture 1 (India) "Challenges in Oil Refining"

**Mr. Vikram M. Sampat**  
Vice President, Reliance Industries Limited

The global market is experiencing tough times. Because of the recession, demand is decreasing, crude prices are falling, and operating rates are going down. However, this is, in our view, a short-term trend. When the tide turns again, crude prices will rise. Today, our challenge lies in making our refineries sustainable and more competitive during the next three or four years.

An issue in the refining industry is that while crude oil is becoming heavier and more difficult to process, the market demands good-quality fuel, such as ultra-low-sulfur diesel and ultra-low-sulfur gasoline. On one hand, we have tougher crude, and on the other hand, we desire better products and want to reduce greenhouse gas emissions. In Europe, diesel has become a more preferred fuel to gasoline. In the Middle East and India, there are trends to produce more petrochemicals from refining products. These trends show that we must refine our oil more competitively if we are to survive in this system.

There are a number of challenges regarding competitiveness. The first challenge is in addressing fuel oil and naphtha. Both have low margins, so anybody making fuel oil and naphtha is in fact destroying value in the refinery.

The second challenge lies in the fact that the market has become extremely volatile. Previously, we



*Mr. Vikram M. Sampat*  
Vice President, Reliance Industries Limited

hardly used to see any changes in oil prices, but today, prices are changing 3 to 4 dollars in one day. Prices have become extremely volatile and, in turn, are also making demand volatile. Therefore, our challenge is in whether we can work together to increase our competitiveness in this volatile scenario.

The last challenge is the environment, and whether we can conserve our environment. This is not about future generations. I am talking about our own generation. If we do not protect the environment today, we will not be able to lead a good life in five or seven years' time.

These are the major challenges facing the refining industry. What we need to do in response to these challenges is to firstly make a shift from the production of gasoline to diesel fuel. Then, we must increase heavy crude processing capacity. If fuel oil and naphtha margins are low, we should eliminate fuel oil and naphtha from our products slate. If the market is becoming increasingly volatile, we need to make our supply chain more robust so that we can manage this increased volatility. In regard to environmental concerns, we need to produce clean fuels, or use less fuel to produce clean fuels.

To increase competitiveness, we must consider four factors. First of all, we need business excellence regarding feedstock and products. Secondly, we need supply chain flexibility; thirdly, technology innovation; and lastly, environmental preservation.

Heavy crudes are in abundance, and light crudes are declining. Therefore, we must consider whether our refineries can process heavier crudes, and whether our refineries have the flexibility to process difficult crudes to make good products. The answer lies in improving bottom processing technology, so that our refineries can process all grades of crude and minimize bottom oil. Fuel oil and naphtha are priced lower than crude oil, but we must do something about this. We must use crude oil more efficiently, or in other words, increase the number of good-quality products that are produced from crude oil.

Similarly, we need to maximize the high-value products of the refinery. The world will not accept poor-quality products. We must consider what we need to do to respond to demands for good-quality

products. We could increase middle distillates and petrochemical products. We could produce more diesel fuel in place of gasoline. We could minimize the production of fuel oil and naphtha. Lastly, we could consider using bottom oil by introducing gasification or cryogenic recovery.

The same applies to fuel gas. If fuel gas is being burned without recovering the good products it contains, we should think about recovering those products by cryogenic recovery. Now is the time to make this investment. We cannot shut down facilities for renovation when plants are running at full capacity. Therefore, I strongly believe now is the right time. We need to extract maximum value from the crude barrel.

Let us now look into the supply chain. On the supply chain side, we are facing extreme volatility. The first thing we need to do is decrease inventories to the minimum to reduce our exposure to volatility. The second is to properly manage whatever inventory cannot be reduced and lower our risk as much as possible. The third is to be flexible. By lending flexibility to the supply chain, we can adapt and survive any environment. If we can do that, I believe we could increase our competitiveness.

We are at a time where we need technology leaders to take up new challenges. In particular, as an industry we need to develop technologies relating to catalysts, equipment materials, and refining processes. Even when we seek the same results, we should try to achieve them with less energy. Moreover, if we improve equipment materials, we should be able to produce lighter vessels that take up less space. We face many challenges in technology, but the bottom line is that technology innovation is crucial to maintaining the competitiveness of the refining business.

Environmental preservation is also very important to us. Global warming is occurring throughout the world, and environmental preservation is no longer an issue for the next generation. As a large emitter of carbon dioxide and as an industry with a large carbon footprint, I think the refining industry has a responsibility to develop technologies for reducing carbon emissions. We need to fully utilize energy-saving technologies and carbon capture and



sequestration technologies. These efforts are called green refining. I think all of us here have an onus to not only go competitive but also to go green in our refining initiatives.

In conclusion, I want to say that we must utilize the recessionary pause to strike a correct balance between energy and ecology in refining. We must upgrade our refining assets at this time to maximize production. Furthermore, we must shut down

refineries which are not meeting the minimum efficiency and ecology standards of the industry, because they cannot survive if they do not meet these standards.

Refineries are coming to play an increasingly important role. Various alternatives will emerge, but the role of refineries will not disappear. In fact, I think this conference has provided an ideal starting point for the transformation of the refining business.

## Special Lecture 2 (USA)

# “Refining in the East of Suez Market: Impact on Product Flows”

**Dr. Fereidun Fesharaki**  
Chairman, FACTS Global Energy

I have had the chance to come to Japan often since 1985 when the Japanese oil industry looked very different. Based on this experience, I will try to offer you a helicopter view from 10,000 meters upwards to give you a view of how I think the refining industry in this part of the world is changing. I will also share with you my view of the developments in Asia Pacific and in the Middle East.

Firstly, we need to understand the interrelationship between global GDP and oil demand. In 2007, oil demand grew, albeit not by much. In 2008, oil

demand was still positive. In 2009, it was slightly negative, but altogether, from 2007 through to 2009, demand was about the same, and it is not as though we have had a crash in demand by any means. What we have had is an input of supplies from OPEC and non-OPEC countries assuming that there is growth where there was none. In other words, the dropping of oil prices so hard and so fast was not the result of a demand crash. Demand has been the same, though of course, it had fallen in some places and had been compensated for in other places.

Next, I wish to talk about the likely demand pattern between 2007 and 2015. The world has become three major poles: China and the countries of the Middle East are displaying growing demand as new consumption countries; India is following behind, though at a distant third. Fundamentally, these three poles will account for an extremely large growth in demand for oil in the future.

East of Suez, China and India are increasing their refining capacity. Large capacity additions have also been seen in Iran, and smaller additions in Iraq and Kuwait. Oman, Qatar, and UAE are planning to make capacity additions. Saudi Arabia has four projects on board. Not all of the projects will go through, however, because some of these export



*Dr. Fereidun Fesharaki*  
Chairman, FACTS Global Energy

refineries may not be essential to the country. They are intended for the United States and European markets, and designed to produce extremely high-quality material using full conversion facilities. Some of the projects may go through, but others may be delayed. I am convinced that the United States and the European markets will soon be saturated to the point where they would lose money and would need to shut down large numbers of refineries, and there would be no point in sending something new to them.

If everybody makes an investment in the scope of current wisdom, something will go wrong. Everybody will follow one line and create too much, or acquire too much conversion capacity. The market will achieve a certain balance after a while, but in the short term, there would be a situation where everybody rushes to produce one thing because they think that is where the profits are, only to find those profits disappear when they get there, because too many people have gone the same way.

In 1998, there was a good balance between Asia-Pacific net imports and Middle East net exports.

What Asia needed, the Middle East supplied. Thus, it was a reasonably good balance. However, in 2010, the balance will become difficult, with everyone becoming an exporter. Asia is an exporter. The Middle East is trying to expand exports. To survive, Asia, including India, has to export to the United States and Europe, and the Middle East has to expand exports or stop building more refineries. Not building more refineries is certainly a scenario worth considering. We need to take the time to think what it is that we really need to do. Things may be better at a later time, but the timing issues are very important.

I have observed the Middle Eastern and Asian markets for 30 years, and have seen various cycles. It has been a repeat of a good five, six years followed by a bad five, six years, but is this pattern going to continue repeating itself? It might not, in the future. Gasoline demand may change, because whether in the United States, Europe, or Japan, hybrids and electric cars are rapidly emerging. Altogether, we need to be very careful, because the upswing on the refining side may be slow, or may not come at all.

## Special Lecture 3 (Qatar)

# "Reengineering of Human Resource Development"

**Mr. Abubakr Amer Al-Saiari**  
**Liaison Coordinator, Human Resources, Qatar Petroleum**

In Qatar today, we are seeing a lot of development in various industrial sectors including oil and natural gas. One of the most difficult things to develop, however, is human resources, which we have found is our responsibility, along with our partners in the energy industry. Therefore, I am going to share with you today the steps and the mechanisms we have applied since launching a nationalization plan in Qatar, or Qatarization plan, in May 2000.

Qatarization is the identification of development of competent Qataris in universities and secondary schools and placing them in permanent posts, so

that eventually 50% of the workforce in Qatar's core energy industry will be Qatari men and women.

In order to achieve this goal, it is not sufficient to simply hire people fresh out of secondary schools or universities and provide them vocational training. Quality improvement is more important. Quality is a must, because our international partners focus on investment performance.

Each company must align its business plan with the Qatarization plan. This is because the energy industry is expanding, and the industry is becoming ever more multi-national. We feel it is important to

share knowledge and technology among the diverse nationalities and our people, and to prepare Qataris to manage business through training and knowledge transfer.

Developing the Qatari workforce is an investment for the future. We have formed competency Qatarization committees and support educational institutions. However, it is not just for the sake of promoting the recruitment of Qataris. We are planning the best recruitment, the best training and the best development mechanism to develop our country, and all Qataris are asked to cooperate and to share in that responsibility.

The Qatarization plan began with the participation of 18 domestic energy companies in 2002. There are now 38 companies. These companies not only do business in Qatar, but they believe in making a contribution to society. That is, they invest in developing the Qatari workforce.

For example, building a refinery could take maybe three years from conducting a feasibility study to commissioning the refinery, but it would take three times that same amount of time to develop the necessary manpower. Though it may take time, each company understands the significance of developing outstanding Qataris, and cooperates in providing Qataris opportunities to participate in projects and accumulate practical experience.

The objective of the Qatarization plan is to develop outstanding Qataris and to retain them in key positions in the energy industry, not training posts. We are working on three levels to achieve this objective. At the corporate level, each company has its own strategy of recruiting Qataris. At the department level, each department has its own strategy of training Qataris. Then at the individual level, we have various individual programs and OJT programs for career enhancement. In other words, we have a mechanism for providing the best recruitment, the best training, and the best career progression to retain stable manpower.

Each company is required to report their achievement of the Qatarization plan twice a year to the Minister of Energy and Industry. We use an advanced information system called QIS (Qatar Information System) to manage the reporting



*Mr. Abubakr Amer Al-Saiari  
Liaison Coordinator, Human Resources, Qatar Petroleum*

procedure and all the information obtained from the 38 participating companies via IT. The companies also present an annual review of their Qatarization plan to the minister. Through this review session headed by the minister, the companies assess potential obstacles to management and discuss how to overcome those issues.

Under the Qatarization plan, we have 850 students studying at overseas and local universities at present. Last year, 700 students participated in a summer internship in the energy industry in response to a massive recruitment campaign. To accommodate the increasing number of Qataris in the industry, we have reinforced our training facilities in Ras Laffan, among other locations. Since launching the Qatarization plan, we have recruited more than 8,000 Qataris, and have also increased the number of women in the workforce. More than 800 women are now working in various fields in the energy sector.

As a result of launching the Qatarization plan, we have increased awareness of Qatarization, made a transition in the training and development of Qataris, have begun to retain Qataris in the workforce in the energy sector, and have enhanced education programs. We will continue to work with our partners in the educational field and other fields, and to align various programs with our needs, to further promote Qatarization and develop human resources in the energy sector.

## Personnel Changes

### Managing Director

#### Outgoing Personnel



Katsuo YOKOYAMA

#### Incoming Personnel



Morihiro YOSHIDA

### Training Department



Katsuo KIRITA

### Riyadh Office



Toshimi KINOSHITA



Kenji NITA



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