



## Technology in Petroleum Refining & Petrochemicals

Venue: KFUPM Research Institute Bldg. 15; 4<sup>th</sup> Floor, Dhahran, Saudi Arabia, November 7-8, 2016

### Day One: Monday, November 7, 2016

#### OPENING REMARKS SESSION

Chairman: Dr. Sulaiman Al-Khattaf

7:45 Registration & Coffee Break

8:00 Opening Remarks

- H.E. Dr. Khaled S. Al-Sultan, Rector of KFUPM
- Mr. Eiji Hiraoka, Senior Executive Director, JCCP
- Dr. Keiichi Tomishige, Head Japan Delegation, JPI

#### SESSION ONE MODELING/CATALYTIC REACTIONS

Chairman: Dr. Atsushi Ishihara

- 8:30 1. Software tools for molecular-level kinetic modeling of refinery and petrochemical reactors, Dr. Michael Klein, Saudi Aramco Chair Professor, KFUPM, Univ. Delaware, USA
- 9:00 2. Hydrogen production by steam reforming reactions over uniform Ni-Fe alloy nanoparticles, Dr. Keiichi Tomishige, Tohoku University, Japan
- 9:20 3. Novel approach to overcome mass-transfer limitation in multiphase reactions with Taylor-Couette flow, Mr. Mohammad Aljishi, Saudi Aramco R&DC
- 9:40 4. Supported Keggin-type heteropolyacid catalysts for isobutene oligomerization and methacrolein oxidation, Dr. Yuichi Kamiya, Hokkaido University, Japan

10:00 Coffee Break

#### SESSION TWO HYDROPROCESSING

Chairman: Dr. Mohammed Ba-Shammakh

- 10:30 5. Hydroprocessing catalysts for heavy oil upgrading, Dr. Lianhui Ding, Saudi Aramco R&DC
- 10:50 6. SPH (Slurry Phase Hydrocracking) Process as a cutting-edge upgrader for upcoming diesel demand in not-too-distant future, Mr. Daisuke Oka, Chiyoda Corporation, Japan
- 11:10 7. CAN-15 catalyst- data Review, Mr. Vinod Ramaseshan, Saudi Aramco P&CSD
- 11:30 8. Oil refining in a CO<sub>2</sub> constrained world with implications for gasoline and diesel fuels, Mr. Amir Abdul Manan, Saudi Aramco R&DC

11:50 Prayer & Lunch Break

#### SESSION THREE AROMATICS/PETCOKE

Chairman: Dr. Rashid Al-Othman

- 13:00 9. Development of the efficient process for producing BTX from fuel oil  
Mr. Masahide Kobayashi, JX Nippon Oil & Energy Corporation, Japan
- 13:20 10. Selective dehydrocyclization reaction of n-paraffins using zeolite-oxide composite supported NiMo-based catalysts, Dr. Atsushi Ishihara, Mie University, Japan
- 13:40 11. Anode-grade coke from Arabian crudes, Dr. Bandar Solami, Saudi Aramco, R&DC

14:00 Day One Ends

Each presentation includes 5-minutes Q&A





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### Day Two: Tuesday, November 8, 2016

#### SESSION FOUR CATALYTIC OLEFINS

Chairman: Dr. Yuichi Kamiya

8:15 Registration & Coffee Break

8:30 12. Active and stable catalyst for 1-butene cracking to propylene

*Dr. Arudra Palani, KFUPM-CRP*

8:50 13. Development of highly selective zeolite based catalysts for naphtha catalytic cracking to ethylene and propylene, *Dr. Nabil Al-Yassir, SABIC Technology & Innovation, Riyadh*

9:10 14. A light olefin selective FCC catalyst based on Ti, Zr-inserted USY zeolite

*Dr. Yaming Jin, Saudi Aramco R&DC*

9:30 15. An integrated study on the production of light olefins from catalytic cracking of Arab crude oil fractions in different reactor systems, *Dr. Qi Xu, Saudi Aramco R&DC*

9:50 Coffee Break

#### SESSION FIVE CRACKING/DEHYDROGENATION/GAS

Chairman: Dr. Abdullah Al-Malki

10:20 16. Study the nano-structured zeolite for hydrocarbon cracking

*Dr. Emad Shafi, Saudi Aramco R&DC*

10:40 17. Zeolite supported structured catalysts for methanol to propylene conversion

*Dr. Shakeel Ahmed, KFUPM-CRP*

11:00 18. Hierarchical nano-consortium catalyst of (Ni, Fe, Co)-Bi-O/support for oxidative dehydrogenation of butane to butadiene, *Mr. Gazali Tanimu, KFUPM-CRP*

11:20 19. Sales gas storage in Saudi Arabia, *Dr. Rashid Al-Othman, Saudi Aramco R&DC*

11:40 Prayer & Lunch Break

#### SESSION SIX CARBON STEELS/CORROSION

Chairman: Dr. Abdulaziz Al-Saadi

13:00 20. Modeling HIC growth in carbon steels: current and future work at Saudi Aramco R&DC

*Mr. Kaamil-Ur-Rahman Shibly, Saudi Aramco R&DC*

13:20 21. Acoustic emission monitoring of HIC growth in carbon steels: laboratory testing

*Mr. Hussam Attar, Saudi Aramco R&DC*

13:40 22. Development of corrosion inspection technique using ultrasonic testing for the measurement of wall loss of inaccessible components, *Mr. Satoru Shiroshta, Non-destructive Inspection Co., Japan*

14:00 23. Prediction of the internal localized corrosion rate in scrapable transmission pipelines

*Mr. Thibault Villette, Saudi Aramco R&DC*

14:20 Closing Remarks, Symposium Ends

Each presentation includes 5-minutes Q&A

Program: October 26, 2016

Registration: [http://staff.kfupm.edu.sa/RI/maroof/new\\_page\\_1.htm](http://staff.kfupm.edu.sa/RI/maroof/new_page_1.htm)