

Tuesday, 29 October, 2019 (Technical Session 1)

(Technical Session 1)						
	Innovative Materials Room 1	Refining & Chemicals Room 2	Exploration & Production Room 3	Circular Economy & Sustainability Room 4	Digital Transformation Room 5	
Session Title	Session Title: Advances in Macromolecular Engineering	Session Title: Crude to Chemicals Challenges and Solutions	Session Title: Innovative Formulations & Chemicals (1)	Session Title: Circular Economy Applications and Challenges	Session Title: Machine Learning for Optimization and Prediction of processes	
	Chair: Dr. Haleema A. Alamri (Aramco) Co-chair: Dr. Hafedh Driss (KAU)	Chair: Dr. Shakeel Ahmed (KFUPM) Co-chair: Dr. Saad Al-Bogami (Aramco)	Chair: Dr. Saleh Al-Mutairi (Halliburton) co-chair: Dr. Abdullah Al-Moajil (Aramco)	Chair: Dr. Bandar Fadhel (Aramco) Co-Chair: Dr. Aadesh Harale (Aramco)	Chair: Dr. Yousung Jung (KAIST) Co-chair: Dr. Georgios Lithoxoos (Aramco)	
<u>Time</u> 14:00-14:20	Title: Development of PEG-modified Poly(ether-b-amide) Membranes for Sour Gas Separation. Authors: John Yang, Daniel J. Harrigan, Milind M. Vaidya, Michele L. Ostraat Aramco Services Company	Title: Advances in Crude to Chemicals Authors: Keith Couch, Joao Alves, Robert Sloane Honeywell-UOP	Title: The Synergy of Surfactant and Nanoparticles: Towards Enhancing Foam Stability Authors: Zuhair AlYousif, Daivd Schechter Saudi Aramco	Title: Recycling Polymers to Chemicals Authors: Abdulrahman bin Jumah, Arthur Garforth, Aleksander Tedstone, Isaac Campbell and Chris Hardacre Manchester University	Title: Chemical Property prediction Using Machine Learning Authors: Kiran K. Yalamanchi, Francesco Tutino, M. Monge-Palacios, S. Mani Sarathy, Xin Gao KAUST	
14:20-14:40	Title: Employing Supramolecular Chemistry to Engineer New Macrocyclic based Materials Authors: Basem Moosa and Niveen Khashab KAUST	Title: Crude to Chemicals – The Way Forward Authors: <u>Musaed Al-Thubaiti</u> , Asma Tahlawi, Fahad Al-Mansour Saudi Aramco	Title: Formulating Water-based Environmental Friendly Pre-flush System Authors: Islam Hassan Modern National Chemicals	Title: Design of Sustainable Packaging Using Simulation Based Optimization Authors: Abdul Rahim Arafath, Raghavendra Janiwarad, Bhaskar Patham SABIC	Title: Machine Learning Approach for Prediction of Reaction Yield with Simulated Catalyst Parameters. Authors: Akira Yada AIST	
14:40-15:00	Title: Self-Healing Supramolecular Block Copolymers via Non-covalent Complementary Interaction Authors: Saibal Bhaumik, Nikos Hadjichristidis KAUST	Title: Paving The Way to More Efficient Crude to Chemical Complex via Innovative Materials Authors: Fabrice BERTONCINI IFPEN	Title: First of its Kind" Application of Novel Conformance Chemical Technology in South Kuwait Field Authors: Kutbuddin Bhatia, Abdullah Al Enezi, Bu-Mijdad Mohammed, and Alaa Alboueshi, Amr Abdelbaky. Halliburton	Title: Experiences from Management of Ageing & Life Extension of Subsea flexible pipes and marine hoses. Authors: Konstantinos Vatopoulos Aramco	Title: A Machine Learning Approach for Pipeline Internal Corrosion: Retrospective and Prospective. Authors: Christian Canto Maya, Biswas Avidipto, Nasser Otaibi Saudi Aramco	
15:00-15:20	Title: Sensitization of Nanostructured TiO2 layer with Dye Extracted from Peels Authors: Khalil Ebrahim Jasim, Najla Mirza AlQassas University of Bahrain	Title: Pressurized, Long-term Steam Reforming of Heavy Naphtha – challenges and Solutions Authors: Joongmyeon Bae, <u>Jae Young Yoo</u> , Jaemyung Lee, Aadesh Harale, and Sai Katikaneni KAIST	Title: Development of New Kinetic Hydrate Inhibitors for Gas Field Applications Authors: Henry Delroisse, Frédéric MOSER, Gilles BARRETO ARKEMA	Title: Life Cycle Assessment for Produced Water in Oil and Gas operations Authors: <u>Ekaterina</u> Kremleva Aramco Overseas BV	Title: Cyber-Physical Approach for the Detection of Corrosion Under Insulation. Authors: Ayman Amer, Ayman Amer, Ali Al Shehri, Vincent Cunningham and Ihsan Taie Saudi Aramco	



Ntetsikas, P. Bilalis, N. Hadjichristidis

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A. Jazzar, A. Al Mahdi, A. Alaqeel, R.

AbuDawoud and S. Shaikh

Saudi Aramco

Tuesday, 29 October, 2019 (Technical Session 2)					
	Innovative Materials Room 1	Refining & Chemicals Room 2	Exploration & Production Room 3	Circular Economy & Sustainability Room 4	Digital Transformation Room 5
Session Title	Session Title: Smart, Multifunctional, Composite Materials and Structures	Session Title: Catalyst Applications	Session Title: Innovative Formulations & Chemicals (2)	Session Title: Carbon Capture & Utilization	Session Title: Data Analysis and Modeling for Efficient Processes
	Chair: Dr. Hassan Al-Rabiah (KISR) Co-chair: Dr. Enrico Bovero (Aramco)	Chair: Dr. Robert Slone (Honeywell-UOP) Co-chair: Dr. Nahid Siddique (KFUPM)	Chair: Mr. Khalid Aldossary (TAQA) Co-chair: Dr. Aisha Alsaleh (Halliburton)	Chair: Dr. Aqil Jamal (Aramco) Co-Chair: Dr. Hasan Imran (Aramco)	Chair: Dr. Naim Akmal (Aramco) Co-chair: Dr. Husinsyah Sitepu (Aramco)
15:40-16:00	Title: Design of metal nanostructures as high performance electrocatalysts for CO2 conversion Authors: Woong Choi and Hyunjoon Song KAIST	Title: Catalytic Dealkylation of Alkyl Polycyclic Hydrocarbons Towards Innovation of Petroleum Refinery Authors: Naonobu Katada Totori University	Title: Evaluation of Compatibility and Synergisms Between Completion Chemicals Using A Non-Ideal Mixing Mod. Authors: Liang Xu, <u>James Ogle</u> Halliburton	Title: Analysis and optimization of multipath CCU system using a computer-aided tool. Authors: Wonsuk Chung, Ali S. Al-Hunaidy, Hasan Imran, Jay H. Lee KAIST	Title: Small molecule activation using computational catalysis and data-driven approaches. Authors: Yousung Jung KAIST
16:00-16:20	Title: Development of a Liquid Crystal- Based Sensing Platform for Direct Detection of Heavy Metal Ions Authors: <u>Sulayman A. Oladepo</u> KFUPM	Title: Catalyst Control for the Synthesis of Cyclic Carbonates or Polycarbonates from CO2 and Epoxides Authors: Hyunwoo Kim KAIST	Title: Investigation of Sacrificial Agents for Surfactant Injection in Carbonates. Autours: Annie Wang, Zhenpeng Leng, Ming Han, Alhasan Fuseni Saudi Aramco	Title: Intermediate temperature CO2 capture: a new promising pathway for future low-cost CCUS Authors: Takuya Harada, Cameron Halliday, Aqil Jamal, T. Alan Hatton MIT	Title: Automated Kick Detection Using Data Mining. Authors: Raed Alouhali, Salem AlGharbi, Abdullah AlYami Saudi Aramco
16:20-16:40	Title: Electrochemical synthesis of ammonia with proton-conducting solid oxide and operation of direct ammo Authors: Kangyong Lee, Seung Jin Jeong, WooChul Jung , Sai P. Katikaneni, Kunho Lee, Joongmyeon Bae KAIST	Title: Optimization of Gasoline Yield Produced from Plastic Mixture Waste by Catalytic Cracking Authors: Muhammad Faisal Irfan, S. A. Habib, Y. Ali, S. M. Z. Hossain, S. Haji University of Bahrain	Title: Novel Nanoparticles for Produced Sand and Water Management in Oil and Gas Applications Authors: Rajendra Kalgaonkar, Khalid Alnoaimi and Vikrant Wagle Saudi Aramco	Title: Efforts for CO2 Sequestration, Metal nanoparticles, and Membrane Authors: Nezar H Khdary KACST	Title: SVR-CSA based platform for modelling and optimization of waste water treatment by Chlorella Kessleri Authors: S.M. Zakir Hossain, N. Sultana and S.A. Razzak University of Bahrain
16:40-17:00	Title: Reinforcing polyethylene (LLDPE) with polyethylene-grafted silica nanoparticles Authors: Reem D. Alghamdi, G. Zapsas, K.	Title: Catalyst for Dealkylation– transalkylation of Heavy Alkyl-aromatics Authors: Veera Venkata Ramakrishna Tammana, M. Thamer, Z. Zhang, A. Abdali,	Title: 2D Materials Effect On The Self- Healing Polymer Hydrogels For Water Shutoff Authors: Edreese Alsharaeh, Feven Mattews	Title: Catalytic non-redox carbon dioxide fixation in cyclic carbonates Authors: Cafer T. Yavuz, Saravanan Subramanian, Doyun Kim, Thien Nguyen,	Title: Data Management and Integration Framework for Industrial Internet-of-Things ir Oil and Gas Smart Plants. Authors: Abdullah Al-Halafi

Michael, Ayman Almohsin

Alfaisal University

Mousumi Garai, Wonki Lim

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Wednesday, 30 October, 2019 (Technical Session 3)						
	Innovative Materials Room 1	Refining & Chemicals Room 2	Exploration & Production Room 3	Circular Economy & Sustainability Room 4	Digital Transformation Room 5	
Session Title	Session Title: Innovative Materials for Engineering Applications	Session Title: Contaminations Removal	Session Title: Advances in Fracturing Fluids & Treatment	Session Title: CO2 Utilizations and Conversion	Session Title: Value Realization Through Process Intelligence	
	Chair: Dr. Abdulrahman M. Albadri (KACST) Co-chair: Dr. Saeed Al-Shahrani (SABIC)	Chair: Dr. Rashid Ansari (Saudi Aramco) Co-chair: Dr. Nahid Siddique (KFUPM)	Chair: Dr. Abdullah Al-Moajil (Aramco) Co-chair: Dr. Hicham El Hajj (Halliburton)	Chair: Dr. Issam Gergeige (Aramco) Co-Chair: Dr. Yasmeen Aldawsari (Aramco)	Chair: Dr. S. M. Zakir Hossain (Univ of Bahrain) Co-chair: Christian Canto Maya (Aramco)	
10:40-11:00	Title: From Oils to "Degradable Polyethylene": A Fast and Living Organocatalytic Ring-Opening Polymerization Authors: Viko Ladelta, Nikos Hadjichristidis KAUST	Title: Effects of Titania Coatings on Hydrodesulfurization Catalysts, Insights from First-principles Authors: Hiroki Iriguchi JXTG Nippon Oil & Energy Corp.	Title: A Novel Non-Damaging Fracturing Fluid: From Lab to Field Authors: Prasad Karadkar, Mohammed Alabdrabalnabi, Feng Liang and Mohammed Bataweel Saudi Aramco	Title: Photocatalytic CO2 Conversion Using Cu-Based Cocatalysts with Varying Surface Treatments Authors: Doh C. Lee, Gwuimin Kim, Ilsong Lee, Pan Lu, Sunil Jeong KAIST	Title: Towards Connected Refineries with Advanced Unit Performance Management Authors: Luc Wolff, Pierre-Yves Le-Goff, Ali Jahel Axens SA	
11:00-11:20	Title: 2D Materials Hybrid Structure Effect On Rechargeable Lithium Battery At Elevated Temperature Authors: Edreese Alsharaeh, Zahra Bayhan, Yasmin Mussa, Muhammad Arsalan Alfaisal University	Title: Meeting IMO 2020 Imposed Challenges by Employing Oxidative Desulfurization of Heavy Oils Authors: Saumitra Saxena, Claudia Hernandez, Paolo Guida, Abdul Gani Abdul Jameel, Long Jiang, Saumitra Saxena, Pedro Castano, William Roberts KAUST	Title: Fracture Conductivity Study in Carbonate Formation Using a Solid Acid System: A Laboratory Study Authors: Mohammad Alqam, Caliboso Saudi Aramco	Title: Cascaded Electrolysis to Optimise the Direct Electrochemical Conversion of CO2 to C2/C3 Hydrocarbons. Authors: Maximilian Fleischer, Sofia Romero, Christian Scherrer, Kai-Olaf Hinrichsen Siemens AG	Title: Bridge Safety & Security Mandates for Industrial Process Felicities (Energy Industry) Authors: Khalid S. Alghamdi Saudi Aramco	
11:20-11:40	Title: Self-cleaning Superhydrophobic Epoxy Coating Based on Fibrous Silica- coated Iron Oxide Magnetic Nanoparticles Authors: Haleema Alamri, Abdullah Al- Shahrani, Enrico Bovero, Turki Khaldi, Gasan Alabedi, Waleed Obaidl, hsan Al-Taie, and Aziz Fihri Saudi Aramco	Title: Trace Helium Recovery from Natural Gas Using Membranes Authors: Jason Ploeger, Jin Cao, Mustafa Alkhabbaz, Erin Sorensen, Charles Page Air Products and Chemicals	Title: Application of Sand and Impact of Sand Properties in Enhancing Hydrocarbon Production Authors: Muzzammil Shakeel Halliburton	Title: Non-reductive Catalytic Conversion of Carbon Dioxide to Organic Carbonates and Carbamates Authors: Keiichi Tomishige Tohoku University	Title: Robotics in Oil&Gas Operations; A Review Authors: Ahmed Alalouni, Muhammad Arsalan; Abubaker Saeed; Muqbil Khalaf Saudi Aramco	
11:40-12:00	Title: Synthesis and Characterization of Branched fcc/hcp Ruthenium Nanostructures and Their Catalytic Activity Authors: Noktan M. AlYami, Shouwen Shen and Abdullah K. AlDakheel Saudi Aramco	Title: Development of Thermo-neutral Reforming Catalyst for Hydrogen Production: Low Pressure Structured ca Authors: Shakeel Ahmed, Sai P. Katikaneni, and Aadesh Harale KFUPM	Title: The Role of Microstructural Characterization and Exothermic Reaction in Optimizing Hydraulic Fractur Authors: Hmeed AL-Badairy, Ayman Al- Nakhli and Mohammed Alqam Saudi Aramco	Title: A Methodology for Developing Effective Approaches for CO2 Utilisation Authors: <u>Tony Picaro</u> Aramco Overseas Company B.V.	Title: Advanced Process Intelligence at Air Products Saudi Technology Center. Authors: <u>Pratik Misra</u> , Vijay N. Kumar, Umesh Patil Air Products	



Wednesday, 30 October, 2019 (Technical Session 4)						
	Innovative Materials Room 1	Refining & Chemicals Room 2	Exploration & Production Room 3	Circular Economy & Sustainability Room 4	Digital Transformation Room 5	
Session Title	Session Title: Innovative Materials for Engineering Applications	Session Title: Catalyst for Refining and Petrohemicals-1	Session Title: Scale and Corrosion Control	Session Title: Advancements in Fuels, Fuel Cells, and Power Units Applications	Session Title: Process Monitoring and Modeling	
	Chair: Dr. Mansour Al-Elyani (SABIC) Co-chair: Dr. Fahd Alghunaimi (Aramco)	Chair: Dr. Omar Koseoglu (Saudi Aramco) Co-chair: Dr. Shakeel Ahmed (KFUPM)	Chair: Dr. Mohammed H. Khaldi (Aramco) Co-chair: Dr. Alsu Valiakhmetova (Halliburton)	Chair: Dr. Mourad Younes (Aramco) Co-Chair: Dr. S. M Zakir Hossain (Univ. of Bahrain)	Chair: Dr. Visvanathan Balasaravanan (SABIC) Co-chair: Yuguo Wang (Aramco)	
14:00-14:20	Title: Improved Gas Transport Performance and Feed Stability Through Highly Tunable, Branched Nanoparticles Authors: Benjamin J. Sundell, Won Seok Chi, Ke Zhang, Daniel J. Harrigan, Steven C. Hayden, Zachary P. Smith Aramco Services Company	Title: Novel Cobalt Catalyst to Produce Cyclohexane by the Hydrogenation of Benzene Authors: Ahmad Alshammari, Rashid M. Altamimi, Rajenahally V. Jagadeesh KACST	Title: Innovative Permanent Down-hole Scale and Corrosion Monitoring System Using Ultrasound Guided Waves Authors: Abubaker Saeed, Arno Volker Speaker: Ahmed R. Alalouni Saudi Aramco	Title: Green Saudi Arabia: Saudi Arabian limestone economically captures CO2 and SO2 from combustion of Heavy Fuel Oil (HFO) Authors: Robert W. Dibble, Sally L. Homsy KAUST	Title: Molecular Modelling of Co-processing Biomass Pyrolysis Oil with Vacuum Gasoil in an Oil Refinery Flu. Authors: Mohamed Al Jamri, Robin Smith; Jie Li University of Manchester	
14:20-14:40	Title: Therban HNBR and Extrusion Resistance in Packer Applications Authors: Susanna Lieber, Christoph Gögelein, Marjan Hemstede, Andreas Kaiser, Victor Nasreddine Arlanxeo	Title: Core Shell Nanomaterial as Heterogeneous Catalysts for Industrial Application Authors: Noor Almana Saudi Aramco	Title: A new chemical approach for managing iron sulfide: an effective alternative to THPS, acrolein, acids Authors: Alsu Valiakhmetova, Martijn Huijgen, Scott Rawlins, Tawfik Al-Ghamdi, Dr. Ping Chen Halliburton MultiChem	Title: A Diesel-Driven Solid Oxide Fuel Cell System for Auxiliary Power Unit Applications. Authors: Minseok Bae, Joongmyeon Bae, Sai P. Katikaneni KAIST	Title: Past, Present and Future Trends in Kinetic Modeling: Application to Hydrocracking. Authors: B. Celse, Per Julian Becker, Denis Guillaume IFPEN	
14:40-15:00	Title: Elevated Sour Gas Separation Performance by Controlling Crystallinity and Crosslinking in Poly(ethyl Authors: Daniel J. Harrigan, BenJamin J. Sundell, John A. Lawrence III Aramco Services Company	Title: Well-controlled Synthesis Techniques for Finely Tuned Catalysts for the Conversion of 2-butene Authors: Brian S. Hanna, Timothy J. Kucharski, Maxim P. Bukhovko, Rachael O. Grudt, Michele L. Ostraat ASC	Title: Corrosion Behavior of 90/10 Cupronickel Heat Exchanger Tubing Material in Chloride Solutions Contain Authors: Hosni M A Ezuber University of Bahrain	Title: Marketable Prospects of Microbial Fuel Cell for Sustainable Energy Generation Authors: Mohammad Salim Akhter University of Bahrain	Title: Computer-Aided Tool for the Uncertainty-Accounted Process Synthesis of CO2 Utilization Technologies Authors: Jeehwan Lee KAIST	
15:00-15:20	Title: SABIC's plastic powders for 3D printing Authors: Zahir Bashir and Fayez Alfayez SABIC	Title: Superior Activity of Rh Nanoparticles in Olefin Hydrogenation Authors: Abdullah Alhanash, Mhamed Benaissa, and Mohamed S. Hamdy KKU	Title: Corrosion Control During Acidizing Treatment in Oil Wells Authors: Hicham El Hajj, Muzzammil Shakeel Halliburton	Title: Simulation Driven Clean Fuel Design Authors: <u>S. Mani Sarathy</u> KAUST	Title: Development of a Novel Operating Plan for Khurais Steam and Fuel Gas Authors: Abdulmohsin, Mohmmed T, Amminudin, Kamarul A Saudi Aramco	



Wednesday, 30 October, 2019 (Technical Session 5)

(Technical Session 3)						
	Innovative Materials Room 1	Refining & Chemicals Room 2	Exploration & Production Room 3	Circular Economy & Sustainability Room 4	Digital Transformation Room 5	
Session Title	Session Title: Innovative Materials for Energy Applications	Session Title: Catalyst for Refining and Petrohemicals-2	Session Title: Advances in Surfactant Chemistry and Applications	Session Title: Renewable Energy Advancements	Session Title: Advanced Techniques and Characterizations	
	Chair: Dr. Hamad Albrithen (KSU) co-chair: Dr. Abdullah Alodhayb (KSU)	Chair: Mr. Mohammed Al-Wadani (SADARA) Co-chair: Dr. Ahlam Alsulami (University of Jeddah)	Chair: Dr. Taha Okasha (Aramco) Co-chair: Dr. Nour O Baqader (Aramco)	Chair: Dr. Ahmad Al-Saggaf (Aramco) Co-Chair: Dr. Yasmeen Aldawsari (Aramco)	Chair: Benoit Celse (IFBEN) Co-chair: Frederick Adam (Aramco)	
15:40-16:00	Title: Capturing the Exhaust Pollutants - The Need to Develop Advanced Materials Authors: Tamour Javed, Remi Mahfoez, Esam Z. Hamad Saudi Aramco	Title: Single Step Catalytic Cracking of Crude to Chemicals in a Packed Bed Reactor Authors: Ahmet R. Özdural, Halil Kalkan Hacettepe University	Title: Investigation of Dynamic Interfacial Tensions of Surfactant Solutions for Improving Oil Production Authors: Limin Xu, Ming Han, Dongqing Cao, and Alhasan Fuseni Aramco Beijing Research Center	Title: Leading-Edge Mirrorless Solar Thermal Panels Reduce Running Costs and Clean Upstream Oil & Gas Image Authors: Marco Scarpellino, Jonathan Koifman, Piero Abbate TVP Solar	Title: A RAPID TECHNIQUE TO QUANTIFY STABILIZER IN POLYPROPYLENE Authors: Lohith Nanjegowda, Saeed Al- Shahrani, George Kuriakose, Sang Kim, Michael Hall, Faisal Al-Suhaibani, Abderrahman Meddad SABIC	
16:00-16:20	Title: Design and Analysis of Spoolable Thermoplastic Reinforced Pipes (RTP) for On-shore Oil and Gas Applications Authors: Ali Alghamdi, Abdul Rahim Arafath and Ratnesh Khandelwal SABIC	Title: Catalyst Technology for Maximize Light Olefin Yield in FCC-U Authors: Mitsunori Watabe Presenter: Takaki Mizuno JGC C&C	Title: Melioration in the Properties of Drilling Mud Using Surfactant Modified Graphene Authors: Muhammad Azeem Akbar Rana, Tawfik A. Saleh KFUPM	Title: Investigation of Green Synthesised Silver Nanoparticles in Dye-Sensitized Solar Cells Authors: Khalil Ebrahim Jasim, Fatema Jaber Aljaboori, and Fryad Henari University of Bahrain	Title: Catalyst Characterization for Converting Heavy Compounds C9+ to BTX Authors: Ibrahim Zaharni, Noor Mana and Ibrahim Jadidi Saudi Aramco	
16:20-16:40	Title: PA11 & PVDF: high performance polymers for oil and gas applications Authors: Hayrani CIFTCI, Patrick DANG and Cyrille MATHIEU ARKEMA	Title: Application of inferential models to crude distillation process Authors: Rashid M Ansari Saudi Aramco	Title: NanoSurfactants: Crude to Advanced Materials for Enhanced Oil Recovery Applications Authors: Ayrat Gizzatov , <u>Afnan Mashat</u> , Amr I. Abdel-Fattah Saudi Aramco	Title: Solar Energy Storage Using Shape- Stabilized Phase Change Materials: MgO and Mg(OH)2 Containing Poly Authors: Md. Hasan Zahir KFUPM	Title: X-Ray Fluorescence (XRF) for monitoring and controlling the fabrication and use of catalytic material. Authors: Nagmeddin Elwaer, Nouri Hassan, Dev Ranjan Perdhan SABIC	
16:40-17:00	Title: 3-Dimensional Nanoarchitectures for Energy Conversion Authors: Yeon Sik Jung and Yeji Kim KAIST	Title: Non-Conventional Oxidative Dehydrogenation of Propane to Propylene: Influence of ZrO2 Phase Structur Authors: Mohamed Mokhtar, Katabathini Narasimharao, S. Basahel, S. Bawaked, T. Ali, N. Al-Yassir, K. Al-Majnouni, A. Al- Mutairi, A. Al-Zenaidi, A. Toseef, N. Elwaer King Abdulaziz University	Title: Surfactant Partitioning in Oil-Water Systems for Improving Oil Production Authors: Jian Hou, M. Han, Alhasan Fuseni Aramco Asia	Title: ZnSnN2 Semiconductor Thin Film Deposited by PVD Magnetron Sputtering for Photovoltaics Applications Authors: F. Alnjiman, A, almoshawah, A. Alodhyay, S. Diliberto, S. Bruyère, J. Ghanbaja, P. Miska, H. Albrithin, J.F. Pierson King Saud University	Title: Achieving the Highest Accuracy of Helium Measurement Authors: Ahmed J. Ibrahim, Leroy Ellis, Steve Clayton, Hussain A. Shammary Saudi Aramco	



Thursday, 31 October, 2019 (Technical Session 6)						
	Innovative Materials Room 1	Refining & Chemicals Room 2	Exploration & Production Room 3	Circular Economy & Sustainability Room 4	Digital Transformation Room 5	
Session Title	Session Title: Innovative structural optimization for different application	Session Title: Petroleum Refining and Petrochemicals Mix	Session Title: Biological Related Activities and Control in Upstream and Downstream	Session Title: Waste Management	Session Title: Test Methods & Advanced Characterizations	
	Chair: Dr. Saeed Al-Shahrani (SABIC) Co-chair: Dr. Aziz Fihri (Aramco)	Chair: Dr. Hassan Alasiri (KFUMP) Co-chair: Dr. Shakeel Ahmed (KFUPM)	Chair: Dr. Alsu Valiakhmetova (Halliburton) Co-chair: Dr. Taha Okasha (Aramco)	Chair: Ensan Al-Ayoubi (Aramco) Co-Chair: Talal Al-Ghamdi (Aramco)	Chair: Dr. Mohamed Bin Shams (Univ of Bahrain) Co-chair: Dr. Georgios Lithoxoos (Aramco)	
10:50-11:10	Title: Optimizing Porous Catalytic Materials with Respect to Intra-particle Mass Transfer Authors: G. Pirngruber, E. Jolimaitre, A. Hugon, and A.A. Quoineaud IFP Energies nouvelles (IFPEN)	Title: Optimizing an Industrial Methanol Reactor Using Aspen Plus Authors: <u>Shaker Haji</u> , Omar Al Deeb, Ashraf Hassan University of Bahrain	Title: Microbiologically Influenced Corrosion Investigation for Refinery Crude Stabilization Authors: Abdulmohsen Alhumam, Husam Khanfar, Michael Davidson, Ayman Janbi, Abdulkarim Al-Ghahtani, Fahad Hamidi, Ammar Alsaqer Saudi Aramco	Title: Nanocellulose from Date-Palm Trees (Phoenix Dactylifera L.) Authors: Abdulrahman G. Alhamzani Imam Muhammad S University	Title: Characterization of Synthesized Nano-Sized ZSM-5 Zeolite Catalysts by Using X-ray Powder Diffraction Authors: Rasha A. Al-Ghamdi, Husin Sitepu, Lianhui Ding, and Hassan M. Sadiq Saudi Aramco	
11:10-11:30	Title: Development and Testing of Novel Lubricants for Extreme Piston Ring Pack Environments Authors: Frank T. Hong, S. Mani Sarathy KAUST	Title: Exploring the Potential Energy Landscape of Zeolites to Understand Deactivation Pathways Authors: Brian S. Hanna, Steven C. Hayden, H. Li, E. Converse, A. France-Lanord, T. Headrick, and J. Grossman ASC	Title: Reduce the Growth of Biofouling in Seawater Industrial Cooling Towers by Alternative Oxidants Authors: Mohammed Albloushi, S. Al- Sayegh, A. Al-Refaie and T. Leiknes SABIC	Title: Crow Search Algorithm for Global Optimization of Papaya Oil Extraction Parameters Authors: S. M. Zakir Hossain, S. Taher, A. Khan, N. Sultana, M.F. Irfan, S.A. Razzak, B. Haque University of Bahrain	Title: The Role of Reference Materials and Methods (Technique) in Chemical Analysis of Refractory Material Authors: Alharbi, Abdulaziz, Akhtar Moahmmad T, Abduljabbar khan; Elyani-Al, Mansour SABIC	
11:30-11:50	Title: Selectivity and Efficient Pb and Cd Ions Removal by Magnetic MFe2O4 (M=Co, Ni, Cu and Zn) Nanoparticles Authors: K. Al Yaqoob, M. Bououdina <u>B. Al-Najar</u> , M. S. Akhter , J. Judith Vijaya , W. Cai University of Bahrain	Title: Selective Catalytic Reduction (SCR) of NO using H2 under Lean Exhaust Conditions Authors: Nawaf M. Alghamdi, Juan Restrepo-Cano, D. Anjum, C. Kalamaras, Jorge Gascon, and S. Mani Sarathy KAUST	Title: Fingerprinting Bacterial Populations In Compacted Clay Cores Imitating Well Cement Authors: Alexander Grigoryan, Darren Korber Saudi Aramco	Title: Cryogenic Carbon Capture™ Applications and Results Authors: Prof. Larry Baxter, Frankman, Andrew Baxter, Kyler Stitt, Chris Hoeger, Skyler Chamberlain, Eric Mansfield, Aaron Sayre, Stephanie Burt Presenter: Robert W. Dibble KAUST	Title: Understanding the Factors in Test Method Affecting the Measurement of Flexural Modulus of Plastics Authors: Visvanathan Balasaravanan, Saeed Al- Shahrani SABIC	
11:50-12:10	Title: Additives to sustain quality of product during storage and transport under harsh climatic condition Authors: Somak Paul, Dughaither-Al, Abdullah Saad SABIC	Title: Synthesis of Amphiphilic Hyperbranched Polyethylene-based Copolymers through a Combination of Living CWCP and ATRP Authors: Ahlam I. Al-sulami and Nikos Hadjichristidis University of Jeddah	Title: Anti-adhesive and Biocidal Thin-film Coatings for Improved Biofouling rResistance of RO Membranes Authors: Ismail Abdulazeez, Asif Matin, Majad Khan, Khalid Al-Hooshani, Mazen Khaled KFUPM	Title: Sodium Octanoate Functionalized Graphene Oxide (SO-GO): A Green Corrosion Inhibitor for Oil Well Acidizing Environment Authors: Kabiru Harunai, Tawfik A. Saleh KFUPM	Title: Headspace Sampling procedure for Difficult Aqueous Matrices Followed by GC-MS with Simultaneous FID. Authors: Majeed Almashnawi, Vreuls J.J., Al-Bloushi M., and Al-Sharhani S. SABIC	