

Catalysts in Petroleum Refining & Petrochemicals

King Fahd University of
Petroleum & Minerals-KFUPM

Japan Cooperation Center,
Petroleum-JCCP

The Japan Petroleum
Institute-JPI

KFUPM Research Institute Bldg. 15; 4th floor, Dhahran, Saudi Arabia, November 5-6, 2006

Day One: Sunday, November 5, 2006

OPENING REMARKS

Chairman: Dr. Sulaiman Al-Khattaf

8:00 Registration and Coffee Break

8:30 Opening Remarks

- H.E. Dr. Khaled S. Al-Sultan, Rector of KFUPM
- Dr. Sachio Asaoka, Head Japanese Delegation, The Japan Petroleum Institute, JPI
- Mr. Kazuhisa Okumura, Deputy General Manager, JCCP Technical Cooperation Dept.

I. NANOCATALYSTS & CLEAN FUELS

Chairman: Dr. Miki Niwa

9:00 1. Keynote Paper: Nano-Structured Heterogeneous Catalysts: One More Step to an Atomic Scale Design of the Active Surface, Dr. Denis Uzio, Saudi Aramco, Dhahran

9:30 2. Iso-Paraffin Production on Nano-Porous Catalyst Composed of Zeolite and Nano-Oxide, Professor Sachio Asaoka, The University of Kitakyushu, Japan

10:00 Coffee Break

10:30 3. Pure & Doped Cerium Oxides Nanoparticles Prepared in Cationic-non-ionic Stabilized Water in Heptane Microemulsion, Dr. A. Bumajdad, Kuwait Univ. Chem.

11:00 4. Comprehensive Approach to Ultra Deep HDS of Light Cycle Oil
Dr. Ki-Hyoun Choi, Saudi Aramco, Dhahran

11:30 5. Research into Future Automotive Fuels for CO₂ Reduction - Applicability of Hydrogenated Palm Oil for Automotive Fuels, Dr. Akira Koyama, Nippon Oil Corp.

12:00 Prayer and Lunch Break

II. FT CATALYSIS & HEAVY OIL

Chairman: Mr. Saeed Al-Alloush

13:15 6. Performance & Molecular Structure of Fuel Oils & Lube Base Oils Prepared from Fischer-Tropsch Waxes, Mr. Manabu Kobayashi, Japan Energy Company.

13:45 7. Upgrading Fischer-Tropsch Products by Alkylation of C₆H₆ over Solid Phosphoric Acid, Mr. Andrew Pienaar, FT Refinery, Sasol Technology, South Africa

14:15 8. Slurry Phase Hydrocracking of Heavy Oil over Ni-Mo/Carbon Catalyst
Dr. Yoshikazu Sugimoto, National Institute of Adv. Industrial Science & Technology

14:45 9. A New Approach for Heavy Oil and Bitumen Dilution
Mr. Peter Van Oordorp, UOP LLC, USA

15:15 Day One Ends

18:30 Welcome Reception at Gulf Meridien Hotel, Al-Khobar

Each presentation includes 5-minutes Q&A

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Day Two: Monday, November 6, 2006

III. H₂ & CATALYTIC PROPERTIES

Chairman: Dr. Sachio Asaoka

- 8:15 Registration and Coffee Break
- 8:30 10. High Performance Catalyst for Preferential Oxidation of CO in H₂-Rich Gas Mixture
Mr. Musaed Al-Ghamdi, Center for Refining & Petrochemicals, KFUPM-RI
- 9:00 11. A Density Function Theory Study of CO Dissociation on Ni (111) Surface
Mr. Hiroshi Ohashi, Idemitsu Kosan Company, Japan
- 9:30 12. Production of H₂ & CNTs by Catalytic Non-oxidative Dehydrogenation of CH₄ & C₂H₆
Dr. Yuguang Wang, Saudi Aramco, Dhahran
- 10:00 Coffee Break
- 10:30 13. Overview of Catalyst Management & Selection Protocols at Saudi Aramco's Refineries: Case Study FCC Catalyst Selection, Mr. Saeed Al-Alloush, Saudi Aramco
- 11:00 14. Bronsted Acidity in HY and USY Studied by IRMS-TPD of Ammonia
Professor Miki Niwa, Tottori University, Japan
- 11:30 15. Kinetics of the Catalyzed Esterification Reaction of Propionic Acid with 1-Propanol
Dr. Sami H. Ali, Chemical Engineering Dept, Kuwait University
- 12:00 Prayer and Lunch Break

IV. OXIDATION & CHEMICAL PRODUCTS

Chairman: Dr. Adnan Al-Amer

- 13:15 16. Keynote Paper: Propylene Oxide Manufacturing Process
Dr. Masaru Ishino, Sumitomo Chemical Company, Japan
- 13:45 17. Selective Oxidation of Light Paraffins: The State of the Art
Dr. Jamal Al-Saeedi, College of Technological Studies, Kuwait
- 14:15 18. Conversion of Methanol in the Presence of CO₂ over Keggin-type Heteropoly Compounds, Dr. Ahmed Aouissi, Chemistry Dept., King Saud University, Riyadh
- 14:45 19. Synthesis & Kinetic Analysis of Semi Aromatic Thermotropic Liquid Crystalline Copolyesters, Dr. Adam Al-Mulla, Chemical Engineering Dept, Kuwait University
- 15:15 Closing Remarks, Symposium Ends

Each presentation includes 5-minutes Q&A

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