

The 18th Saudi-Japan Joint Symposium

—Oil Refining and Petrochemical Catalyst Technologies—

On November 16 and 17, 2008, JCCP and King Fahd University of Petroleum and Minerals (KFUPM) sponsored a Saudi-Japan Joint Symposium on oil refining and petrochemical catalyst technologies at the KFUPM auditorium in Dhahran, Saudi Arabia. The symposium is held every year under organization by KFUPM and the Japan Petroleum Institute (JPI), and was held for the 18th time this year. It has taken root in Saudi Arabia as an annual event at KFUPM, and attracted the attendance of a large number of researchers not only from KFUPM, but also from Saudi Aramco's research department and others.

Following the preparatory discussion among KFUPM, JPI and JCCP, a twelve-member JPI Overseas Cooperation Committee headed by Dr. Koichi Eguchi from Kyoto University Graduate School actively discussed details of the symposium, including its theme, Japanese speakers, and their presentation topics, to deliver an academically meaningful symposium that suitably corresponds to needs in Saudi Arabia. The committee ultimately decided to feature presentations centering on the results of studies on environmentally friendly catalysts and catalysts that promote the effective production of high value-added products whose demands are expected to increase in the future.

JCCP and KFUPM have previously cooperated in conducting international joint research projects on advanced catalyst research (FY1992–2000) and HS-FCC (high-severity fluid catalytic cracking) technology (FY1996–2004). The last project was completed in FY2004, but the joint symposium, which has been held in parallel with the research projects, was continued as a forum for sharing new research results among researchers in Japan and oil-producing countries and supporting the activities of Saudi researchers.

Seven Japanese researchers participated in this year's symposium, presenting their latest R&D



Dr. Abdul-Jauwad, Vice Rector for Applied Research, delivering an opening address

achievements in their respective fields.

On the Saudi side, Dr. Shakeel Ahmed, a researcher at KFUPM, gave a presentation on a joint study on hydrogen production, which KFUPM is jointly implementing with Saudi Aramco. Titled "Development of Thermoneutral Reforming Catalyst for Hydrogen Production from Liquid Hydrocarbons," the presentation received high marks from all attendees, including the Japanese attendees. We hope to include increasing numbers of presentations on such conventional yet academically significant research themes in future symposiums, while also responding to trends of the times toward globalization and diversification of topics.

On the first day of the symposium, Dr. Abdul-Jauwad, Vice Rector for Applied Research, delivered an opening address on behalf of Dr. Khaled S. Al-Sultan, Rector of KFUPM, who was suddenly called away on business in Riyadh. This was followed by opening speeches by Dr. Sachio Asaoka, Professor at the University of Kitakyushu and head of the Japanese delegation, and Kazuhisa Okumura from the JCCP Technical Cooperation Department. An audience of approximately 100



Dr. Akinobu Shiga giving a presentation



*Symposium venue:
KFUPM Research Institute auditorium*

people sat in on the opening proceedings, and 60 to 70 people attended the ensuing presentation sessions. Approximately 130 participants were from the KFUPM Research Institute and colleges, Saudi Aramco, King Abdulaziz City for Science and Technology (KACST), and various companies and universities in Saudi Arabia.

An average of five questions were raised after each presentation, and the speakers and participants engaged in lively discussions based on those questions. They also took the opportunity of rest breaks between presentations to continue their discussions and cultivate personal exchanges.

We would like to extend our deepest gratitude to all speakers of the symposium, Dr. Sulaiman Al-Khattaf, Director of KFUPM Center for Refining and Petrochemicals, members of JPI's Overseas Cooperation Committee, and all members of both secretariats, for their support and cooperation. With the continued cooperation of Japanese universities, companies, research institutes, and JPI, we hope to continue working closely with KFUPM to further improve and develop the symposium as a high-level forum for advanced technical needs in Saudi Arabia.

<by Kazuhisa Okumura, Technical Cooperation Dept.>

Japanese Speakers from JPI	Presentation Title
Dr. Sachio Asaoka Professor, University of Kitakyushu	Hydrocracking on Nanoporous Zeolite Catalysts
Dr. Atsushi Satsuma Professor, Nagoya University Graduate School	Synthesis of Bisphenol-A from Phenol and Acetone Using Organic-inorganic Modified Heteropolyacid Catalyst
Dr. Takao Masuda Professor, Hokkaido University Graduate School	Preparation of Mono-dispersed MFI-type Zeolite Nanocrystals in Water-surfactant Oil Solution and their Application to Synthesis of Olefines from Oxygen-containing Compounds
Dr. Toshio Tsutsui Associate Professor, Kagoshima University	Enhancement of Conversion and Selectivity by Unsteady-state Operation in Shape Selective Synthesis of 2,6-Dimethylnaphthalene with ZSM-5
Dr. Akinobu Shiga Lummax Research Laboratory, Japan (formerly Senior Researcher of Sumitomo Chemical Co., Ltd.)	Development of Propylene Polymerization Catalysts and Polypropylene Manufacturing Processes
Mr. Katsuya Watanabe Group Leader, Central Research Laboratory, Cosmo Oil Co., Ltd.	Development of New Isomerization Process for Petrochemical By-products
Mr. Hiroyuki Nakamura Chief Researcher, Refining Technology Center, Japan Energy Corporation	Development of Hydrodesulfurization Catalyst Using Comparative Studies of Model Feed Experiments and Quantum Chemical Studies