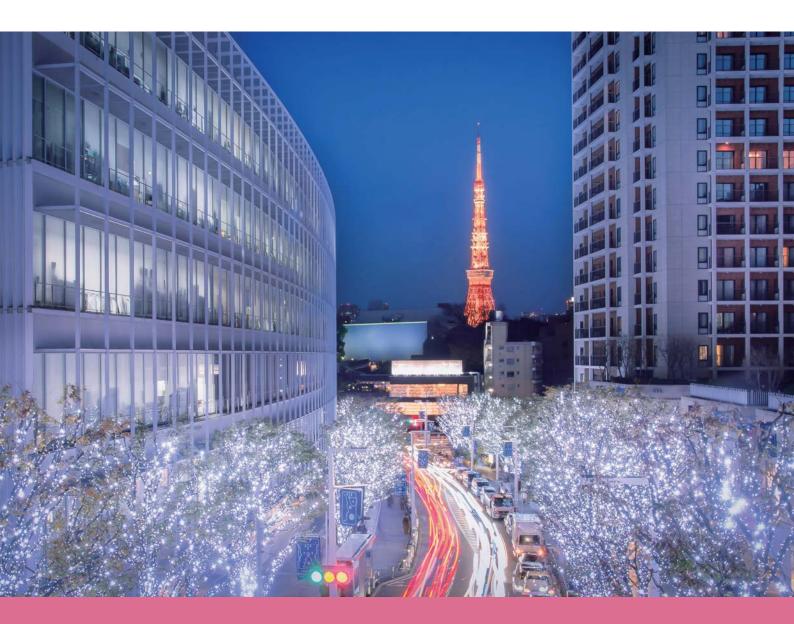
TO DIEWS No. 122 2016 March

Connected by technology, person-to-person

- The 34th JCCP International Symposium
- Friendship Committee for Women Career Development
- **■** JCCP Alumni Meeting in Kuwait
- Executive Visits to National Oil Companies in Asia, Middle East and Central/South America
- The 25th Saudi Arabia-Japan Joint Symposium and Reception



JCCP NEWS No. 122 March 2016

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This fiscal year, JCCP has newly set forth the following statement on the "Foundation of JCCP" as a guiding principle for further enhancing our operations and activities.



The Foundation of JCCP

We aim to be the World's foremost NPO
in the downstream oil sector by offering exceptional and
attractive knowledge based on Japanese experiences together with total hospitality.
Through this we strive to strengthen the ties of mutual trust
between Petroleum & Gas producing countries and Japan, to create new value,
and for us to become the bridge
between parties in the name of mutual prosperity.

To realize this we will:

- 1. Share learned exceptional human resources development & technology of Japan to meet the desires of petroleum & gas producing countries.
- 2. Deliver outcomes that satisfy our member companies as well as the Government which support us.
- 3. Respect the sound relationship with each society's stakeholders.
- 4. Endeavor to be the trustworthy organization & individual with high ethics by achieving the individual self-realization, utilizing the advantage of our diversity and placing emphasis on our teamwork.
- 5. Continue to improve and innovate our performance, and always try to renew our information.

Special Message



Mr. Yusa Hassan
CEO, Petronas Gas
Participant of a regular course on Corrosion and Inspection offered in April 1987

I would like to first express my deepest gratitude and appreciation to JCCP for this honor of delivering a special message on the occasion of JCCP's 35th anniversary. Time flies. It is quite difficult to believe that 28 years have passed since the first time I attended the program.

When I was selected to attend the Corrosion and Inspection Program way back from 8th – 23rd April 1987, I was in my second year of employment at PETRONAS. I was a young engineer in the Technical Department taking part in a pioneering team at ASEAN Bintulu Fertilizer. As a graduate from the United States, being sent to Japan was a breath of fresh air. Together with me was Mr. Ahmad Kamal B. Hj. Mohd. Salleh, and besides us there were six more participants from other oil producing countries, namely Indonesia, Peru, Algeria and Saudi Arabia.

I can still picture in my mind the excitement I felt as I looked forward to attending classes every day to learn new things. The program was very interactive and informative, and included classroom training, a group discussion and plant visits. The lecturers and trainers were extremely professional and dedicated in delivering the program to ensure we fully understood the subject.

The entire program was conducted in an orderly manner in a conducive learning environment, and the content was structured to ensure we gain as much technical knowledge and know-how as possible. However, our interest also went beyond attending classes. We were fortunate to be able to visit many iconic places inside and outside of Tokyo, and delighted in seeing Japanese culture in daily life. Despite their sophisticated and high technologies, the Japanese have

never forgotten to preserve their traditional culture and values.

Indeed, the program has made me richer in terms of knowledge and technical skills. In addition, information exchange among my fellow peers has benefited me, and I learned many best practices from my classmates. The program met my expectations, and has added much value throughout my career development at PETRONAS.

Finally, I would like to congratulate JCCP on its 35th anniversary. It is a truly remarkable milestone worth celebrating. Although I am far away from the JCCP office in Sunshine 60 Building, the sweet memories remain close to my heart. JCCP has broadened our horizons and impacted our careers, and I believe will continue to unleash our potentials.

Arigato Gozaimasu, and happy 35th anniversary! Sayonara till we meet again, friends!



Group photo of the regular course on Corrosion and Inspection held in April 1987 (Mr. Hassan, third from left in back row)

Announcement

Digitization of JCCP NEWS

Thank you for your continued patronage of JCCP NEWS.

Please be informed that this issue of *JCCP NEWS* will be the last to be published as a printed booklet. We are presently considering making the newsletter available online, beginning from next fiscal year. Details on how to access the new newsletter will be posted on our website (http://www.jccp.or.jp) as they become available.

Planning & Public Relations Group, JCCP Administration Dept.



The 34th JCCP International Symposium

"Structural Changes in Petroleum Industries in a Volatile Global Market"

The 34th JCCP International Symposium was held on January 28, 2015 at The Prince Park Tower Tokyo, under the auspices of the Ministry of Economy, Trade and Industry (METI). More than 400 people from METI, oil-producing countries, foreign embassies in Japan, governmental agencies, domestic companies, and organizations attended the event.

1. Theme and Structure

The theme of this year's symposium was "Structural Changes in Petroleum Industries in a Volatile Global Market." Today's drastic movement in crude oil prices is imposing a serious impact on oil-producing and consuming countries alike. Within this trend, oil companies throughout the world are being pressed to take action to resolve the many issues they face, and thus the development of capable management and technical strategies is increasing in importance. From this perspective, the symposium was held as a forum for exchanging information and views and discussing the possibilities of cooperation and partnerships with leading authorities from oil-producing and consuming

countries, which continue to address the challenges of the oil industry in their respective capacities.

Last year's symposium consisted of an opening ceremony and leaders' panel in the afternoon of the first day and two discussion sessions divided between the morning and afternoon of the second day. This year's program, however, was completed within a single day, with the opening ceremony, keynote speech, and leaders' panel held in the morning and two executive sessions in the afternoon, in an effort to maintain the continuity of discussions, and to make the event more convenient for busy guests to attend. The executive sessions were held under the themes "Developing Next-Generation Management" and "Technological Strategy and Deployment."

2. Overview

(1) Opening Ceremony

The opening ceremony began at 9:00 a.m. on January 28, featuring a welecome address by Mr. Keizo Morikawa, Chairman of the Board of JCCP, followed by greetings from the guest of honor, Mr. Toshihiko



Participants of the symposium



Mr. Keizo Morikawa Representative Director, Chief Executive Officer, Cosmo Energy Holdings Co., Ltd. / Chairman of the Board, JCCP

Fujii, Director-General, Natural Resources and Fuel Department, Agency for Natural Resources and Energy, METI.

By way of discussing the objectives of the symposium, Mr. Morikawa pointed out that today's volatile crude oil prices are imposing various issues on international oil companies in each country. They are being pressured to take action to maintain their corporate strength, such as by reviewing their projects, restructuring their organization, increasing efficiency and improving their management environment, promoting the nationalization of workers, employing female labor, or expanding overseas, including collaborating with foreign oil companies in a third country. Particularly vital in realizing these initiatives are the development of leaders from a long-term perspective, and the formulation and execution of technical strategies in each sector. In this respect, dialog and information-sharing between oil-producing and consuming countries will hereafter become ever more important.

Next, Mr. Fujii briefly described today's energy situation in Japan, and emphasized that it is important for Japan to further strengthen its relationship with major oil-producing countries. As relationships of trust and friendship cannot be established overnight, Japan must make ongoing efforts by creating opportunities for regular meetings, appreciating its ties of friendship, and welcoming partners to Japan as in this symposium. Mr. Fujii also expressed his expectations of the symposium, saying that active discussions in the symposium will undoubtedly deepen and renew mutual understanding among all participating countries.

(2) Keynote Speech

Following the opening ceremony, H.E. Dr. Aabed A. Al-Saadoun, Deputy Minister for Companies Affairs,



Mr. Toshihiko Fujii Director-General, Natural Resources and Fuel Department, Agency for Natural Resources and Energy, Ministry of Economy, Trade and Industry

Ministry of Petroleum and Mineral Resources, Saudi Arabia, gave a keynote speech titled "Structural Changes in Petroleum Industries in a Volatile Global Market."

As a JCCP alumni himself, Dr. Al-Saadoun first spoke about his participation in a regular course on HRD in 2000, and about the friendly relationship between Saudi Arabia and Japan. He then discussed changes that have taken place in the oil market over the past 18 months, while pointing out that it is not high or low prices that Saudi Arabia seeks, but price stability, and that transparency of information is vital.

The minister then discussed the impact the changes in the oil market have had on global petroleum industries. While many projects are being cancelled or mothballed, he said Saudi Arabia will continue its investments, and expressed his hope that Saudi Arabia and Japan will continue to work together in terms of petrochemicals, greater energy efficiency, and new technologies.

Dr. Al-Saadoun also stated that Saudi Arabia will continue to be a reliable and sustainable supplier of oil to its customers, including Japan, and expressed his hope that greater demand will lead to fairer and more stable prices for consumers and producers alike.



H.E. Dr. Aabed A. Al-Saadoun Deputy Minister for Companies Affairs, Ministry of Petroleum and Mineral Resources / Saudi Arabia

(3) Leaders' Panel

Following the keynote speech, five speakers took the stage for a leaders' panel moderated by Mr. Tsuyoshi Nakai, CEO of JCCP. They each gave a presentation, and engaged in an active Q&A session.



Leaders' Panel

The first speaker was Mr. Ali Khalifa Al Shamsi, Director Strategy & Coordination, Abu Dhabi National Oil Company (ADNOC). In his presentation titled "Industry Challenges and ADNOC's Priorities," Mr. Al Shamsi discussed global and local-level issues facing ADNOC and its response to those issues. He stated that ADNOC wishes to play a role as a major global energy provider that can be continuously relied upon. Toward this end, the company is considering making long-term investments, and is taking measures to remain unaffected by short-term market conditions. It is implementing various ongoing initiatives for efficiency and effectiveness without compromising HSE or its integrity. Characterized by resilience, flexibility, and innovation, ADNOC will continue to make investments and produce results. Dr. Al Shamsi concluded by pledging that through these policies, the company will

sustain its efforts to fulfill corporate social responsibility by satisfying demand within and outside the country, based on its proven reliability and safety in the domestic, regional, and global markets.

Next, Mr. Takashi Matsushita, Managing Director, Idemitsu Kosan Co., Ltd., spoke about the environment surrounding the Japanese oil industry, the actions of the Japanese oil industry, and Idemitsu's activities, in a presentation titled "Idemitsu's Challenge in Global Energy Market." He explained that in Japan, where demand is constantly decreasing, Idemitsu intends to downsize its operations in anticipation of further decreases in demand in order to gain competitiveness, and to ensure stable supplies of petroleum across the country as a social infrastructure. At the same time, the company intends to strengthen its engagement in regions and countries where the oil business is embraced as a growth industry, and to establish ties between those regions and countries and Japan to contribute to Japan's energy security. On a final note, Mr. Matsushita mentioned the company's plans to promote the development and commercialization of high-function materials with an eye toward greater growth in the future.



Mr. Takashi Matsushita Managing Director, Idemitsu Kosan Co., Ltd.



Mr. Ali Khalifa Al Shamsi Director Strategy & Coordination, Abu Dhabi National Oil Company (ADNOC)

Mr. Ahmed Omar Abdulla, Chief Operating Officer, Abu Dhabi Oil Refining Company (TAKREER), gave a presentation titled "Surfing the Tides of Refining Industry in Today Markets." He spoke about the operational status of TAKREER's three refineries, its efforts to increase efficiency and reliability through safety operations, and its initiatives for integration of its refineries as well as with external petrochemical companies. He also emphasized that the petrochemical industry will continue to depend upon refineries as the main source of propylene and aromatics as well as

feedstock for its operation. TAKREER's integration with the petrochemical industry will allow the company to increase efficiency and enhance its performance, and thereby boost its position in the global market. Amid today's price fluctuations, it will aim to provide high-quality products based on the integration. While making various efforts to promote integration, TAKREER will also be utilizing the environmental conservation technologies of Japanese companies. For example, with regard to waste treatment, operational excellence, reliability, maintenance, and plant operations, the company wishes to continue its cooperation and further solidify its relationship with Japan.



Mr. Ahmed Omar Abdulla Chief Operating Officer, Abu Dhabi Oil Refining Company (TAKREER)

Dr. Le Manh Hung, Vice President, Vietnam Oil and Gas Group (Petrovietnam), gave a presentation titled "Integration Strategy in Refining and Petrochemical Complex," in which he spoke about Petrovietnam's two refineries, demand-supply issues in Vietnam and their countermeasures, the integration of refining and petrochemical processes, and the Blue Whale Project.



Dr. Le Manh Hung Vice President, Vietnam Oil and Gas Group (PETROVIETNAM)

In sum, he pointed out that the demand-supply gap in Vietnam's refining and petrochemical markets is extremely large, and that it is expected to widen even more in the future. The situation thus poses an extremely good opportunity for Vietnam to develop new petroleum projects. Feedstock for petrochemicals almost completely comes from crude oil, so products are simple and limited. It is therefore necessary to diversify both feedstock options and products. The integration of Dung Quat Refinery and petrochemical plants is expected to increase economic efficiency and enhance existing infrastructure. This will allow even deeper-level processes and ultimately strengthen Petrovietnam's global competitiveness.

The final speaker of the leaders' panel was Dr. Fereidun Fesharaki, Chairman, Facts Global Energy (FGE). In a highly intriguing and thought-provoking presentation titled "Oil Market Turmoil: Implications for the Refining Industry," Dr. Fesharaki first analyzed the energy situation revolving around the United States as an energy superpower (not only in reference to the shale gas revolution, but also the multifarious expansion of U.S. influence). He then discussed the global oil market and crude oil price outlook (the importance of 'policemen' to direct traffic; the expectations of the oil price reaching US\$40/barrel in the third quarter of this year, US\$50 in the fourth quarter, and US\$60 to \$80 in early 2018), and the good/bad impacts on the refining industry (surplus of diesel fuel, tight gasoline demand-supply balance).



Dr. Fereidun Fesharaki Chairman, FGE

(4) Executive Sessions

Executive Sessions 1 and 2 were held in the afternoon. Executive Session 1 was chaired by Mr. Takashi Noro, Director, Senior Vice President (Refining Department, Technical & Engineering Service Department), JX Nippon Oil & Energy Corporation. Executive Session 2 was chaired by Mr. Masayuki Uchida, Director & Senior Executive Officer, CTO, Chief Compliance Officer (CCO), General Manager of SQE Management Unit, Manager of Quality Management Div. & Auditing Div., Toyo Engineering Corporation.

In Executive Session 1, four panelists gave presentations on initiatives for developing leaders capable of resolving various issues in line with the theme of the session, "Developing Next-Generation Management." Mr. Saeid Mahjoubi, Director, Product Coordination & Supervision, National Iranian Oil Refining and Distribution Company (NIORDC), gave a presentation titled "Post Sanction Situation and HRD of Oil & Gas Industry in Iran"; Mr. Darmen Sadvakassov, Director of Department of Strategy and Coordination, JSC NC KazMunayGas, gave a presentation titled "Strategic Development of KazMunayGas and HR Transformation"; Mr. Ihsanuddin Usman, Vice President, Pertamina Corporate University, PT Pertamina (Persero), gave a presentation titled "The Path to Excellence: Talent Development Acceleration Program for Early Professionals"; and from Japan, Mr. Junichi Iwase, Executive Officer, General Manager of Refining Department, JX Nippon Oil & Energy Corporation, gave a presentation titled "JX Approaches to Develop Leaders and Management in International Competition."

As chairperson of the session, Mr. Noro summarized the presentations as follows. He said that in each country, serious efforts are being made to introduce new technologies and develop human resources in response to recent changes in the business climate of the oil refining and petrochemical industries, in view of the social situation in each country. A major force behind this trend is the awareness that it is becoming ever more difficult to survive within a globally competitive society

that is subject to drastic environmental changes.

Mr. Noro also suggested that an underlying sense of responsibility is placing implicit pressure on state-run companies to provide world-class education and training and to employ and utilize national workers in major industries. He said this was also evident in the presentations, which introduced the ongoing efforts of oil and gas-producing countries to implement human resource development strategies in accordance with current conditions, despite the differences in the history and issues of the oil refining and petrochemical industries in each country.

In conclusion, Mr. Noro said that the presentations by the panelists of Executive Session 1 provided deep understanding of the management and human resource development strategies in their organizations. On behalf of JX Nippon Oil & Energy Corporation, he expressed his wish to deepen mutual exchanges and contribute to human resource development in each country at the initiative of Japanese companies and the Japanese government.

Executive Session 2 was held under the theme of "Technological Strategy and Deployment," and featured four presentations on technical strategies and new movements and initiatives related to technology. Dr. Ammar A. Al Nahwi, Head of Downstream Research & Development, Saudi Aramco, gave a presentation on "Transforming Saudi Aramco Technology"; Mr. Chalermchai Udomranu, Executive Vice President, Refinery Business, The Bangchak Petroleum Public Company Limited, gave a presentation title "Bangchak for Technological Strategy and Deployment"; Mr. Phan Thanh Tung, President and Chief Executive Officer, PetroVietnam Technical Services Corporation (PTSC), gave a presentation titled "PTSC Technological Strategy and Deployment"; and Mr. Hiroshi Sato, Senior



Executive Session 1



Executive Session 2

Executive Officer, Unit Director/Senior Petroleum Engineer, Energy Business Unit, Toyo Engineering Corporation, gave a presentation titled "Gas Master Plan: GMP – Planning for Gas Utilization in Oil/Gas Producing Countries."

Mr. Uchida summarized the presentations of Executive Session 2, saying that technology strategies in the oil and gas industries, the theme of the session, must be deployed on the premise that they will bring diverse benefits to each respective country and its citizens, regardless of the scope of such strategies.

He noted that Japan suffered a bitter experience during its high-growth period between the 1950s and 1970s, when its concentrated use of fossil resources led to a serious social issue in the form of air and water pollution. Thereafter, the country succeeded in overcoming this pollution issue through the development of laws, administrative initiatives centered on the Ministry of the Environment, corporate efforts that include energy conservation activities, and above all, technology development and heightened public interest. The technologies that were developed during this time and the human resources who engaged in their development have thereafter become important assets to each company and to Japan as a whole.

Mr. Uchida then said that the guest speakers of Executive Session 2—comprising executive officers from the R&D department, refinery or resource and energy department in their respective company—have effectively expressed their wish to benefit the public through sustainable technology strategies and their deployment. He said the presentations should thus serve as an important reference for cooperation by Japanese companies and JCCP. JCCP cooperation programs, in particular, are implemented with the objective of resolving technical issues facing the oil industry in oil-producing countries by transferring, applying, and jointly building on Japan's technologies and knowhow in cooperation with oil-related companies in the counterpart country. In this sense, he strongly emphasized that the information provided in the presentations should be incorporated in future activities.

3. Closing Address

Mr. Tsuyoshi Nakai, CEO of JCCP, delivered a



Mr. Tsuyoshi Nakai Chief Executive Officer, JCCP

closing address before bringing the symposium to its conclusion. He stated that amid drastic fluctuations in crude oil prices, an international framework of cooperation or partnership is essential to the resolution of the issue, and reiterated the importance of cooperation among oil-producing and consuming countries.

He also noted that JCCP has recently formulated a new statement on its foundation. The statement articulates JCCP's wish to become the world's foremost NPO in the downstream oil sector by offering exceptional and attractive knowledge based on Japan's experience and total hospitality. This new concept was derived by strengthening the previous concept that had served the organization for 30 years since its founding. Mr. Nakai ended his address with a wish that this international symposium will mark the first step toward the realization of the new concept.

4. Reception

A reception was held after the Executive Sessions. Mr. Koji Toyoshima, Director, Petroleum Policy, National Resources and Fuel Department, METI, gave a welcome speech. Mr. Toyoshima was followed by H.E. Dr. Aabed A. Al-Saadoun, who gave a speech representing the oil-producing countries, and Mr. Takashi Noro, representing the Japanese side. Mr. Noro also led a toast and opened the way for friendly conversation among the guests.

The presentation materials of each speaker are posted on the JCCP website (http://www.jccp.or.jp) for your reference.

by Akio Yamanaka, Administration Dept.>

The 34th JCCP International Symposium Program

"Structural Changes in Petroleum Industries in a Volatile Global Market"

January 28 (Thu.), 2016

8:30 - 9:00

Registration The Prince Park Tower Tokyo Ball Room, B2 floor

Moderator Mr. Tsuyoshi Nakai

Chief Executive Officer, JCCP

9:00 - 9:10

Opening Speech

Mr. Keizo Morikawa

Representative Director, Chief Executive Officer, Cosmo Energy Holdings Co., Ltd. /

Chairman of the Board, JCCP

Message from METI

Mr. Toshihiko Fujii

Director-General, Natural Resources and Fuel Department, Agency for Natural Resources and

Energy, Ministry of Economy, Trade and Industry

9:10 - 9:30

Keynote Speech Structural Changes in Petroleum Industries in a Volatile Global Market

H.E. Dr. Aabed A. Al-Saadoun

Deputy Minister for Companies Affairs, Ministry of Petroleum and Mineral Resources / Saudi Arabia

9:30 - 12:00

Leaders' Panel

Panelists Industry Challenges and ADNOC's Priorities

Mr. Ali Khalifa Al Shamsi

Director, Strategy & Coordination, Abu Dhabi National Oil Company (ADNOC) / UAE

Idemitsu's Challenge in Global Energy Market

Mr. Takashi Matsushita

Managing Director, Idemitsu Kosan Co., Ltd. / Japan

Surfing the Tides of Refining Industry in Today Markets

Mr. Ahmed Omar Abdulla

Chief Operating Officer, Abu Dhabi Oil Refining Company (TAKREER) / UAE

Integration Strategy in Refining and Petrochemical Complex

Dr. Le Manh Hung

Vice President, Vietnam Oil and Gas Group (PETROVIETNAM) / Vietnam

Oil Market Turmoil: Implications for the Refining Industry

Dr. Fereidun Fesharaki Chairman, FGE / USA

12:00 - 13:10

Lunch Break

13:10 - 15:10

Executive Session 1

Developing Next-Generation Management

Chairperson

Mr. Takashi Noro

Director, Senior Vice President, Refining Department, Technical & Engineering Service Department,

JX Nippon Oil & Energy Corporation / Japan

Panelists

Post Sanction Situation and HRD of Oil & Gas Industry in Iran

Mr. Saeid Mahjoubi

Director, Product Coordination & Supervision, National Iranian Oil Refining and Distribution

Company (NIORDC) / Iran

Strategic Development of KazMunayGas and HR Transformation

Mr. Darmen Sadvakassov

Director of Department of Strategy and Coordination, JSC NC "KazMunayGas" / Kazakhstan

The Path to Excellence: Talent Development Acceleration Program for Early

Professionals

Mr. Ihsanuddin Usman

Vice President, Pertamina Corporate University, PT Pertamina (Persero) / Indonesia

JX Approaches to Develop Leaders and Management in International Competition

Mr. Junichi Iwase

Executive Officer, General Manager of Refining Department, JX Nippon Oil & Energy Corporation /

Japan

15:30 - 17:30

Executive Session 2

Technological Strategy and Deployment

Chairperson

Mr. Masayuki Uchida

Director & Senior Executive Officer, CTO, Chief Compliance Officer (CCO), General Manager of SQE Management Unit, Manager of Quality Management Div. & Auditing Div., Toyo Engineering

Corporation / Japan

Panelists

Transforming Saudi Aramco Technology

Dr. Ammar A. Al Nahwi

Head of Downstream Research & Development, SAUDI ARAMCO / Saudi Arabia

Bangchak for Technological Strategy and Deployment

Mr. Chalermchai Udomranu

Executive Vice President, Refinery Business, The Bangchak Petroleum Public Company Limited /

Thailand

PTSC Technological Strategy and Deployment

Mr. Phan Thanh Tung

President and Chief Executive Officer, PetroVietnam Technical Services Corporation (PTSC) /

Vietnam

Gas Master Plan: GMP - Planning for Gas Utilization in Oil/Gas Producing Countries

Mr. Hiroshi Sato

Senior Executive Officer, Unit Director / Senior Petroleum Engineer, Energy Business Unit, Toyo

Engineering Corporation / Japan

17:30 - 17:35

Closing Address

Mr. Tsuyoshi Nakai

Chief Executive Officer, JCCP

18:00 - 20:00

Reception

Friendship Committee for Women Career Development (FCW)

Under the initiative of H.E. Dr. Maitha Salem Al Shamsi, Minister of State of UAE, JCCP and ADNOC have begun to cooperate in providing further support to women who work in the oil sectors in UAE and Japan, from this fiscal year.

The 2014 Gender Gap Index presented by the World Economic Forum has ranked Japan 104th and UAE 115th among 142 countries, placing the two countries at a similar level. Furthermore, the incorporation of female workers in mature society continues to be an issue in Japan, and the roles of female workers are expanding amid an increasing nationalization of workers in UAE. Yet in both countries the oil industry poses particular difficulties to women's advancement, due to the harsh conditions of refinery and field operations. Given this situation, the Friendship Committee for Women Career Development (FCW) was organized with the aim of empowering women through mutual exchange of experience and launching of a training program for capacity building for women.

1. Framework

The FCW is headed by the honorary chairmanship of H.H. Sheika Fatima bint Mubarak, called "Mother of the Nation" in UAE, and is composed of an Executive Board and a Planning and Implementing Committee. The

Executive Board comprises three members, including Dr. Maitha Salem Al Shamsi, Minister of State; H.E. Abdullla Nasser Al Suwaidi, Director General of ADNOC; and Mr. Tsuyoshi Nakai, CEO of JCCP. The Planning and Implementing Committee is organized by selected members from the ADNOC group, oil and engineering companies in Japan, and JCCP. The chairperson for the Planning and Executive Committee has been nominated from the UAE side (the ADNOC group), but will alternate with Japan every three years. Mr. Ali Khalifa Al Shamsi, Strategy and Coordination Director at ADNOC, was elected as the first chairperson, and Ms. Mieko Onai, General Manager of JCCP's Administration Department, as vice-chairperson.



The 1st FCW in UAE (Al-Ain)



Members of the 1st FCW

2. The 1st FCW

The first FCW conference was held in Al-Ain, UAE on May 20, 2015. Members of the Planning and Implementing Committee, which included 13 female employees from Japan and eight from the ADNOC group, spent their precious limited time exchanging views, with the Japanese members introducing specific initiatives of each company and ADNOC members presenting case examples of initiatives being implemented by their group companies.

Each member then wrote down their present situation, issues, points for improvement, proposals and suggestions on a worksheet based on three themes (career path, work-life balance and management with women's empowerment), and submitted the worksheet as a reference for future FCW activities.

3. The 2nd FCW

The second FCW conference was held in Japan (Osaka, Kyoto and Tokyo) from November 16 to 19, 2015. Members from UAE included Dr. Maitha Salem Al Shamsi, representing the Executive Board; Mr. Ali Khalifa Al Shamsi, as chairman of the Planning and Implementing Committee; and seven female members of the committee. On the Japanese side, 13 female members of the Planning and Implementing Committee attended the conference. In addition, three special guests were invited to participate in the second FCW, and included Ms. Hosnia Hashim, Vice President of Kuwait Foreign Petroleum Exploration Company (KUFPEC).

The main agenda of the second conference was to hold a workshop on women's career paths, work-life balance and management with women's empowerment, by dividing the members of the Planning and Implementing Group into three groups, with each group to give a presentation on their findings and proposals in an open forum scheduled on the last day. To facilitate their discussions, specialists were assigned to each group as advisors. Additionally, to learn about initiatives for women's empowerment in other industries and exchange views with their female employees, visits were made to Osaka Gas Co., Ltd., which has received the "Nadeshiko Brand" designation by the Ministry of Economy, Trade and Industry (METI) and the Tokyo Stock Exchange (TSE) as an example of an enterprise that encourages women's success, and to Obayashi Corporation, which came in first place in the ranking of the "Best 100



The 2nd FCW: H.E. Dr. Maitha Salem Al Shamsi, Minister of State of UAE, giving a speech

Companies for Women" in the construction and real estate industry, selected by Nikkei Inc. and Nikkei Business Publications Inc. In Kyoto, the FCW members visited a traditional Japanese craftwork industry supported by women and listened to stories from female staff who carry on the tradition, as they experienced the essence of traditional Japanese culture and crafts that have been handed down through many years.

The open forum held on the last day featured an address by Mr. Toshihiko Fujii, Director General, Oil, Gas and Mineral Resources, Agency for Natural Resources and Energy, METI, and relevant speeches from key figures in various industries.

4. Workshop

In the workshop, members representing UAE, Kuwait and Japan divided into three groups to discuss women's career paths, work-life balance and management with women's empowerment from the perspective of promoting women's opportunities in oil-related industries. While the situation differs in the three countries, each group put their heads together to identity



Workshop

issues and discuss solutions while receiving advice from a specialist, and compiled proposals for policy planning, management and JCCP training programs. Proposals for JCCP programs included strong expectations for a program on the creation of an international women's network in the petroleum industry and a women's human resource development program. JCCP will examine these proposals and incorporate them in HRD programs in the future.

As there are already many female managers at ADNOC, the Japanese members had much to learn from

them, and seemed to receive great inspiration from them. At the same time, the members from overseas noted that they gained valuable experience in learning how the Japanese government and private companies are taking various initiatives to promote women's active participation, and in discussing women's empowerment issues across national boundaries. Above all, many of the conference members said they are thankful for the opportunity to create a network of women in oil-related industries.

JCCP hopes to see the women's network further expand across the global petroleum industry.

by Mieko Onai, Administration Dept.>



Open forum (1)



Open forum (2)



Visit to Obayashi Corporation, which came in first place in the ranking of the "Best 100 Companies for Women" in the construction and real estate industry

Friendship Committee for Women Career Development in Japan

Forum Program

November 19, 2015 / 15:00 – 18:00 / Tokyo

15:00 – 18:00 Open Forum

Moderator Mr. Tsuyoshi Nakai

Chief Executive Officer, JCCP

Special Speeches Representative of Ministry of Economy, Trade and Industry (METI)

Mr. Keizo Morikawa

President, Cosmo Energy Holdings Co., Ltd. / Chairperson of the Board, JCCP

H.E. Dr. Maitha S. Al Shamsi Minister of State, UAE

Mr. Ali Khalifa Al Shamsi

Director, Strategy & Coordination, Abu Dhabi National Oil Company (ADNOC)

Leaders' Panel

Leaders' Speakers Ms. Noriko Nakamura

Chairperson, Japan Women Executive Association

Mr. Masashi Terahata

Senior Vice President, JFE Holdings, Inc.

Ms. Kuniko Urano

Executive Officer, General Manager, Human Resources Development, Komatsu Ltd.

Prof. Mitsuyo Matsubara

Visiting Professor, Faculty of Economics, Gakushuin University

Committee's Address Ms. Abeer Al Mehairbi

Manager, Learning & Career Management, Abu Dhabi Company for Onshore Petroleum

Operations Ltd. (ADCO)

Ms. Hosnia S. Hashim

Vice President Operations, Kuwait Foreign Petroleum Exploration Company (KUFPEC)

Ms. Reiko Kawakubo

Executive Officer, Public & Government Relations, Tonen General K.K.

Report & Recommendation through Workshop from PIC Members

Advice & Comments Prof. Mitsuvo Matsubara

from Experts Visiting Professor, Faculty of Economics, Gakushuin University

Ms. Tamaki Sato

Senior Fellow, Nikkei BP Institute of Consumer Trend

Comments from a Mr. Tadashi Izawa

Comments from H.E. Dr. Maitha S. Al Shamsi UAE Minister of State, UAE

Closing Address

Mr. Takeshi Kurosaki

Executive Vice President, JX Nippon Oil & Energy Corporation

Workshop Advisors -

Name	Organization
Ms. Yumiko Murakami	Head, OECD Tokyo Centre
Ms. Naoko Ishihara	Editor in Chief, HR Magazine "Works," Recruit Works Institute
Ms. Yoko Yajima	Principal Consultant, General Manager of Diversity Management Strategy Department, Mitsubishi UFJ Research & Consulting Co., Ltd.
Ms. Maki Kunimatsu	Chief Analyst, Economic & Social Policy Department, Mitsubishi UFJ Research & Consulting Co., Ltd.
Ms. Tamaki Sato	Senior Fellow, Nikkei BP Institute of Consumer Trend

Friendship Committee for Women Career Development (FCW) —————

Executive Board Members	
H.E. Dr. Maitha S. Al Shamsi	Minister of State, UAE
H.E. Mr. Abdulla Nasser Al Suwaidi	Director General (ADNOC)
Mr. Tsuyoshi Nakai	CEO, JCCP

UAE	
Mr. Ali Khalifa Al Shamsi	Director, Strategy & Coordination (ADNOC)
Dr. Ghuwaya Al Neyadi	Medical Services Division Manager (ADNOC)
Ms. Maryam Amiri	Acting Corporate Communications Division Manager (ADNOC)
Dr. Abeer Al Teneiji	Abu Dhabi Medical Department Manager (ADNOC)
Ms. Mahra Al Nuaimi	Compensations & Benefits Department Manager (ADNOC)
Ms. Noura Al Nuaimi	Secondment Planning Department Manager (ADNOC)
Ms. Nouf Al Mansoori	Vice President (emiratization), Intake & Vocational Development (ADCO)
Ms. Abeer Al Mehairbi	Learning & Career Management Manager (ADCO)
Ms. Khulood Al Shehhi	Executive Office Administrator (ADNOC)
Ms. Lubna Al Ameri	Sustainability & Social Responsibility Manager (ADNOC)

ADNOC: Abu Dhabi National Oil Company

ADCO: Abu Dhabi Company for Onshore Petroleum Operations Ltd.

Guest Participants from Kuwait	
Ms. Hosnia S. Hashim	Vice President Operations, Kuwait Foreign Petroleum Exploration Company (KUFPEC)
Ms. Nadia B H Y Al-Hajji	Technical Services Manager, Mina Abdulla Refinery, Kuwait National Petroleum Company (KNPC)
Ms. Ameena Rajab	Manager, Support Service (S&EK) Manager, Kuwait Petroleum Company (KPC)

Japan		
Ms. Junko Sakamoto	JX Nippon Oil & Energy Corporation	Senior Staff, Products Trading Group, Supply Planning & Optimization Department
Ms. Kaeko Matsuo	JX Nippon Oil & Gas Exploration Corporation	Senior Staff, Human Resources Group 2, Human Resources Department
Ms. Hiroko Abe	Idemitsu Kosan Co., Ltd.	Human Resources Section, Human Resources Department
Ms. Yuri Sekiguchi	Idemitsu Kosan Co., Ltd.	Process Engineer, Refining & Petrochemical Technology Group No. 2, Process Technology Office, Technology & Engineering Center
Ms. Miyuki Hanada	Cosmo Energy Holdings Co., Ltd.	Diversity Promotion Department, Group Management Support Unit
Ms. Mikari Kuga	Cosmo Oil Co., Ltd.	Assistant Manager, Supply Business Unit / Crude Oil & Tanker Department / Crude Oil Group
Ms. Yuki Fukasawa	Showa Shell Sekiyu K.K.	Planning Section, Manufacturing Division
Ms. Reiko Kawakubo	Tonen General Sekiyu K.K.	Executive Officer, Public & Government Relations
Ms. Megumi Banno	EMG Marketing Godo Kaisha	Payable Manager, Procurement Services Department
Ms. Ayako Shoda	Chiyoda Corporation	Section Leader, Section 2 Refinery, Petrochemical & New Energy Process Engineering Unit
Ms. Shizuko Era	Toyo Engineering Corporation	Project Coordinator, Energy Project Division, Energy Business Unit
Ms. Yukiyo Ikeda	INPEX Corporation	Senior Coordinator, Planning & Coordination Unit, Masela Project Division
Ms. Kazuko Maruyama	JGC Corporation	Audit & Supervisory Board Administration
Ms. Tomomi Yoshida	Japan Oil Development Co., Ltd. (JODCO)	Administration Manager, Japan Oil Development Co., Ltd. Abu Dhabi Branch

JCCP	
Ms. Mieko Onai	General Manager, Administration Department
Ms. Ritsuko Nakayama	Manager, Operation Department
Ms. Misako Iwase	Manager, Planning and Public Relations, Administration Department
Ms. Megumi Suenaga	Assistant Manager, Training Department
Ms. Kayoko Okawa	Senior Staff, Operation Department

JCCP Alumni Meeting in Kuwait



Key speakers at the alumni meeting (from left):
Mr. Kentaro Oe, Deputy Director at METI;
Dr. Naji Mohamed Al-Mutairi, Director General of KISR;
Mr. Mohammad Ghazi Al-Mutairi, CEO of KNPC;
Mr. Tsuyoshi Nakai, CEO of JCCP;
Mr. Nizar Al-Adsani, CEO of KPC;
H.E. Mr. Toshihiro Tsujihara, Japanese Ambassador to Kuwait;
H.E. Mr. Abbas A. Al-Naqi, Secretary General of OAPEC; and
Mr. Assad Ahmad Al-Saad, CEO of PIC

1. Background

JCCP Alumni Meetings have so far been held as shown below. All three meetings ended successfully, helping to establish strong bonds with oil-producing countries.

1st Alumni Meeting: Nov. 28, 2012 in UAE 2nd Alumni Meeting: Mar. 6, 2014 in Saudi Arabia 3rd Alumni Meeting: Jan. 18, 2015 in UAE

As an ongoing initiative, the recent 4th meeting was held in Kuwait.

2. Objectives

- (1) To verify and evaluate the effects of JCCP programs in oil-producing countries (Kuwait) and apply the results to enhancing future program operations
- (2) To request Kuwait's continued support of JCCP programs, strengthen Japan's relationship with Kuwait, and create a network with Kuwait as an oil-producing counterpart to JCCP
- (3) To create even stronger personal connections with JCCP alumni, many of whom have become executive officers and managers in oil companies in Kuwait, with a view to stabilizing crude oil supplies to Japan

3. The 4th Alumni Meeting

The 4th JCCP Alumni Meeting was held on October 5, 2015, at the JW Marriott Hotel in Kuwait City. JCCP alumni in Kuwait were broadly invited to attend, and as a result, a total of 201 people turned out for the meeting, including 181 members from Kuwait and 20 local Japanese personnel.

Many key figures from Kuwait's oil industry lent their presence to the event. Speakers included:

Mr. Nizar Al-Adsani

CEO of KPC (Kuwait Petroleum Corporation)

Mr. Mohammad Ghazi Al-Mutairi

CEO of KNPC (Kuwait National Petroleum Company)

Dr. Naji Mohamed Al-Mutairi

Director General of KISR (Kuwait Institute for Scientific Research)

H.E. Mr. Abbas A. Al-Naqi

Secretary General of OAPEC (Organization of the Arab Petroleum Exporting Countries)

Mr. Assad Ahmad Al-Saad

CEO of PIC (Petrochemical Industries Company) (and Chairman of the Board at KNPC)



Members of the alumni meeting

Key figures on the Japanese side included the following. Speakers included:

H.E. Mr. Toshihiro Tsujihara Japanese Ambassador to Kuwait

Mr. Kentaro Oe

Deputy Director of Oil, Gas and Mineral Resources, Agency for Natural Resources and Energy, METI (overall coordinator)

Mr. Nizar Al-Adsani, CEO of KPC, gave a speech in which he stated that Japan is a legendary presence in the history of the oil industry in Kuwait, and expressed his appreciation for Japan's considerable contribution through the promotion of human resource development and technical transfer. He also noted that he has been particularly impressed with the Japanese people's strong sense of responsibility. With regard to JCCP, Mr. Al-Adsani said he hopes to strengthen their friendly relationship of cooperation by continuing to create new value as a strategic partner to JCCP.

On behalf of all JCCP alumni in attendance, Ms. Shaima Ali Mohammad Ameen from KNPC (who attended a JCCP regular course on "Challenge to Environmental Pollution Control in Refineries" in FY2004) also gave a speech and reminisced about her experiences in Japan.

Following the speeches by key figures from Kuwait and Japan, Sukeroku Taiko, a Japanese drum group from



Ms. Shaima Ali Mohammad Ameen (from KNPC), representing JCCP alumni

Japan, gave a performance as an introduction to Japanese culture. Japanese foods were also served, including crafted candies, sushi and tempura, all of which were well received by the guests. After allowing ample time to enjoy the light meal and social interaction, the JCCP members led everyone in singing the Japanese song "Furusato" under the direction of E. Iwamatsu, Master Lecturer of the JCCP Training Department, and enjoyed feeling the strong bond between Kuwait and Japan.

Three local Arabic newspapers (*Al-Raimedia*, *Al-Kuwaityah* and *Al-Seyassah*) carried an article of the alumni meeting accompanied by color photographs, indicating the local media's strong interest in the event.



JCCP chorus being led by E. Iwamatsu, Councilor of JCCP

4. Summary

- (1) The attendance of Ambassador Toshihiro Tsujihara and Mr. Kentaro Oe from METI on the Japanese side allowed JCCP to promote greater understanding of JCCP activities and the activities of JCCP alumni in Kuwait among members of the Japanese government.
- (2) The meeting brought together such top leaders in Kuwait's oil industry as Mr. Nizar Al-Adsani, Mr. Mohammad Ghazi Al-Mutairi, Dr. Naji Mohamed Al-Mutairi, and H.E. Mr. Abbas A. Al-Naqi, and attracted major coverage by local newspapers, thereby strengthening JCCP's presence in Kuwait.
- (3) Prior to the alumni meeting, Mr. Tsuyoshi Nakai had the opportunity to pay a courtesy call on Dr. Ali Saleh Al-Omair, Minister of Oil, who unfortunately had to cancel his attendance of the event, and received words of appreciation from the minister for JCCP's cooperation in Kuwait and future expectations. This amicable meeting between the leaders of two partner organizations is expected to further strengthen the friendly ties between Kuwait and JCCP.

by Eiji Iwamatsu, Training Dept.>

Report of Executive Visits to National Oil Companies in Oil-producing Countries

—Top Meetings with National Oil Companies in Asia, Middle East, and Central/South America—

As stated in the beginning of this newsletter, JCCP has set forth a statement on the "Foundation of JCCP" as a guiding principle for further enhancing JCCP operations and activities. Toward realizing this mission, Mr. Tsuyoshi Nakai, CEO of JCCP, visited and met with top leaders in relevant oil-producing countries, mainly with the following objectives.

- (1) To verify the reputation of JCCP operations in oilproducing countries, and establish and maintain personal networks in those countries
- (2) To conduct a review of JCCP training programs and technical cooperation projects, verify the direction of future programs, and reach a consensus on their prioritization
- (3) To collect relevant information

An outline of Mr. Nakai's visit is provided below.

1. Myanmar

1. Thanlyin Refinery: Meeting with Mr. Khine Oo, Refinery Director

(1) Date & time:

April 21, 2015 / 10:00 – 12:00 (Thanlyin Refinery)

- (2) Attendees:
 - Mr. Khine Oo, Refinery Director

Nine other members

(3) Meeting content:

The meeting began with an introduction of the Thanlyin Refinery by the refinery side. The refinery is outfitted with two atmospheric distillation units, a lubricating oil blending facility and a delayed coker, among its main facilities. The refinery's training center is staffed by five instructors, and implements seven types of training course per year.

Next, Mr. Nakai thanked the refinery for receiving the JCCP delegation, and then presented an overview of JCCP. In response, the refinery members expressed their wishes and requests as follows.



Meeting at the Thanlyin Refinery: Mr. Khine Oo, Refinery Director (sixth from left)

- Technical cooperation project: As there are presently no environmental standards in Myanmar, the refinery wishes to promote environmental management based on the quality management system that is being developed with JCCP.
- 2) Personnel exchange program: The refinery seeks a Customized Program-Overseas (CPO) on the latest instrumentation at its training center.

2. Ministry of Energy (MOE): Meeting with Mr. U. Zeyar Aung, Minister

- (1) Date & time:
 - April 22, 2015 / 13:00 14:00 (MOE)
- (2) Attendees:
 - Mr. U. Zeyar Aung, Minister Seven other members
- (3) Meeting content:

Mr. Nakai gave a greeting and thanked the ministry for its welcome, followed by an introduction of JCCP. In response, the ministry side expressed their wishes and requests as follows.

1) Training at JCCP: The ministry expressed its deep appreciation to JCCP for receiving some 600 ministry employees to its training programs to date, and noted that candidates are currently being

- selected for participation in all 24 regular courses offered in fiscal 2015.
- 2) CPO at the Thanlyin Refinery: Based on the awareness that it is important to know about the latest control systems, the counterpart department in the ministry will consult with JCCP concerning specific matters.
- 3) Training regarding pipelines: In preparation for the implementation of a small-scale pipeline project, the ministry wishes to send its employees to study at Nippon Steel & Sumitomo Metal Corporation, and desires JCCP make the necessary arrangements.

by Eiji Iwamatsu, Training Dept.>

2. Kuwait & UAE

From May 18, 2015, Mr. Tsuyoshi Nakai, CEO of JCCP, and Mr. Daisuke Asano, Deputy Manager of the Petroleum Refining and Reserve Division, Agency for Natural Resources and Energy, METI, visited Kuwait and Abu Dhabi, to pay a call on JCCP counterpart organizations and a refinery (the refinery was visited by Mr. Asano and JCCP staff) in Kuwait and attend a conference of the Friendship Committee for Women's Career Development (FCW) in Abu Dhabi. (Details of the FCW are provided in a separate article in this newsletter.) The main objectives of the visits were as follows:

- (1) To request cooperation in the JCCP Alumni Meeting that was scheduled to be held in Kuwait in fiscal 2016
- (2) To present an overview of FCW and to sound out Kuwait's interest in launching a program for women's career development in Kuwait
- (3) To exchange views on promoting future personnel exchange and technical cooperation programs
- 1. Kuwait Petroleum Corporation (KPC): Meeting with Ms. Wafa'a Y. Al-Zaabi, Deputy Managing Director—Planning
- (1) Date & time: May 17, 2015 / 08:00 – 09:00 (KPC Head Office)
- (2) Attendees: Ms. Wafa'a Y. Al-Zaabi, Deputy Managing Director–Planning Ms. Asmaa Al-Qallaf, Manager, Health, Safety, Security, Environment

(3) Meeting content:

After introducing Mr. Asano, the JCCP side requested KPC's cooperation in the JCCP Alumni Meeting scheduled to be held in Kuwait this fiscal year. Mr. Nakai then described the committee for women's career development and utilization that has been organized in Abu Dhabi, and explained that JCCP wished to also create a similar framework in Kuwait in the future. Ms. Al-Zaabi expressed positive interest in this idea. She also spoke about the Kuwaiti Minister of Oil's strong demand for the introduction of renewable energy sources and efficient utilization of energy, to which Mr. Nakai promised JCCP's cooperation to the greatest extent possible.

2. Petroleum Research Center, Kuwait Institute for Scientific Research (KISR PRC): Meeting with Mr. Dawoud Bahzad, Division Director Science & Technology

- (1) Date & time: May 17, 2015 / 10:30 – 12:30 (KISR PRC)
- (2) Attendees: Mr. Dawoud Bahzad, Division Director Science & Technology Ms. Khalidah Al-Dalma, Research Scientist, Division Director Six other members
- (3) Meeting content:

Following the JCCP side's overview of JCCP programs in Kuwait, the KISR side explained its priority research areas over the next five years (see below), and provided a progress report of the three joint projects being implemented with JCCP—namely, the "Project on Effective Hydrotreatment of Kuwait Heavy Crude," the "Project for Newly Planned Corrosion Assessment and Mitigation Technology Program," and the "Project for Application and Economic Examination of SPH Processes."

- EOR technology
- Reinforcement of refinery processing capacity
- Corrosion mitigation measures
- Introduction of new treatment technologies
- Petrochemical research

A discussion was also held on the Kuwait-Japan Joint Symposium scheduled to be held this fiscal year.

After the meeting, the JCCP delegation received a tour of the Petroleum Research Center (PRC).

3. KISR Head Office: Meeting with Dr. Nadar M. Al-Awadhi, KISR Executive Commissioner, and Dr. Meena Marafi, Executive Director of PRC

(1) Date & time: May 17, 2015 / 14:30 – 15:30 (KISR Head Office)

(2) Attendees:

Dr. Nadar M. Al-Awadhi, KISR Executive Commissioner

Dr. Meena Marafi, Executive Director, PRC Two other members

(3) Meeting content:

Dr. Nadar M. Al-Awadhi, KISR Executive Commissioner, first gave a greeting, stating that KISR wished to further develop its friendly relationship with JCCP, and expressing deep appreciation for METI's support of JCCP programs, which had been successful models of international cooperation. He also mentioned KISR's strong interest in Japan's renewable energy technologies.

The JCCP side discussed the JCCP Alumni Meeting and the Kuwait-Japan Joint Symposium that was scheduled to be held in Kuwait this fiscal year, and JCCP's cooperation in the area of renewable energy. Mr. Asano thanked KISR for its long years of cooperation, and expressed METI's wish to further strengthen its ties with KISR in the future.



Meeting with Dr. Nadar M. Al-Awadhi, KISR Executive Commissioner

4. KNPC Mina Abdulla Refinery: Meeting with Mr. Mutlaq Al-Azmi, Deputy CEO, Shuaiba Refinery, and Refinery Tour

(1) Date & time: May 18, 2015 / 10:30 – 12:30 (Mina Abdulla Refinery)

(2) Attendees:

Mr. Mutlaq Al-Azmi, Deputy CEO, Shuaiba Refinery

Ms. Nadia B. Al-Hajji, Manager, Technical Services Six other members

(3) Meeting content:

The meeting opened with an overview of the Mina Abdulla Refinery by Ms. Nadia B. Al-Hajji, Manager of Technical Services. Particularly impressive was the photo-accompanied account of how the refinery units and facilities that received considerable damage in the 1991 Gulf War were thereafter restored to their present state by the efforts of refinery personnel. The presentation was followed by an active Q&A session and a tour of the refinery.

by Junichi Kasuya, Administration Dept.>



Meeting at the Mina Abdulla Refinery

3. Qatar, Iran, Kuwait

1. Qatargas Operating Co.: Meeting with Sheikh Khalid K. Al-Thani, CEO

(1) Date & time: June 24, 2015 / 10:00 – 10:45 (Qatargas Head Office)

(2) Attendees: Sheikh Khalid K. Al-Thani, CEO

(3) Meeting content:

The meeting began with the JCCP side introducing JCCP's activities with a particular focus on the launching of the Friendship Committee for Women's Career Development (FCW) with ADNOC this fiscal year for the promotion of women's career development. Mr. Al-Thani listened attentively to the overview of JCCP activities, and exchanged views with Mr. Nakai on a wide range of topics, including the supply-demand situation of natural gas and the impacts of the low prices of crude oil.

2. Qatar Petroleum (QP): Meeting with Mr. Saad S. Al-Kaabi, Managing Director

(1) Date & time: June 24, 2015 / 11:30 – 12:30 (QP Head Office)

(2) Attendees:

Mr. Saad S. Al-Kaabi, Managing Director Mr. Abdulaziz M. Al-Mannai, Executive Vice President, Human Capital

(3) Meeting content:

After giving an overview of JCCP activities, the JCCP side requested the participation of QP employees in JCCP's personnel exchange course for management candidates and Mr. Al-Kaabi's participation in the JCCP International Symposium in January 2016.

In response, Mr. Al-Kaabi said that QP recently completed its organizational reform and matters had settled down within the company, so he wished to focus on strengthening QP's relationship with JCCP, such as by sending QP employees to JCCP training programs and implementing technical cooperation projects.



Mr. Saad S. Al-Kaabi, Managing Director of QP (center)

3. Ministry of Oil-Iran: Meeting with Mr. Amir Hossein Zamaninia, Deputy Minister for Commerce & International Affairs

(1) Date & time: June 25, 2015 / 11:00 – 12:00 (Ministry of Oil–Iran)

(2) Attendees:

Mr. Amir Hossein Zamaninia, Deputy Minister for Commerce & International Affairs Ms. Marzeieh Riahi, Director General, Asia and Africa

H.E. Mr. Koji Haneda, Ambassador of Japan to Iran Six other members

(3) Meeting content:

In the meeting, Mr. Zamaninia requested support from Japan and JCCP in addressing various energyrelated issues in Iran when economic sanctions against Iran were lifted. In response, Mr. Nakai said JCCP was prepared to provide as much support as possible, but since the issues span a diverse array of fields, a priority order needed to be established and the main focus of each issue defined. The JCCP members also noted that JCCP has received some 1,400 participants from Iran to its training programs since 1981, and gave an overview of recent JCCP activities. In addition, views were exchanged regarding the Middle East situation and topics related to the lifting of sanctions against Iran.



Mr. Amir Hossein Zamaninia, Deputy Minister for Commerce & International Affairs (center), and Ambassador Koji Haneda (second from left)

4. National Iranian Oil Refining and Distribution Co. (NIORDC): Meeting with Mr. Abbas Kazemi, Deputy Minister of Petroleum and President

(1) Date & time: June 27, 2015 / 08:00 – 08:30 (NIORDC Head Office)

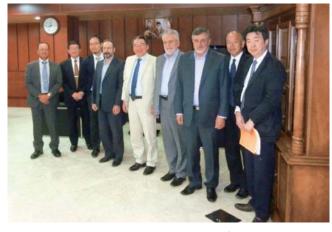
(2) Attendees:

Mr. Abbas Kazemi, Deputy Minister of Petroleum and President

Mr. Saeid Mahjoubi, Director, Production Coordination & Supervision Mr. Shahrokh Khosravani, Vice President One other member

(3) Meeting content:

Mr. Nakai first noted that he had learned about the



Mr. Abbas Kazemi, Deputy Minister of Petroleum and President (fourth from right)

diverse issues in Iran's energy sector in his meeting with Minister Zamaninia, and assured the NIORDC side that JCCP would provide cooperation and support in addressing those issues once the sanctions against Iran were lifted. He also expressed his hope to invite Iranian engineers to JCCP within the fiscal year to organize the issues and place them in perspective.

5. Kuwait Petroleum Corporation (KPC): Meeting with Mr. Nizar M. Al-Adsani, CEO

- (1) Date & time: June 28, 2015 / 09:45 – 10:15 (KPC Head Office)
- (2) Attendees: Mr. Nizar M. Al-Adsani, CEO
- (3) Meeting content:

Mr. Nakai first provided an overview of recent JCCP activities, followed by discussions on a variety of topics, including the JCCP Alumni Meeting in Kuwait, the personnel exchange course for strategic management candidates, and the JCCP International Symposium. When Mr. Nakai introduced the launching of the Friendship Committee for Women's Career Development (FCW) by ADNOC and JCCP to promote women's social advancement, Mr. Al-Adsani noted that the KPC Group also had a women's organization called Professional Women's Network (PWN), and introduced Ms. Hosnia S. Hashim, Vice President–Operation of Kuwait Foreign Petroleum Exploration Company (KUFPEC), who played a central role in the network.

6. Kuwait Foreign Petroleum Exploration Company (KUFPEC): Meeting with Ms. Hosnia S. Hashim, Vice President-Operation

- (1) Date & time: June 28, 2016 / 10:30 – 11:20 (KUFPEC Head Office)
- (2) Attendees:Ms. Hosnia S. Hashim, Vice President-Operation
- (3) Meeting content:

In addition to an overview of JCCP operations, the JCCP side specifically introduced FCW activities that were jointly being implemented with ADNOC, and requested Ms. Hashim's participation in an event called FCW Week, scheduled to be held in November. For her part, Ms. Hashim introduced the activities of the Professional Women's Network (PWN), and articulated her approval of the activities of FCW. She also kindly agreed to participate in FCW Week.

by Junichi Kasuya, Administration Dept.>

4. Mexico

1. PEMEX: Meeting with Mr. Emilio Lozoya, PEMEX CEO

- (1) Date & time: July 6, 2015 / 18:30 – 19:30 (office of the CEO)
- (2) Attendees:

Mr. Emilio Lozoya, PEMEX CEO Mr. Miguel Tame Dominguez, PEMEX Refination Director General Mr. Antonio Alvarez Moreno, PEMEX Refination Subdirector

(3) Meeting content:

JCCP has continuously received participants from Mexico for over 30 years since its establishment, but the number has decreased during the past few years, and unfortunately dropped to zero last year. To restore the good relationship that Pemex and Japan have established over many years, Mr. Nakai requested PEMEX to once again send participants to JCCP training programs, and also discussed areas for future cooperation and the possibility of implementing customized courses for PEMEX.

Mr. Lozoya said the JCCP delegation's visit came at a good time, as PEMEX had just completed its organizational reform and turned its attention to the importance of human resource development, and personally articulated his wish to again send participants to JCCP programs. The opportunity to explain JCCP activities directly to the CEO helped to deepen understanding of JCCP.



With Mr. Emilio Lozoya, PEMEX CEO (third from left)

2. PEMEX Corporate University: Meeting with Mr. Ernesto Alcocer, Dean

(1) Date & time: July 7, 2015 / 10:00 – 11:10 (PEMEX Head Office)

(2) Attendees:

Mr. Ernesto Alcocer, Dean of PEMEX Corporate University

Mr. Eduardo Segovia, General Manager, PEMEX Corporate University

Mr. Antonio Alvarez, Subdirector, PEMEX Five other members

(3) Meeting content:

After confirming training needs in PEMEX's HRD and technology departments, Mr. Nakai discussed possible customized programs for PEMEX and explained the procedure for making a request for a technical cooperation project.

3. Visit to PEMEX's Salamanca Refinery and Meeting with Mr. Josa Alfredo Chavez Ortega, General Manager

(1) Date & time:

July 8, 2015 / 10:20 – 12:30 (PEMEX Salamanca Refinery)

(2) Attendees:

Mr. Josa Alfredo Chavez Ortega, Salamanca Refinery General Manager Eight other Salamanca Refinery executives Mr. Enrique Rosales Dominguez, Adviser (Director General)

(3) Meeting content:

Although the meeting was requested on short notice, the JCCP delegation was heartily welcomed with handmade flags of Mexico and Japan decorating the conference room. The members on the PEMEX side included a number of familiar faces, as Mr. Chavez had attended a regular course in 2003, and there were also JCCP alumni among the other executives as well.

Mr. Chavez gave a rundown of the status of pipeline facilities in Mexico, the construction of delayed cokers that would reduce refining costs, and projects for the production of low-sulfur gasoline and diesel fuel. Following the presentation, the JCCP delegation received a tour of the refinery and adjacent training center. The training center was established with aid from Japan International Cooperation Agency (JICA), and has inherited and continues to teach the "5S" concept, the "pointing and calling confirmation" method, and the "toolbox meeting" for safety management.

by Mieko Onai, Administration Dept.>



At the Salamanca Refinery



Strategic Management in the Oil Industry

-- Management Training-

In fiscal 2014, JCCP launched a program titled "Strategic Management in the Oil Industry" for management officers, with the objective of building personal networks with management executives in oilproducing countries through the program. The program earned a good reputation, and was implemented again this fiscal year, over an 11-day period from October 20 to 30, 2015, with the participation of 19 management officers, including directors and general managers, from 13 oil-producing countries. In Japan, the selected members visited the Ministry of Economy, Trade and Industry (METI), oil companies, engineering companies, and manufacturing industries (automobile and power generation facilities), and studied Japan's energy and environmental policies and business strategies of oilrelated companies.

1. Background to Implementing the Program

In oil-producing countries, where the oil industry is experiencing an ongoing expansion of operations, such as increases in crude oil production, the establishment of new refineries and extension into the petrochemical business, the development of capable management officers has become an important issue to the top management. In fact, JCCP has received many requests from oil-producing countries regarding human resource development needs for management officers. As there

have been particular requests for a new program that fully incorporates Japanese-style management in contrast to Western programs, JCCP had engaged in preparing said program that was implemented for the first time last fiscal year, over a period of two years. As the program was highly well-received by participants from oil-producing countries, it was offered again this fiscal year.

2. Overview of the Program

Industrial development, energy conservation measures, and environmental countermeasures have become important policy issues in oil-producing countries experiencing economic growth mainly in their oil industries. Thus, the program was designed to address strategic management issues with a focus on the management of advanced technologies related to energy and the environment.

More specifically, it placed particular focus on the following three areas:

- (1) Policy area: Energy and environmental policies of national and local governments and their advanced initiatives
- (2) Oil company strategy area: Industrial policies and energy and environmental strategies of oil companies
- (3) Technology and environment area: Technologies and strategies of manufacturers and engineering companies



Training on "automotive fuel strategies" at Toyota Motor Corporation



Cultural experience at a Hakata doll workshop run by Hakata doll master Shinkyo Nakamura

The program placed emphasis on holding direct discussions with Japanese corporate management personnel and engineers in the field to allow participants to experience how manufacturing industries in Japan are managed in comparison with the method employed in Western countries. It also included visits to private companies and production fields in Japan and opportunities to mutually discuss future plans and present issues, as most of the participants have an MBA or other such degree from a Western university or are presently engaged in management activities in their organizations.

3. Participants

The top management of national oil companies in each country were requested to nominate participants, as was done last year. As a result, a larger number of applications were received this year from oil-producing countries, indicating the program's high reputation and heightening needs for management training. To allow as many participants as possible to attend, the capacity for the program was expanded to receive 19 participants from 13 countries. (Participating countries: Saudi Arabia, UAE, Kuwait, Qatar, Oman, Mexico, Kazakhstan, Indonesia, Vietnam, Myanmar, Cambodia)

The participants included many high-level management officers from oil-producing countries, including directors and general managers from the oil ministry and national oil companies in their countries.

4. Program Overview

Based on the above basic concept, the program covered the following areas, and was implemented with the cooperation of related organizations and lecturers.

(1) Site visits

- 1) Energy policy
 - Agency for Natural Resources & Energy, Ministry of Economy, Trade and Industry (METI)
 Discussion with Mr. Toshihiko Fujii, Director-General of Natural Resources and Fuel
- Advanced initiatives of local public bodies and private-public partnerships
 Toyota Ecoful Town: Advanced environmental and energy initiatives
- 3) Strategies of the oil industry
 Idemitsu Kosan Co., Ltd.: Business strategies in the

- oil refining industry
- INPEX Corporation: Strategies of an oil exploration company
- 4) Strategies of engineering and manufacturing companies
 - JGC Corporation: New business strategies of an engineering company
 - Toyota Motor Corporation: New fuel strategies in the automobile industry
 - Mitsubishi Hitachi Power Systems, Ltd.: Development of advanced energy technologies Hitachi, Ltd.: Advanced renewable energy and environmental technologies

(2) Lectures and workshop

- 1) Economic growth
 - "History of Japan's economic development"
 - Prof. Toshikazu Hamada, Sophia University
- 2) Industrial policies
 - "Oil industry policies in Japan"
 - Prof. Takeo Kikkawa, Tokyo University of Science
 - "Japan's energy and environmental policies"
 - Mr. Yuji Morita, Research Director, The Institute of Energy Economics, Japan
 - "Japan's economic policies and public loans"
 - Prof. Keiichiro Kobayashi, Keio University
 - "Business strategies and global strategies (with a focus on the automobile industry)"
 - Mr. Tsuyoshi Nakai, CEO of JCCP
- *3) Strategies of the oil industry*
 - "Business strategies of downstream oil companies"
 - Mr. Michio Ikeda, Advisor, JX Nippon Oil & Energy Corporation
 - "Energy and environmental strategies in the oil industry"
 - Tetsuo Arii, Deputy General Manager, Human Resource Development Department, JCCP

(3) Cultural experience

This year's program included visits to Nagasaki and Fukuoka to provide exposure to Japanese culture at the Atomic Bomb Museum, Dejima, Dazaifu, and a Hakata doll workshop. At Dazaifu, in particular, the participants learned about its historical significance and the efforts that are made to preserve tradition, and at the Hakata doll workshop run by Hakata doll master Shinkyo Nakamura, they learned about the technologies and spirituality that are involved in making the dolls.

6. Summary

(1) Training for management officers

In oil-producing countries, there are increasing needs for the development of native management personnel accompanying business expansion. Also owing to the high reputation of this management training program launched last fiscal year, JCCP received more applications from a larger number of countries to this year's program. Furthermore, the participation of highlevel officers such as directors and general managers, including deputy director generals, elevated the overall level of the program.

(2) Personal networks with oil-producing countries Participants who attended the program are

management officers nominated by their country, who are engaged in central operations in their organization. It is thought that having such participants deepen their understanding of manufacturing industries and management systems in Japan through JCCP's HRD program would greatly contribute to establishing strong personal networks and relationships between oil-producing countries and Japan.

(3) Future issues

As the program is still a new initiative to JCCP, efforts will be made to provide an even more fulfilling program, such as in cooperation with universities and corporate universities in oil-producing countries and Japan.

by Tetsuo Arii, Human Resource Development Dept.>





"CPO on Reliability Improvement and Effective Maintenance of Aged Plants" for Saudi Aramco (Saudi Arabia) and

"CPO on Inspection, Corrosion/Degradation, and Static Equipment Maintenance" for TAKREER (UAE)

1. Background and Objective

Dealing with aging facilities has become an important issue in Saudi Aramco and other refineries in the Middle East. Under this situation, JCCP received a request for a Customized Program-Overseas (CPO) that addresses this issue, and implemented a "CPO on Inspection, Corrosion/ Degradation, and Static Equipment Maintenance" at Saudi Aramco's Professional Engineering Development Division (PEDD) in fiscal 2013 and a "CPO on T&I Best Practices" at the Riyadh Refinery in fiscal 2014. Following these two seminars, JCCP received a request this time from the Jeddah Refinery for a technical seminar on equipment maintenance and management that focuses on improving reliability toward the stable operations of aging equipment, and implemented the "CPO on Reliability Improvement and Effective Maintenance of Aged Plants" from April 26 to 30, 2015.

From UAE, where new facilities have been put into operation at the Ruwais Refinery in 2015, JCCP received a request for a seminar on inspection technologies that calculate the future deterioration of facilities. In response to this request, JCCP implemented the same programs that were implemented at Saudi Aramco, over the period

from May 10 to 14, 2015.

These seminars focused on corrosion as the most pressing problem in aging facilities, and covered the assessment of deterioration, corrosion control, and management of potential risks. They provided advanced knowledge of corrosion based on standards compiled by oil and engineering companies at meetings of the Japan Petroleum Institute as guidelines for corrosion management and inspection technologies. This was supplemented by expertise accumulated by each company.

2. Outcome of the Seminars

2.1 Participants

Participants to the seminars at Saudi Aramco included 23 members from refineries (the Jeddah, Riyadh, Ras Tanura, and Yanbu Refineries) and NGL fractionations (the Juaymah and Yanbu Plants) directly operated by Saudi Aramco.

At TAKREER, the seminars were attended by 19 engineers from the Ruwais Refinery and process engineers from TAKREER's maintenance support division and the Takreer Research Center (TRC) (including five female participants).



At Saudi Aramco's Jeddah Refinery



TAKREER (with male participants)

The participants comprised a diverse group with various backgrounds, ranging from new employees with only three to six months of experience, to seasoned engineers with 30 years of experience, and including top-level to novice engineers.

3. Seminar Content

3.1 Maintenance Management & Safety Management in Japan

Lecturer: Fumihiro Tone, JCCP Training Dept.

This lecture discussed maintenance management principles and initiatives in Japan's oil industry using case examples of serious accidents that have occurred at petroleum complexes in Japan. The cases included (1) accidents in which corrosion was caused by a facility design flaw; (2) accidents caused by failure in change management coupled with inadequate inspection technology; (3) accidents caused by poor technology succession, deterioration of safety culture and a breach of rules; and (4) accidents caused by natural disasters.

The lecture also introduced TPM activities that strengthen organizations and change manager attitudes, in addition to voluntary maintenance activities and the 5S concept that underlie those activities.

3.2 Typical Material Damage/Corrosion Threats in the Refinery

Lecturer: Mr. Takao Shimizu, Chiyoda Corporation
This lecture discussed (1) deterioration damage
at high temperatures (approx. 200°C and higher), (2)
environmental embrittlement and cracks (at temperatures
below 200°C), and (3) assessment and countermeasures
of fatigue damage and equipment deterioration
through typical cases that have occurred in the past
and photographs of such damage classified into ductile
fracture, brittle fracture, and fatigue damage.



TAKREER (with female participants)

3.3 Corrosion Control Technologies for Facilities in the Refinery

Lecturer: Mr. Hiromitsu Saito, Cosmo Oil Co., Ltd. This lecturer discussed corrosion control technologies for six types of facilities (CDU, VDU, HT, CR, FCC, boilers) in consideration of the equipment configuration in refineries in each country. It provided detailed explanations of representative corrosion cases that have occurred in Japan and their countermeasures with a focus on materials, and allowed comparisons of corrosion and damage that have actually occurred in the two countries.

3.4 Reliability Management for Static Equipment

Lecturer: Mr. Hiromitsu Saito, Cosmo Oil Co., Ltd.

This lecture mainly focused on corrosion monitoring and control, predictive maintenance technologies, life assessment technologies, and countermeasures for aging equipment. As it covered issues ranging from the basic concept of predictive maintenance to general maintenance, and included simple to advanced knowledge, the lecture was well-received by all levels of participants, from beginners to skilled engineers. The Q&A on practices in Japan particularly contributed to finding solutions to the many maintenance matters under consideration at Saudi Aramco.

3.5 Introduction of KPI, RCM, RBI

Lecturer: Mr. Kiyoshi Sakaino, JGC Corporation
This lecture discussed key performance indicators
(KPI) using case examples of responses to various
equipment, followed by overviews of risk-based
inspection (RBI) and reliability-centered maintenance
(RCM), accompanied by specific examples. It also
provided an explanation of how to formulate inspection
plans using RBI as a method for determining work scope,
and introduced specific examples. Although this method
is already well-known by seasoned engineers, the lecture
provided encouragement to young engineers to hereafter
use the method.

3.6 Technologies for Plant Diagnosis and Life Extension

Lecturer: Mr. Kiyoshi Sakaino, JGC Corporation
This lecture discussed how to go about considering
the extension of a plant's lifecycle, and introduced the
main technologies needed in that process, including
(1) the latest inspection technologies, (2) inspection
using the Advanced Maintenance Inspection Support
(A-MIS) system for inspection data management, (3) the

Computational Fluid Dynamic (CFD) analysis method for predicting pipe flows, and (4) the thermal spray coating technology that is used in the maintenance of refineries and petrochemical plants.

3.7 Life Cycle Engineering (PLE)

[only at Saudi Aramco]

Lecturer: Mr. Eiichi Yamamoto, Eishin Techno Co., Ltd.

This lecture discussed lifecycle engineering of pressure facilities in plants from the perspectives of design, materials, production and inspection, deterioration damage, materials selection, principles of facility diagnosis and maintenance technologies, deterioration damage trends, serious past accidents and the development of technologies prompted by surveys and studies of such accidents, and recent trends related to the Post Construction Code (PCC).

4. Observations

At Saudi Aramco, there are high expectations for the continued implementation of this course, so improvements will be made to further enhance the program. As customized programs related to maintenance are applicable to all of Saudi Aramco's refineries, steady activities in response to actual circumstances of onsite

maintenance are expected of JCCP. JCCP also recognizes the need to seamlessly and continuously implement steady activities, and considers it an important priority to strengthen coordination with departments in charge of company-wide maintenance and inspection.

At TAKREER, the seminar invited many logical and pragmatic questions from the participants. Active discussions also took place, as represented by an episode in which an experienced maintenance planning officer advised the application of a new inspection technology to regular maintenance activities. With regard to risk management, the future development of RBI will likely become an important issue at TAKREER. Therefore, how well inspection engineers can understand RBI and utilize the data they obtain during operations is expected to become important factors in addressing the issue. Based on this understanding, JCCP believes it can provide effective support to UAE by providing medium-term technical cooperation through a team of TAKREER engineers who have gained experience in a Japanese refinery.

The seminars implemented in Saudi Arabia and UAE provided advanced and high-quality knowledge of maintenance technologies in general, but further improvements will be made to provide programs that will more widely benefit maintenance activities in oil-producing countries.

by Fumihiro Tone, Training Dept.>



CPO on Japanese-style HRM/HRD for Uzbekneftegaz (CPO-1-15)

1. Course Background and Objectives

This Customized Program-Overseas (CPO) was designed for participation by management-level officers in Uzbekneftegaz's HRM/HRD departments and training centers, and was organized in response to a request from Mr. Shokir Fayzullaev, then Chairman of the Board.

Prior to implementation of the program, Uzbekneftegaz conveyed a message that it has high hopes for the successful implementation of the program, which will be Uzbekneftegaz's first-ever participation in a program of its kind. It also noted that roughly 90 Uzbekneftegaz employees have participated in JCCP training in Japan to date, and have effectively acquired Japanese technologies and techniques that differ from the technologies and management practices of the former style. Furthermore, it explained that the company places strong emphasis on the education and training of its 130,000 employees, and as JCCP training is included in the scope of its overseas training program, it wishes to maintain friendly relations with Japan through future JCCP HRD programs.

2. Content

Before launching into the program, H.E. Mr. Fumihiko Kato, Japanese Ambassador to Uzbekistan, delivered an opening speech. He spoke about the friendly relationship between Uzbekistan and Japan, and particularly underscored JCCP's contribution to human resource development. He then pledged the Japanese government's continued cooperation for HRD at Uzbekneftegaz, the largest company in Uzbekistan's energy industry.

As an introduction to the seminar, Dr. Hiromasa Tanaka, an authority on HRD planning, gave a keynote presentation. Using slides and a video, he described the overall structure of the three-day seminar, defined HRM and HRD, and explained the concept of business discourse, all the while accepting questions from the floor. Through this introductory session, the JCCP team gained a general idea of the participants' interests, level of understanding and language proficiency.

The first day of the seminar featured a lecture by Mr. Taro Shoji, JCCP lecturer, on the history, cultural background and present state of Japanese-style HRM and HRD and the direction of future changes. The second day featured a lecture by Mr. Kazuyuki Yoshitomi, JCCP lecturer, on the practices and present state of HRD at Idemitsu Kosan, a representative oil company in Japan (engaging mainly in downstream activities and specifically in refinery operations). On the third day, Dr. Tanaka provided guidance on creating and evaluating practical HRD plans based on HRM/HRD theories and examples that were studied on the first two days.

3. Summary

The seminar was designed to allow participants to learn from case examples in other countries and study how to optimize HRD plans in their company from diverse approaches through three days of lectures and workshops.

In Uzbekistan, foreign currency repatriation and the employment of returning workers is a pressing issue today, as the more than one million migrant workers who have worked in Russia are returning to Uzbekistan due to the economic stagnation in Russia that has occurred as a result of economic sanctions and the falling prices of crude oil and gas.

As the largest energy company in Uzbekistan, Uzbekneftegaz assumes the role of supporting the national employment security policy. It is also a



Completion ceremony for CPO-1-15 seminar on HRM/HRD, Sept. 18, 2015 (at Gubkin Russian State Oil and Gas University, Tashkent Branch)

monopoly that supplies the nation's energy needs excluding electric power, as it engages in all energy-related businesses in the country, including the operation of nationwide refineries and pipelines, the manufacture of drilling equipment, service station management and logistics management.

The central government of Uzbekistan has designs to allow corporate executives to study the HRM and HRD methods of private companies in Western Europe and Japan to allow state-run companies to shed their old style management framework and achieve modernization. This movement has accordingly led to Uzbekneftegaz's promotion of overseas training for its HRM/HRD departments and participation in JCCP training and other training programs in Japan. The company also endorses the participation of its upstream departments in training offered in Japan.

The Uzbek people display a national character resembling that of the Japanese, and are characteristically

good-natured, earnest and kind. They have local communities called *mahalla*, which form the basis of neighborhood ties, and value teamwork.

Incidentally, the people of Uzbekistan have high respect for the Japanese, stemming from the construction of the Navoi Theater by Japanese prisoners of war during World War II. They acknowledge the diligent effort of the Japanese, despite being prisoners, in constructing the sturdy theater, which has proven to be strong enough to withstand even a massive earthquake.

Many young people in Uzbekistan have an interest in Japan's culture and economic growth, and are avid fans of learning the Japanese language. Among the participants of the seminar as well, many expressed strong admiration of Japanese technologies and products.

Lastly, we wish to extend our deep appreciation to the members of Uzbekneftegaz and all others concerned for their support and cooperation in bringing the seminar to a successful completion.

by Taro Shoji, Human Resource Development Dept.>



JCCP Regular Courses Completed

TR-1-15 Future Advanced Technology for Petroleum Industry April 7 – April 24, 2015

Content: New Business Strategies in Japanese Oil Companies;

World Energy Situation and New Energy;

Hydrogen Society; Workshop for Refinery Equipment

Optimization by Using Virtual Refinery; Power Generation from Waste and Tank Vapor

Recovery

Site visits: Chiyoda Corporation (Yokohama City, Kanagawa

Pref.);

Carbon Dioxide Capture and Storage Demonstration

Site of Japan CCS Co., Ltd. (Tomakomai City,

Hokkaido Pref.);

Sanyu Plant Service Co., Ltd. & Kazusa Clean System Co., Ltd. (Togane City & Kisarazu City, Chiba Pref.); Tobu Energy Management Co., Ltd. (Sumida City,

Tokyo);

National Institute of Technology and Evaluation

(NITE / Kisarazu City, Chiba Pref.);

Hasaki Wind Farm & Suigo Itako Solar Power Plant (Kamisu & Itako City, Ibaraki Pref.);

JX Nippon Oil & Energy Corporation (Yokohama City, Kanagawa Pref.);

Chugai Technos Corporation (Tsukuba Bio-Frontier Center / Tsukuba City, Ibaraki Pref.)

Countries: Indonesia, Kazakhstan, Kuwait, Myanmar, Pakistan, Sudan, Thailand, Vietnam

TR-2-15 Petroleum Marketing April 13 – April 24, 2015

Content: 1. Petroleum Industry in Japan:

Refining, product shipping system, integrated refueling system in airport, latest service station

facilities, retail dealer business

2. Business skill workshop:

Oil derivatives, decision making process of crude oil buyers, advanced negotiation, procurement,

financial accounting

Site visits: Kyokuto Petroleum Industries, Ltd. (Chiba Refinery);

Fujitani Inc. (depot & service stations);

San-Ai Oil Co., Ltd. (Haneda Airport Branch); Tatsuno Corporation (Yokohama Factory)

Countries: Ecuador, Kazakhstan, Mexico, Thailand, UAE,

Vietnam



<8 countries / 11 participants>

Lecturer: Bunsuke Kariya



<6 countries / 9 participants>

IT-1-15 Material Problems and Their Countermeasures November 4 – November 21, 2015

Content: Petroleum Industry in Japan;

Maintenance Strategy & Activities;

Corrosion and Materials for Refining Processes; Maintenance Management in Japanese Refinery, Trouble Experiences and Countermeasures;

Material of Pressure Vessels;

Estimation of Remaining Life of Static Equipment;

Latest Welding Technologies;

Evaluating and Controlling Technology of Welding

Quality;

Corrosion & Deterioration Problems of Materials in

Refinery;

Typical Mechanical Damages in Refining Industry;

Safety and Reliability of Aged Plants;

Case Study and Discussion

Site visits: Toa Oil Co., Ltd. (Keihin Refinery);

Japan Steel Works, Ltd. (Muroran Plant);

IHI Corporation (Production Engineering Center); Chiyoda Corporation (Global Headquarters)

Countries: Indonesia, Iraq, Kuwait, Myanmar, Pakistan, Sudan, Thailand, UAE, Uzbekistan, Vietnam



<10 countries / 11 participants>

Lecturer: Kazuhiro Wakamatsu

TR-3-15 Upgrading Processes of Heavy Oil May 12 – May 29, 2015

Content: Outline of Upgrading of Heavy Oil;

Hydrotreating and Hydrocracking Catalyst; Thermal Cracking Process; GCC Technology and Selection of Heavy Oil Upgrading Process; FCC & Resid-FCC Process Technology;

Hydrotreating and Hydrodesulfurization Process

Technology;

FCC Catalyst Reaction Theory;

Thermal Cracking (Delayed Coker Flexi Coker) Unit

and FCC Unit;

Operation and Trouble Shooting and Decreasing

Effect in Heavy Oil Production;

Developed HDS & FCC Catalyst and Its Theory; Process and Characteristics of RFCC and VRHDS

Unit;

Evaluation Technology and Its Results for HDS Catalyst & FCC Catalyst; Process Simulator Practice of FCC Start-up & Operation Trouble Examples;

Linear Programming and Production Planning for Refinery

Site visits: JGC Catalysts and Chemicals Ltd. (Wakamatsu-ku, Kitakyusyu City);

JX Nippon Oil & Energy Corporation (Marifu Refinery / Kuga District, Yamaguchi Pref.);

Nippon Ketjen Co., Ltd. (Niihama Division / Niihama City, Ehime Pref.); Toa Oil Co., Ltd. (Keihin Refinery / Kawasaki City, Kanagawa Pref.)

Countries: Cambodia, Indonesia, Iraq, Myanmar, Peru, Philippine, Sudan, Thailand, Vietnam



<9 countries / 11 participants>

TR-4-15 Fundamentals and Applications of Instrumentation and Control in the Oil Downstream

May 12 – May 29, 2015

Lecturer: Kunio Kawashima

Content: New Course: Fundamentals of instrumentation and

control to younger engineers.

Principle of Measurement (flow, level, etc.);

PID and Its Tuning Method;

Applications of Instrumentation and Control; Advanced Control and Process Optimization;

Fieldbus Technology; Wireless Systems; Safety Systems;

Instrument Modernization

Site visits: Yokogawa Electric Corporation (Headquarters);

Endress+Hauser Japan Co., Ltd. (Kofu Factory); Idemitsu Kosan Co., Ltd. (Aichi Refinery); Shinkawa Sensor Technology, Inc. (Hiroshima

Factory); OVAL Corporation (Yokohama Operation Center); Azbil Corporation (Fujisawa Technology Center & Shonan Factory

Countries: Cambodia, Indonesia, Kuwait, Pakistan, Saudi Arabia, Sudan, Thailand, Uzbekistan, Vietnam



<9 countries / 10 participants>

Lecturer: Taro Shoji

TR-5-15 Human Resource Management May 26 – June 12, 2015

Content: Petroleum Industry in Japan;

Transitional Changes and Status quo of

Japanese-style Human Resource Management &

Development;

HRM of Japanese Oil Company;

HRD & TPM at Refinery;

Small Group Activity at Refinery;

Rational Thought and Team Consensus Building; Training Program Development for Curriculum

Development and Evaluation;

National Petroleum Stock Piling System;

Renewable Energy

Site visits: JX Nippon Oil & Energy Corporation (Negishi

Refinery);

Idemitsu Kosan Co., Ltd. (Aichi Refinery); Cosmo Oil Co., Ltd. (Sakai Refinery);

Kitakyushu Eco Town Center;

JOGMEC (Shirashima National Petroleum Stockpiling Base);

Meisei University

Countries: Azerbaijan, Bangladesh, Ecuador, Indonesia, Kazakhstan, Saudi Arabia, UAE, Vietnam



<8 countries / 14 participants>

TR-6-15 Maintenance Management May 26 – June 12, 2015

Content: Petroleum Industry in Japan;

Maintenance Management in Japanese Refineries; Corrosion and Fouling Control for Petroleum; Manufacture and Inspection Technologies for

Turbine and Boiler;

Maintenance Technology and Reliability

Management for Plant Pumps;

Manufacture Technology and Material

Characteristics of Stainless Steel Tubes & Pipes; Project Management, Maintenance Management,

Risk & Reliability Management, Inspection

Management System;

Maintenance Management & Technology as

Contractor;

Operational Practices and Maintenance of Mechanical Seals;

Safety and Reliability of Aged Plants;

Plant Life Cycle Engineering

Site visits: Mitsubishi Hitachi Power Systems Co., Ltd. (Nagasaki Plant);

Torishima Pump Mfg. Co., Ltd. (Takatsuki Works);

Nippon Steel & Sumitomo Metal Corporation (Steel Tube Works);

Cosmo Oil Co., Ltd. (Yokkaichi Refinery); JGC Corporation (Yokohama Headquarters);

Sankyu Inc. (Maintenance Centre);

EagleBurgmann Japan Co., Ltd. (Niigata Factory)

Countries: Bangladesh, Ecuador, Indonesia, Iraq, Kuwait, Saudi Arabia, Sudan, Vietnam

TR-7-15 Advanced Technologies in a Transforming Energy Market June 1 – June 18, 2015

Content: Energy and Environment Strategies of Oil Industry;

Energy Market and Long-term Plan of Japan;

Energy Saving in a Stockpile Base;

Renewable Energy (Solar, Wind, Geothermal);

Advanced Technologies for Energy and

Environment;

Advanced Technologies for Power Generation; Energy Efficiency Technology and Gasification;

Hydrogen Transportation;

Carbon Capture and Storage; CO₂ EOR; Workshop: Energy Project Development

Site visits: JOGMEC (Kuji National Petroleum Stockpiling

Base);

Rokkasho Energy Park;

Tohoku Electric Power Co., Inc. (Sumikawa Geothermal Power Station, Onagawa Nuclear Power Plant, Sendai Solar Power Plant);

Kobe Steel, Ltd. (Kobe Works);

Hitachi, Ltd. (Kobe works);

Mitsubishi Hitachi Power Systems Co., Ltd. (Yokohama Works)

Countries: Bangladesh, Cambodia, Ecuador, Indonesia, Kuwait, Myanmar, Saudi Arabia, Thailand, UAE,

Vietnam



<8 countries / 11 participants>



<10 countries / 15 participants>

TR-8-15 Environmental Management for Sustainability August 25 – September 11, 2015

Content: Japanese Oil Company's New Business Strategy;

Environmental Management in Japanese Refinery;

CSR Strategy of Japanese Refinery;

Advanced Environmental Project Planning

(Countermeasures for Air Pollution);

Carbon Capture and Storage;

International Efforts for Climate Change; Air Pollution Monitoring and Simulation;

Class Discussion (Case study and group discussion for the problems and countermeasure in your

environmental management)

Site visits: Chugai Technos Corporation;

Kawasaki Heavy Industries, Ltd. (Kobe Works);

Shimadzu Corporation;

Fuji Oil Co., Ltd. (Sodegaura Refinery);

Swing Corporation;

Sanyu Plant Service Co., Ltd.

Countries: Cambodia, Kuwait, Mexico, Myanmar, Sudan, Thailand, UAE



<7 countries / 8 participants>

TR-9-15 Reliability Enhancement and Maintenance Management of Rotary Machinery August 25 – September 11, 2015 Lecturer: Shinji Marumo

Content: Petroleum Industry in Japan;

Reliability Enhancement and Maintenance Management for Rotary Machinery; Maintenance Technology and Reliability

Management for Plant Pumps;

Various Technologies for Pumps and Steam Turbines;

Refinery Practices for Maintenance of Rotary

Machinery;

Operational Practices and Maintenance

Technologies for Compressors;

Various Technologies for Gas Turbines; Operational Practices and Maintenance of

Governors;

Operational Practices and Maintenance of

Mechanical Seals;

Instrumentation for High-efficiency Power

Generation;

Vibration Measurement and Control Systems

Site visits: Torishima Pump Mfg. Co., Ltd. (Takatsuki Works);

Shin Nippon Machinery Co., Ltd. (Kure Factory);

JX Nippon Oil & Energy Corporation (Marifu Refinery);

Kobe Steel, Ltd. (Takasago Works);

Mitsubishi Hitachi Power Systems Co., Ltd. (Takasago Works);

Woods Corporation (Head Office and Works); EagleBurgmann Japan Co., Ltd. (Niigata Factory); Yokogawa Electric Corporation (Mitaka Headquarters)

Countries: Cambodia, Indonesia, Kuwait, Myanmar, Oman, UAE, Vietnam



<7 countries / 9 participants>

TR-10-15 Advanced Technology and Control System of Power Generation Facilities **August 25 – September 11, 2015** Lecturer: Eiji Iwamatsu

Content:

Overview and Practice of Latest Power Generation Facilities:

Power Generation Facility-related Technologies (vibration sensor and governor maintenance technologies);

Latest DCS-related Technologies and APC System;

Control System for Actual Power Plants;

Other Related Technologies (basic process control theories with practice using computer simulator, optimization system and dynamic simulator technology, application for safety instrument system)

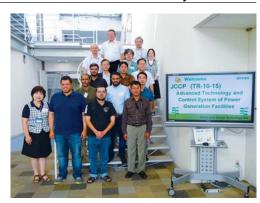
Site visits: Yokogawa Electric Corporation (Headquarters and

Kyushu Branch);

The Kitakyushu Next Generation Energy Park; JX Nippon Oil & Energy Corporation (Oita Refinery); Shinkawa Sensor Technology, Inc. (Hiroshima Factory);

Woods Corporation (Head Office)

Countries: Myanmar, Indonesia, Kuwait, Oman, Qatar, UAE, Vietnam



<7 countries / 8 participants>

Lecturer: Fumihiro Tone

TR-11-15 Project Management for High-Value-Added Petroleum Industry September 29 – October 16, 2015

Content:

To promote understanding of project management from the point of view of the owner side, and to improve project management and leadership abilities to create a high-value-added petroleum industry in the future.

Main Topics are as following;

- 1. Project management activities as project owner in refineries
- 2. Project Cost management
- 3. Project risk management and project contracts
- 4. Case study & discussion: "Problems in project management of your project and countermeasures"



<7 countries / 11 participants>

5. Visits to:

A refinery—to study project planning/management in a refinery for high-value-added petroleum industry;

An oil stockpiling terminal—to study tank inspection and execution;

A high pressure vessel manufacturer—to understand recent technologies for high pressure vessel manufacturing;

Two engineering companies—to study engineering of EPC project by IT utilization and to study EPC project risk management and schedule management;

An engineering company—to study;

A turbine manufacturer—to study recent turbine and boiler technologies; A steel pipe manufacturer—to study recent technologies for pipeline; and An inspection company—to study latest NDT inspection technologies

Idemitsu Kosan Co., Ltd. (Chiba Refinery); Site visits:

> Hokkaido Joint Oil Stockpiling Co., Ltd. (Hokkaido Office); JGC Corporation (Yokohama World Operation Center);

Chiyoda Corporation (Global Headquarters); The Japan Steel Works, Ltd. (Muroran Plant); JFE Steel Corporation (West Japan Works);

Non-Destructive Inspection Co., Ltd. (Headquarters); Mitsubishi Heavy Industries, Ltd. (Takasago Works)

Countries: Bangladesh, Indonesia, Kuwait, Myanmar, Sudan, UAE, Vietnam IT-2-15 Finance & Accounting Management October 13 – October 23, 2015

Content: Petroleum Industry in Japan;

Crude Oil Terminal; Refining and Shipping System;

Distribution of Petroleum Products; Workshop for Business Skill Development; Corporate Negotiation; Financial Accounting;

Procurement; Oil Derivatives;

Decision Making Process of Crude Oil Buyers

Site visits: Showa Yokkaichi Sekiyu Co., Ltd. (Yokkaichi

Refinery);

JX Nippon Oil & Energy Staging Terminal

Corporation (Kiire Terminal)

Countries: Indonesia, Kazakhstan, Myanmar, UAE, Vietnam



<5 countries / 10 participants>

Lecturer: Taro Shoji

TR-14-15 Human Resource Development November 2 – November 19, 2015

Content: Petroleum Industry in Japan;

Japanese-style Human Resource Management &

Development;

HRM/Training System of Sole Agent of Wholesaler

of Petroleum Products;

HRD of Engineering Company;

Training Program Development and Evaluation of

Training Activities; HRD & TPM at Refinery;

Rational Thought and Team Consensus Building

Site visits: Fujitani Oil Inc. (Hiroshima);

JGC Corporation (Yokohama);

Meisei University (Tama); Idemitsu Kosan Co., Ltd.

(Chiba Refinery / Ichihara)

Countries: Bangladesh, Indonesia, Kuwait, Mexico, Myanmar, Oman, Qatar, Saudi Arabia, Thailand, UAE,

Uzbekistan, Vietnam

<12 countries / 16 participants>

TR-15-15 Current Situation and Future Perspectives of LNG Technology November 2 – November 19, 2015 Lecturer: Toshinobu Ishikawa

Content: Global Natural Gas & LNG Market;

Outline of Natural Gas Processing and Liquefaction Plant; Exploration and Production of Natural Gas;

Steel Pipeline Technology;

Future Technology for Utilizing Natural Gas; LNG vaporizer and Natural Gas Compressor

Technology; Gas-Turbine Technology;

LNG Storage Tank Technology;

LNG Ship Technology;

LNG Loading Arm Technology;

LNG Terminal Operation

Site visits: Osaka Gas Co., Ltd. (Himeji LNG Terminal);

Kobe Steel, Ltd. (Takasago Works);

Mitsubishi Hitachi Power Systems, Ltd. (Takasago

Works);

Kawasaki Heavy Industries, Ltd. (Sakaide Shipyard);

JFE Engineering Corporation;

NKK Tubes

Countries: Cambodia, Indonesia, Myanmar, Philippine, Thailand, Uzbekistan, Vietnam



<7 countries / 8 participants>

IT-3-15 Latest Technologies for Power Plant Turbines and Boiler Systems

November 9 – November 19, 2015

Content: Petroleum Industry in Japan;
Overview of Latest Power Generation Equipment;

Recent Technologies for Turbine and Boiler; Maintenance Technology and Reliability

Management for Plant Pumps;

Vibration Measurement Equipment and Diagnostic

Techniques of Rotating Machinery;

Operational Practices and Maintenance of

Governors:

Water Management for Turbine and Boiler System

Site visits: Mitsubishi Hitachi Power Systems Co., Ltd.

(Yokohama Works);

Shinkawa Sensor Technology, Inc. (Hiroshima

Factory);

Torishima Pump Mfg. Co., Ltd. (Takatsuki Works); Woods Corporation (Head Office and Works)

Countries: Cambodia, India, Myanmar, Pakistan, Sudan, Thailand, Uzbekistan, Vietnam



<8 countries / 8 participants>

Lecturer: Takaaki Yuasa

TR-16-15 Wide Scope of Downstream Safety Management November 24 – December 11, 2015

Content: Safety Regulations and Disaster Prevention;

Safety Consideration for Plant Design and Risk

Management;

Safety Management for Plant Maintenance; Safety Management for the Refinery;

Risk Estimation by Insurance Companies;

Case Study and Discussion

Site visits: Sompo Japan Nipponkoa Risk Management Inc.

(Shinjuku Head Office);

Yokogawa Electric Corporation (Mitaka

Headquarters);

Idemitsu Kosan Co., Ltd. (Tokuyama Complex); JGC

Corporation (Headquarters);

JX Nippon Oil & Energy Corporation (Negishi

Refinery);

JX Nippon Oil & Energy Staging Terminal Corporation (Kiire Terminal)

Countries: Indonesia, Myanmar, Oman, Peru, Thailand, Uzbekistan, UAE, Vietnam

TR-17-15 Utilization of Information and Control Systems in the Oil Downstream November 24 – December 11, 2015 Lecturer:

Content: System Configuration in Refinery;

Latest Information System; PID Tuning Methods;

Distributed Control System (DCS); Hands-on Training of Process Control; Alarm Analysis; Operation Support System; Advanced Process Control; Process Optimization;

Modernization of Instrumentation; Safety Instrumented System;

Site visits: Yokogawa Electric Corporation (Headquarters &

Hiroshima Branch);

Fieldbus Wireless System

Azbil Corporation (Shonan Factory);

JX Nippon Oil & Energy Corporation (Marifu Refinery);

Idemitsu Kosan Co., Ltd. (Aichi Refinery)

Countries: India, Indonesia, Mexico, Myanmar, Philippine, Oman, Sudan, Thailand



<8 countries / 11 participants>



<8 countries / 8 participants>

IT-4-15 Turnaround and Inspection November 24 – December 4, 2015

Content: Outline of Petroleum Industry in Japan;

Maintenance Activities in Japanese Refineries; Manufacture and Maintenance Technologies of Screw, Centrifugal, Reciprocating Compressors; Inspection Technologies & Its Demonstration; Turnaround Maintenance and Inspection in the

Refinery;

Reliability Centered Maintenance, Risk Based Inspection, Inspection Management System;

Turnaround Maintenance;

Plant Maintenance & Technologies as Contractor and Human Resource Development of Contractor

Site visits: Kobe Steel, Ltd. (Takasago Equipment Plant);

Non-Destructive Inspection Co., Ltd.

(Headquarters);

Idemitsu Kosan Co., Ltd. (Chiba Refinery);

Sankyu Inc. (Maintenance Center);

JGC Corporation (Yokohama Headquarters)

Countries: India, Indonesia, Myanmar, Pakistan, Qatar, Sudan, Thailand, UAE, Vietnam



<9 countries / 9 participants>

CPJ-5-15 Program Formulation Course December 9 – December 17, 2015

Purpose:

Visits:

- (1) To discuss and finalize "Customized Program Overseas (CPO) & Customized Program Japan (CPJ)" program in 2016
- (2) To know about JCCP activities and to discuss the role of JCCP and the future activities
- (3) To have bilateral meeting with JCCP
- (4) To have bilateral meeting with JCCP member companies respectively
- (5) To promote mutual understanding and cooperation between participants and JCCP staff

Ministry of Economy, Trade & Industry;

Fuji Oil Co., Ltd. (Anegasaki Refinery);

Mitsubishi Motors Corporation (Mizushima Factory); Chugoku Electric Power Co., Inc. (Mizushima Plant)

Countries: Iran, Mexico





<2 countries / 11 participants>



Agreement Signing Ceremony for the "Joint Project on Quality Improvement of Petroleum Products (Vietnam)" with Binh Son Refining and Petrochemical Company Limited

In Vietnam, the Doi Moi Reform initiative that was launched in 1989 by the government helped revitalize the economy, and the country has marked a rapid economic growth of 5 - 10% per year for more than 20 years. As a result, the demand for petroleum products and asphalt has increased. At the same time, air pollution caused by the motorization of automobiles and motorbikes has become a serious environmental problem.

In order to tackle air pollution, the Vietnamese government is set to introduce European emission standards. At present, the sulfur content of fuel in Vietnam is 500 ppm in gasoline and 500 to 2,500 ppm in diesel. Because of the strong concern for air pollution caused by high sulfur fuel, the Vietnamese government announced a policy to reduce fuel sulfur content to the Euro 4 level (50 ppm) by 2016 and to the Euro 5 level (10 ppm) by 2021. However, the Dung Quat Refinery, the sole operating refinery in Vietnam, is not designed to produce fuel oil that satisfies these standards. Moreover, the refinery also does not have the capacity to produce road paving asphalt that is in increasing demand.

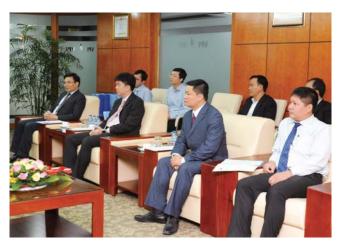
Given this situation, JCCP conducted the survey, "Technical cooperation for quality improvement of petroleum products in Vietnam with the natural gas resource," in fiscal 2014 to tackle the issue and identify additional issues facing the refinery. The results of the survey were then incorporated into a joint project launched in 2015.

In parallel with the project, JCCP conducted another project titled "LP software technology transfer and energy saving project" from FY2013 to 2014 to enhance the competitiveness of the Dung Quat Refinery. By employing an LP model, a plan for improving refinery operations was made and proposed. In addition, future LP models for multiple refineries in Vietnam were also made. Various case studies were then conducted, including a product optimization case and an energy cost minimization case.

The above circumstance led to the signing of an MOA on the "Technical cooperation for quality improvement of petroleum products in Vietnam" (July 2015 – March 2018) between JCCP and Binh Son Refining and Petrochemical Company Limited (BSR), an affiliate of the Vietnam Oil and Gas Group (Petrovietnam; PVN) on July 21, 2015. The ceremony took place at the VPI Tower (the building of Vietnam Petroleum Institute; VPI), and Mr. Dinh Van Ngoc, President of BSR, and Mr. Eiji Hiraoka, Senior Executive Director of JCCP, signed the MOA in the presence of Mr. Masaaki Toma, Secretary at the Embassy of Japan in Vietnam.

The Japanese side also included Dr. Hajime Okazaki, President of JX Nippon Research Institute, Ltd., which is participating in the project. The Vietnamese side was represented by Dr. Le Manh Hung, Vice Director of PVN, and Dr. Nguyen Anh Duc, General Director of VPI, and included approximately 15 other members from the Petrovietnam group of companies.

With the signing of the MOA, JCCP will commence the project on quality improvement of petroleum products at the Dung Quat Refinery. In addition to reducing the sulfur content of fuel oil, the refinery brought several new issues in the preparation process



Dr. Le Manh Hung, Vice Director of PVN, giving a greeting at the signing ceremony (far left)

to the signing ceremony. These include the reduction of vapor pressure and olefins content of gasoline, reduction of the C4 content in LPG, improvement of diesel fuel fluidity, reduction of sulfur and metal content and pour point of bunker (heavy) oil, octane number improvement agents, etc. By applying the oil product improvement technologies, coupled with expertise of Japanese companies, this project is expected to improve the quality of fuel oil and thereby improve the atmospheric environment in Vietnam.

The project is furthermore expected to create new business opportunities for Japanese oil companies and contribute to strengthening the friendly relations between Vietnam and Japan.

by Seiki Kisamori, Technical Cooperation Dept.>



Mr. Dinh Van Ngoc, President of BSR (center right), and Mr. Eiji Hiraoka, Senior Executive Director of JCCP (center left) after signing the MOA



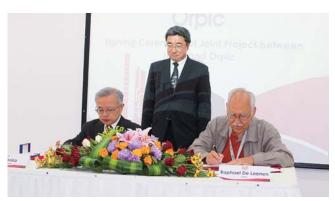


Agreement Signing Ceremony for the "Joint Project on Refinery Operation and Maintenance Technologies (Oman)" with Orpic

On June 14, 2015, JCCP and Oman Oil Refineries and Petroleum Industries Company (Orpic) held a Memorandum of Agreement (MOA) signing ceremony for the "Joint Project on Refinery Operation and Maintenance Technologies" at the head office of Orpic. In the presence of Mr. Hirofumi Murabayashi, Counsellor of the Embassy of Japan in Oman, Mr. Raphael De Loenen, COO of Orpic, and Mr. Eiji Hiraoka, (then) Special Counselor of JCCP, affixed their signatures to the MOA. Also in attendance was Mr. Hiroyuki Udagawa, Director of the Overseas Technical Cooperation Center, representing Cosmo Oil Co., Ltd. as the participating company on the Japanese side, in addition to some 20 members from Orpic.

JCCP has previously provided technical support to Orpic's Mina al Fahal (MAF) Refinery, but with the recent signing of the MOA, it will embark on technical cooperation mainly for operational improvement at the Sohar Refinery, the largest refinery in Oman. The project will be implemented jointly with Orpic from June 2015 to March 2018, and will focus on providing technical support for addressing issues that are occurring in relation to the crude distillation unit, aroma production unit and seawater desalination unit at the Sohar Refinery. Through this support, the refinery is expected to see a significant improvement in its operational efficiency.

Mr. De Loenen gave a speech in which he noted that Orpic and JCCP have undertaken joint projects



Signing of the MOA: Mr. Raphael De Loenen, COO of Orpic (right), Mr. Eiji Hiraoka, (then) Special Counselor of JCCP (left) and Mr. Hirofumi Murabayashi, Counsellor of the Embassy of Japan in Oman (center)



Members of the signing ceremony

on a continuous basis for more than 10 years, but the relationship between the two organizations has further strengthened with the commencement of this most recent project. He also stated that this MOA would provide an impetus for achieving the goal of international cooperation in the oil industry between Oman and Japan, and expressed his strong expectations of greater technical and personnel exchanges in the future.

In Oman, the MAF Refinery was built in the capital city of Muscat in 1982 as the country's first refinery, and commenced crude oil processing to satisfy domestic demand. Thereafter, a petrochemical complex centered on the Sohar Refinery was constructed in Sohar in 2006 with the aim of exporting petroleum and petrochemical products, and the refinery has since assumed an important role as the country's main refinery. Over a period of 12 years, from 2003 to 2014, JCCP has implemented joint projects on a continuous basis, mainly toward the operational improvement of the MAF Refinery. It has provided proposals and guidance on measures for achieving quality improvement that is compliant with the Euro 5 standards and has contributed to addressing various issues, such as the upgrading of the processing capacity of the refinery's crude distillation unit.

Expectations run high that this project will help improve Orpic's oil refining business, as well as contribute to further solidifying the friendly relations between Oman and Japan.

dy Osamu Nonaka, Technical Cooperation Dept.>



The 25th Saudi Arabia-Japan Joint Symposium and Reception



VIP members of the reception

The Saudi Arabia-Japan Joint Symposium was held on December 7 and 8, 2015 at King Fahd University of Petroleum and Minerals (KFUPM). Until last fiscal year, the symposium had been held every year on themes related to oil refining and petrochemical catalyst technologies, co-hosted by KFUPM, JCCP and the Japan Petroleum Institute (JPI). This year, Saudi Aramco, Saudi Arabia's national oil company, has joined as a host, envisaging further cooperation through the symposium from this year and beyond.

This year marked its 25th-year milestone. At the same time, it marked the 60th anniversary of the establishment of diplomatic relations between Saudi Arabia and Japan. To commemorate this auspicious occasion, a reception was held on December 6 at Mövenpick Hotel in Al Khobar, Saudi Arabia.

The reception opened with a congratulatory speech by the guest of honor, H.E. Mr. Norihiro Okuda, Ambassador of Japan to Saudi Arabia. He noted the 25 years of contribution made by Saudi Arabian and Japanese researchers, and summarized that the symposium is based on the strong, cooperative relationship that the two countries have nurtured through 60 years of relations. He mentioned that roughly 30% of Japan's crude oil is imported from Saudi Arabia. He then expressed his appreciation for Saudi Arabia's enormous contribution to the stability of the world oil market, and voiced his strong wish for the two countries to continue sharing

knowledge and experience through the symposium and maintaining their good relationship.

Dr. Khaled Al-Sultan, Rector of KFUPM, next gave a commemorative address. He stated that Saudi Arabia and Japan have built a strong relationship in the energy sector over many years, but that the time has come to take another step to build ties in new fields as well, such as in relation to culture, education and renewable energy. Additionally, he acknowledged the significant contributions that the long-term cooperation between KFUPM, JPI and JCCP have made to enhancing heavy oil processing technologies in Saudi Arabia, and noted that a joint project implemented with Saudi Aramco, which led to the commercialization of HS-FCC



Dr. Khaled Al-Sultan, Rector of KFUPM, giving a commemorative address

technology, is a prime example of that cooperation.

Following Dr. Al-Sultan, Prof. Wataru Ueda, Chairman of JPI, also gave a commemorative speech. After emphasizing the importance of petroleum as a limited national resource, he stated that JPI's 25 years of cooperation with KFUPM is a symbolic act arising from the friendly, cooperative relationship between Saudi Arabia and Japan, and expressed his strong wish to continue the efforts that will contribute to strengthening ties between the two countries in the future.

After the speeches, Mr. Eiji Hiraoka, Senior Executive Director of JCCP, gave a screen presentation on a retrospective view of JCCP projects that have been implemented in Saudi Arabia to date. It flashed back on scenes from personnel exchange programs, successful technical cooperation projects and the comings and goings of researchers and important figures under the Researcher Invitation/Dispatch Programs, and brought back memories to the audience.

Some 100 guests attended the reception. Among them were the next day's speakers, including internationally famous researchers such as Prof. Avelino Corma from Spain. Also present were members from Saudi Aramco, Japanese companies operating in the Middle East region, and KFUPM.

The symposium opened on December 7 with the attendance of some 120 participants. In addition to the guests of honor who delivered speeches on the previous day, Mr. Ahmad O. Al Khowaiter, CTO, Saudi Aramco, also gave a commemorative speech. He first expressed his appreciation for the commercialization of the HS-FCC process and the heavy oil hydrocracking catalyst, as two examples of significant achievements that have been made to date. Then, he referred to COP21 that was being held in France during the symposium and to which he had to return immediately. He emphasized that



Mr. Ahmad O. Al Khowaiter, CTO of Saudi Aramco, giving a commemorative speech



Symposium audience

technical developments also need to be made in the oil and gas industries to address the greenhouse gas issue, and firmly stressed that it is definitely possible to address the issue by developing effective technology.

The presentation sessions featured a total of 17 presentations on the latest technologies related to the development and evaluation of oil-refining and petrochemical catalysts. On the Japanese side, JPI gave six presentations, and a member of the JCCP Long-term Researcher Dispatch Program (Dr. Sachio Asaoka) also gave a presentation. On the Saudi Arabian side, KFUPM gave four presentations, Saudi Aramco two, and King Abdullah University of Science and Technology (KAUST) (Assoc. Prof. Kazuhiro Takanabe) one. Presentations were also given by two representatives from Spain (Prof. Avelino Corma, Prof. Luis Oro) and one from the Czech Republic (Prof. Jiri Čejka).

Three presentations by KFUPM included reports by researchers who studied under the JCCP Research Invitation Program, namely Dr. Mozahar Hussain and Dr. Oki Muraza, who engaged in research at Hokkaido University (Dr. Mozahar in FY2010; Dr. Muraza from FY2011 to 2012), and by Dr. Muhammad Atiqullah, who studied at Japan Advanced Institute of Science and Technology (FY2013), also under said program.

News of the symposium appeared in the local Arabic newspaper *Al-Yaum*.

The symposium has been focused on catalyst studies, but consideration is being given to even broader issues, including the commercialization of catalyst technologies. Furthermore, this year's symposium welcomed the participation of KAUST for the first time. Next fiscal year and beyond, the symposium envisages presentations from a wider range of oil-related institutions.

by Seiki Kisamori, Technical Cooperation Dept.>

Day One: Monday, December 7, 2015 Opening Remarks Session 7:45 Registration & Coffee Break 8:00 Opening Remarks

- H.E. Dr. Khaled S. Al-Sultan, Rector of KFUPM
- Mr. Ahmed Al-Khowaiter, CTO, Saudi Aramco
- Mr. Eiji Hiraoka, Senior Executive Director, JCCP
- <u>Dr. Wataru Ueda</u>, President, JPI

Session 1: Light Alkanes

<Chairperson: Dr. Naonobu Katada>

- 8:30
 1. Separations of CO₂/methane, and propene/propane and hydrocarbon reactions with zeolite catalysts

 Dr. Avelino Corma, ITQ, Spain and KFUPM
- 9:15 2. Light alkane activation chemistry and technology using high dimensional crystalline complex metal oxide catalysts

 <u>Dr. Wataru Ueda</u>, Kanagawa University, Japan
- 9:45 Coffee Break

Session 2: Aromatics and Chemicals <Chairperson: Dr. Omer Koseoglu>

- 10:15 3. A study on converting C10+ aromatics to xylene over bifunctional zeolite catalysts Mr. Mohammed Al Khunaizi, Saudi Aramco R&DC
- 10:45 4. Development of technology for converting fuel oil to aromatics Mr. Hirotaka Mori, JX Nippon Oil & Energy Corporation
- 11:15
 5. Heterogeneous catalysis for direct synthesis of chemicals from alcohols, CO₂ and biomass platform compounds

 Dr. Ken-ichi Shimizu, Hokkaido University
- 12:00 Prayer & Lunch Break

Session 3: Olefins Production <Chairperson: Dr. Mikihiro Nomura>

- Silicalite-1 as efficient catalyst for propylene production from alkenes
 <u>Dr. Hideshi Hattori</u>, KFUPM Chair
- 13:30 7. **Self-metathesis of butenes**<u>Dr. Sohel Shaikh</u>, Saudi Aramco R&DC
- 14:00 8. Conversion of methanol to propylene in valorization of shale-gas to petrochemicals Dr. Oki Muraza, KFUPM CENT/ChE
- 14:30 Day One Ends

Each presentation includes a 5-minute Q&A

Day Two: Tuesday, December 8, 2015				
Session 4: Catalyst Design			<chairperson: dr.="" ken-ichi="" shimizu=""></chairperson:>	
8:15	Reg	Registration & Coffee Break		
8:30	9.	Two-dimensional zeolites in catalysis <u>Dr. Jiři Čejka</u> , J. Heyrovský Institute Physical Chemistry	y, Czech Republic and KFUPM	
9:00	10.	Towards the design of aluminosilicate catalyst: measurements and understanding of origin of the acidic property of solid <u>Dr. Naonobu Katada</u> , Tottori University, Japan		
9:30	11.	Reaction chemistry and technology for catalyst of consortium: Butane to butadiene <u>Dr. Sachio Asaoka</u> , JCCP-KFUPM	design using hierarchical metal oxide	
10:00	Cot	Coffee Break		
Session 5: Fuel Upgrading <chairperson: ba-sh<="" dr.="" mohammed="" td=""><td>:Chairperson: Dr. Mohammed Ba-Shammakh></td></chairperson:>		:Chairperson: Dr. Mohammed Ba-Shammakh>		
10:30	12.	Understanding a role of cocatalyst for photocata electrochemistry <u>Dr. Kazuhiro Takanabe</u> , KAUST	alytic hydrogen evolution using	
11:00	13.	Heavy oil upgrading using Fe based slurry cataly Dr. M. Mozahar Hossain, KFUPM ChE	rsts	
11:30	14.	The effect of operational variables in delayed co. Mr. Yoshihiro litsuka, Cosmo Oil Co.	oker	
12:00	Prag	rayer & Lunch Break		
Session 6: Carbenes/Membranes/Polyolefins <chairperson: al-ghamdis<="" dr.="" sameer="" td=""></chairperson:>				
13:00	15.	Alkyne hydrothiolation by rhodium n-heterocyclic carbene catalysts <u>Dr. Luis Oro</u> , Zaragoza University, Spain		
13:30	16.	Development of silica based membranes for hydrocarbon separation <u>Dr. Mikihiro Nomura</u> , Shibaura Institute of Technology, Japan		
14:00	17.	Methylaluminoxane-activated polyolefin precatalysts: An applied research approach <u>Dr. Muhammad Atiqullah</u> , KFUPM CRP		
14:30	Clo.	Closing Remarks, Symposium Ends		

Each presentation includes a 5-minute Q&A



"Technical Collaboration Project for Newly Planned Corrosion Assessment and Mitigation Technology Program" and International Conference in Kuwait

In recent years, many Middle East oil-producing countries have begun building hydrorefining units for automotive fuel oil, with an eye to reinforcing their oil refining capacity and strengthening environmental countermeasures. At the same time, however, various refinery units in existing oil refineries are showing advancing states of corrosion as a result of long years of operation, and are in need of corrosion assessment, prevention and maintenance measures.

In response to this situation, JCCP has implemented the "Technical Collaboration Project for Newly Planned Corrosion Assessment and Mitigation Technology Program, Kuwait" over a period of four years, from 2012 to 2015, with the Petroleum Research Center (PRC) of Kuwait Institute for Scientific Research (KISR) as its counterpart.

The project mainly addressed the following issues:

- (1) Technical guidance on corrosion and corrosion mitigation for engineers working in oil-related facilities in Kuwait;
- (2) Analysis of chloride-induced stress-corrosion cracking behavior of stabilized stainless steel in a hydrogen sulfide environment;
- (3) Establishment of an analysis method for material damage case examples and remaining life prediction technology for furnace pipes (Cr-Mo steel) in oil refineries;
- (4) Development of a method for monitoring electrochemical corrosion and its application to an actual plant (examination of the applicability of the noise method);
- (5) Efficient corrosion assessment of heat exchanger tube materials in a harsh process environment;
- (6) Galvanic corrosion of carbon steel and 321ss/ incoloy 825 steel in an ABS (ammonium bisulfide) environment;
- (7) Life-extending technology for aging plants; and



Mr. Assad Al-Saad, CEO of Petrochemical Industries Company, giving an address



Mr. Eiji Hiraoka, Senior Executive Manager of JCCP, giving a speech

(8) Monitoring technology for diagnosis of concrete deterioration in the oil industry.

During the course of the project in 2013 and 2015, the electrochemical corrosion monitoring method was presented at EUROCORR, a congress of corrosion mitigation, as a fruit of the project, and gained high acclaim not only from KISR but also from many

external institutions. Based on this favorable review, JCCP sponsored a three-day international conference on corrosion, from October 12 to 14, 2015, at the Hilton Hotel in Kuwait.

The international conference was titled, "Kuwait Japan Joint International Conference, RISK MANAGEMENT for Integrity of Oil Production and Refining Facilities." The term 'risk management' was included in the title, as it is being studied and implemented worldwide today as a wide-ranging activity for preventing accidents based on conventional corrosion assessment and mitigation measures. The conference was organized with the objectives of presenting the technically advanced results of the JCCP project, gaining extensive knowledge of accident prevention measures based on corrosion mitigation and management as a keyword, and reflecting that knowledge on future corrosion mitigation measures. Toward this end, distinguished speakers were invited from overseas, and a forum was organized for the provision of the latest information and exchange of views.

An opening ceremony was held on the first day of the conference, with speeches given by H.E. Mr. Toshihiro Tsujihara, Ambassador of Japan to Kuwait, and representatives of KPC and NACE-Kuwait. Thereafter, the proceedings featured a total of 24 lectures and presentations—six keynote lectures and 18 presentations—not only by members from oil institutions in Japan and Kuwait, but also from North America, Europe and the GCC region. They included six presentations from speakers representing Japan, six from Kuwait, four from the GCC region, and two from Europe.

Kuwaiti and Japanese speakers mainly presented their achievements of the recent JCCP project, but also spotlighted other information, such as facility



(From left) Mr. Yamamoto, Researcher at the Japan Society of Corrosion Engineering; Mr. Eiji Hiraoka, Senior Executive Manager of JCCP; Mr. Assad Al-Saad, CEO of Petrochemical Industries Company; Ms. Meena Marafi, Executive Director of KISR/PRC

risk management and risk countermeasures related to disaster prevention in the oil industry. In particular, the presentations on corrosion monitoring by electric noise method and life extension technology for aging plants, which were subjects derived from the project, were valued highly, as they are technologies that could be concretely introduced to refineries.

The conference also provided an opportunity for the audience and speakers to engage in active exchanges of views regarding future corrosion mitigation measures, facility management policies, and other such relevant issues.

A week prior to the conference, a JCCP-sponsored alumni meeting was held in Kuwait, and served to increase awareness of JCCP within Kuwait.

Based on the results of the conference, JCCP will continue to organically link personnel exchange programs and technical cooperation projects, and further promote their implementation in the future.

by Yukio Nomura, Technical Cooperation Dept.>

Personnel Changes

Incoming Personnel

Training Dept.

Administration Dept.



Kazuyuki MUROI (July 1, 2015)



Almazyad Othman (October 19, 2015)

Thank you for reading *JCCP NEWS*. If you have any comments or feedback about this newsletter, please free to contact us by e-mail.

Your feedback is appreciated.

Planning & Public Relations Group, Administration Department E-mail: planning@jccp.or.jp



We are pleased to bring you the 2016 (January) edition of JCCP NEWS.

The 34th JCCP International Symposium was held on January 28 at The Prince Park Tower Tokyo in Shiba, Tokyo. Conventionally, it has been held over two days, but the program was modified this year and consolidated into a single day. With a panel discussion by invited leaders from oil-producing countries held in the morning and two discussion sessions held in the afternoon, it was a day filled with valuable information.

The Friendship Committee for Women Career Development (FCW) held in May and November saw women from oil and engineering companies and industries in UAE and Japan assemble and pledge to stimulate activities by "women in petroleum." Please see the relevant article for details.

As mentioned at the beginning of this newsletter, this issue of *JCCP NEWS* will be the last to be published as a printed booklet. We are presently considering making the newsletter available online beginning from next fiscal year, and will announce details on how to access the new newsletter on our website (http://www.jccp.or.jp) as they become available.

Misako Iwase Planning and Public Relations Group Administration Dept.





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