

# The 16th Kuwait-Japan Joint Symposium

The 16th Kuwait-Japan Joint Symposium was held on January 13 and 14, 2015 at Jumeirah Beach Hotel Kuwait, jointly hosted by Kuwait Institute for Scientific Research (KISR), Kuwait National Petroleum Company (KNPC) and Japan Petroleum Institute (JPI), together with JCCP. The symposium has been held annually in Kuwait, initially with only KISR as partner, but KNPC joined as a participant from the 5th symposium and as a co-organizer from the 11th symposium. Owing to these developments, the symposium has become an unparalleled forum that covers a broad scope of issues, from catalyst research to refinery operations.

The Japanese side captured the interest of the Kuwaiti side with presentations of technical papers and practical knowledge such as the troubleshooting of actual corrosion cases in processing facilities in the refinery and procedures for operational optimization.

On the first day of the symposium, Mr. Faisal Al-Qattan from Mina Abdullah Refinery, KNPC, Dr. Meena Marafi, Executive Director of KISR, and Mr. Shigeru Yamamoto, First Secretary at the Japanese Embassy in Kuwait, gave opening addresses as the guests of honor, followed by words of greetings from Mr. Masaya Tsukidate, General Manager of the Technical Cooperation Department at JCCP, and Dr. Wataru Ueda, Chairman of JPI.

The symposium featured 18 presentations—two keynote speeches and 16 presentations—in five sessions. Total attendance, including the speakers, reached 120 people.

The names of the Japanese speakers and their presentation themes are shown below (in random order).

- (1) Dr. Wataru Ueda, Department of Material & Life Chemistry, Kanagawa University  
Presentation title: “Catalytic selective oxidation and its mechanism over high dimensionally structured  $\text{Mo}_3\text{VO}_x$ ”
- (2) Prof. Atsushi Muramatsu, Institute of Multidisciplinary Research for Advanced Materials, Tohoku University  
Presentation title: “MFI Zeolites Synthesis with Different Acidic Properties for DTO Reaction”
- (3) Dr. Shinichi Takasaki, Venture Academia  
Presentation title: “Evaluations of Neutralizing



Dr. Meena Marafi, Executive Director of KISR, and Dr. Wataru Ueda, Chairman of Japan Petroleum Institute

- Amines for Corrosion Control in the Overhead of Crude Distillation Units”
- (4) Mr. Taku Maeda, Central Technical Research Laboratory, JX Nippon Oil & Energy Corporation  
Presentation title: “Development of catalyst system for aromatics production from fuel oil”
- (5) Mr. Eiki Nagashima, Engineering Technology Division, Engineering Unit, Toyo Engineering Corporation  
Presentation title: “Trend of Corrosion Under Insulation (CUI) Assessment and Application to a Commercial Plant”
- (6) Mr. Eiji Kawai, Refinery, Petrochemical & New Energy Process Engineering Unit, Chiyoda Corporation  
Presentation title: “SPH (Slurry Phase Hydrocracking) Process as a cutting-edge upgrader — for upcoming diesel demand in not-too-distant future”

News of the symposium was distributed worldwide in English and Arabic via Kuwait News Agency (KUNA), and was also featured in seven local Arabic newspapers (*Al-Anba*, *Al-Shahid*, *Al-Wasat*, *An-Nahar*, *Ar-Ray*, *As-Sabah* and *As-Siyasah*).

The symposium underlined the awareness of Kuwait’s strong interest and expectations for Japan’s technologies, and of the role of JCCP activities in cooperative ties established with Kuwait through the concerted efforts of various Japanese institutions.

<by Sadao Wada, Technical Cooperation Dept.>

9:00 – 9:45 **Opening Addresses**  
 Mr. Faisal Al-Qattan, Mina Ahmadi Refinery, Kuwait National Petroleum Company  
 Mr. Shigeru Yamamoto, Commercial Attaché, The Japan Embassy in Kuwait  
 Dr. Wataru Ueda, President, Japan Petroleum Institute  
 Mr. Masaya Tsukidate, General Manager, Technical Cooperation Department, JCCP  
 Dr. Meena Marafi, Executive Director, Kuwait Institute for Scientific Research

9:45 – 10:30 **Keynote Presentation 1: “Corrosion and Equipment Failures in Refinery Units – General Prospective,” Dr. Abdul Hameed Al-Hashem, KISR**

10:30 – 10:45 **Coffee Break**

**Session 1: Failure Investigation <Chairperson: Dr. Hassan Al-Rabiah, KISR>**

10:45 – 11:10 **Presentation 1: Corrosion Challenge in ARD Fractionator Overhead System, Laxma Reddy Kethireddy, KNPC, MAA**  
 11:10 – 11:35 **Presentation 2: “External Corrosion of Tubes in Hydrocracker First Stage Reactor Effluent / H2S Stripper Feed Breech-Lock Heat Exchanger,” Mansour Al-Ghanem, KNPC, MAB**  
 11:35 – 12:00 **Presentation 3: “Failure of Vessel Trim Line Due to Under Deposit Corrosion in Atmospheric Residue Desulfurization Unit,” Nishant Kumbhare, KNPC, MAB**  
 12:00 – 12:25 **Presentation 4: “Assessment of Methanator Vessel In Hydrogen Manufacturing Unit After Temperature Excursion,” Bader Al-Harbi, KNPC, MSH**

12:25 – 1:15 **Prayer & Lunch Break**

**Session 2: Corrosion Management & Control <Chairperson: Dr Hanaa Al-Mazeedi, KISR>**

1:15 – 1:40 **Presentation 5: “Evaluations of Neutralizing Amines for Corrosion Control in the Overhead of Crude Distillation Units,” Dr. Shinichi Takasaki, Venture Academia**  
 1:40 – 2:05 **Presentation 6: “Trend of Corrosion Under Insulation (CUI) Assessment and Application to a Commercial Plant,” Eiki Nagashima, Toyo Engineering Corporation**  
 2:05 – 2:30 **Presentation 7: “Challenges in Corrosion Management in Ageing Petroleum Refineries,” Naser Al-Sebaili, KNPC, MSH**  
 2:30 – 2:55 **Presentation 8: “A Novel Rig for Investigating the Susceptibility of Metals/Alloys to Stress Corrosion Cracking in Flowing Fluid,” Dr. Rihan Omar Rihan, KISR**



*KISR, JPI and the symposium secretariat*

Session 3: Green Initiatives in Refining Industry <Chairperson: Prof. Atsushi Muramatsu, Tohoku University>

- 9:00 – 9:25 Presentation 9: "Investigations on Parameters Controlling the Production of Diesel Fuel," **Dr. Abdulazim Marafi**, KISR
- 9:25 – 9:50 Presentation 10: "SPH (Slurry Phase Hydrocracking) Process as a cutting-edge upgrader — for upcoming diesel demand in not-too-distant future," **Eiji Kawai**, Chiyoda Corporation
- 9:50 – 10:15 Presentation 11: "Crossflow Microfiltration of Synthetic Oily Effluent using Multi Channel Ceramic Membrane," **Dr. Yousef Alanezi**, PAAET, Kuwait
- 10:15 – 10:30 Coffee Break

Session 4: Advancements in Catalyst Development <Chairperson: Mr. Faisal Al-Qattan, KNPC>

- 10:30 – 11:15 Keynote Presentation 2: "MFI Zeolites Synthesis with Different Acidic Properties for DTO Reaction," **Prof. Atsushi Muramatsu**, Tohoku University
- 11:15 – 11:40 Presentation 12: "Role of Catalyst Preparation and Support Composition on Hydrodesulfurisation," **Dr. Mohan Rana**, KISR
- 11:40 – 12:05 Presentation 13: "Development of catalyst system for aromatics production from fuel oil," **Taku Maeda**, JX Nippon Oil & Energy Corporation
- 12:05 – 1:15 Prayer & Lunch Break

Session 5: Oxidative Refining Processes <Chairperson: Dr. Mohan Rana, KISR>

- 1:15 – 1:40 Presentation 14: "Catalytic selective oxidation and its mechanism over high dimensionally structured  $\text{Mo}_3\text{VO}_x$ ," **Prof. Wataru Ueda**, Kanagawa University
- 1:40 – 2:05 Presentation 15: "CO and  $\text{CH}_4$  oxidation of unsupported and supported  $\text{CuCeO}_2$ ," **Dr. Ali Bumajdad**, Kuwait University
- 2:05 – 2:30 Presentation 16: "Current Research Progress in Oxidative Desulfurization of Oil Fuels Using Peroxides," **Dr. Muhieddine A. Safa**, KISR
- 2:30 Closing Remarks



JPI delegation in front of Kuwait Towers