Saudi Arabia InterPore Chapter

2nd Annual Meeting
Nov. 27 – 28, 2023

Day (1): Monday, November 27, 2023

Time	Event
8:30 AM– 8:45 AM	Opening Remarks: Welcome to the 2nd Interpore Saudi Chapter Annual Meeting (Day 1) – Dr. Tameem Amani
8:45 AM – 9:00 AM	Brief Overview of Interpore Saudi Chapter – Prof. Shuyu Sun, President of Interpore Saudi Chapter
9:00 AM – 10:00 AM	Keynote Speech (1): Prof. Shuyu Sun, KAUST
10:00 AM – 11:00 AM	Keynote Speech (2): Prof. Majid Hassanizadeh, Utrecht University, Managing Director of Interpore
11:00 AM – 12:20 PM	Lunch Break
MS 01 Session (1): Pore-Scale Modeling and Algorithms for Porous Media Flow MS 01 Chair: Prof. Shuyu Sun, KAUST	
12:20 PM – 12:40 PM	Physical and Numerical Simulation of Microscale Porous Flow using 3D printed rock and DRP, Prof. Rui Song (Chinese Academy of Sciences, China)
12:40 PM – 1:00 PM	On the Filtration of Oily Water Systems Using Membranes: Micro Fates, and Macro Model, Dr. Amgad Salama (University of Regina, Canada)
1:00 PM – 1:20 PM	Medial Access Path Search (MAPS) for Pore-Network Extraction, Prof. Yuze Zhang (Nanjing Normal University, China)
1:20 PM – 1:40 PM	Numerical Methods for Diffuse Interface Model with Application to Multiphase Flows, Prof. Abdullah Shah (KFUPM)
1:40 PM – 2:00 PM	Thermodynamic Analysis of Quasi-static Pore-Network Modeling of Phase Equilibrium, Ronghao Cui (PhD candidate, KAUST)
MS 02 : Reservoir Geomechanics MS 02 Chair: Dr. Osman Hamid, Saudi Aramco	
2:00 PM – 2:20 PM	Pore Size and Pore Throat Damage Mechanics, Dr. Osman Hamid (Saudi Aramco)
2:20 PM – 2:40 PM	A true pore surface roughness measurement technique: 3D Pore Surface Roughness (3D PSR) from X-ray μ-CT image data, Dr. Hyung T. Kwak (Saudi Aramco)
2:40 PM – 3:00 PM	Break & Online Networking
3:00 PM – 3:20 PM	Prof. Abdallah Ghreizy, American University of Beirut (AUB), Title: TBD
3:20 PM – 4:00 PM	Plenary Talk: Poromechanics, Prof. Younane Abousleiman (University of Oklahoma, Aramco Services Company)
4:00 PM – 4:20 PM	Comparison of Flow-Mechanics Iterative Coupling Schemes for Fractured Poroelastic Media, Dr. Tameem Almani (Saudi Aramco)

Day (2): Tuesday, November 28, 2023

7:45 AM – 8:00 AM	Opening Remarks: Welcome to the 2nd Interpore Saudi Chapter Annual Meeting (Day 2) – Dr. Tameem Amani
MS 03 Session (1): Uncertainty in Reservoir Modeling: Where Challenges are Opportunities MS 03 Chair: Dr. Ali Alturki, Saudi Aramco	
8:00 AM – 8:20 AM	Optimization of Well Placement and Design For Full-Field Development using Mathematical Optimization and Machine Learning, Mr. Menhal Ismael (Saudi Aramco, PhD candidate, KFUPM)
8:20 AM – 8:40 AM	Physics-Aware Data-Driven Approaches for Reservoir Assessment, Alanood Alrassan (Saudi Aramco)
8:40 AM – 9:00 AM	Assessing Leakage Rate in Geological CO2 Sequestration under Uncertainty, Dr. Ben Mansour Dia (KFUPM)
9:00 AM – 9:20 AM	Break & Online Networking
9:20 AM – 10:20 AM	Keynote Speech (3): Prof. Kundan Kumar, University of Bergen, Norway
MS 03 Session (2): Uncertainty in Reservoir Modeling: Where Challenges are Opportunities MS 03 Chair: Dr. Ali Alturki, Saudi Aramco	
10:20 AM – 10:40 AM	Numerical Reservoir Models' Calibration with Ensemble Methods, Dr. Ali Alturki (Saudi Aramco)
10:40 AM – 11:00 AM	GPU Computing for Reservoir Simulation, Osaid Hajjar (Saudi Aramco)
11:00 AM – 11:20 AM	Reservoir Simulation and High Performance computing, Dr. Majdi Baddourah (Saudi Aramco)
11:20 AM – 12:40 PM	Lunch Break
MS 04 : Numerical Insights into Multiphase Flow Phenomena in Porous Media MS 04 Chair: Dr. Manal Alotaibi, KFUPM	
12:40 PM – 1:00 PM	Modeling and Simulation of Interfacial Dynamics with Soluble Surfactants, Dr. Guangpu Zhu (Nanyang Institute of Technology, Singapore)
1:00 PM – 1:20 PM	Parallel Multiscale Methods on High-Performace-Computing (HPC) Architectures: Design Aspects and Performance Analysis, Dr. Abdulrahman Manea (Saudi Aramco)
1:20 PM – 1:40 PM	Leaching and Accelerated Carbonation of Concrete, Dr. Michal Toth, Heidelberg University
1:40 PM – 2:00 PM	Prof. Bicheng Yan (KAUST), Title: TBD
2:00 PM – 2:20 PM	Supporting Reservoir Simulation Models: Challenges and Opportunities, Ahmad Shubbar (Saudi Aramco)
2:20 PM – 2:40 PM	Dr. Tao Zhang (KAUST), Title: TBD
2:40 AM – 3:00 PM	Concluding Remarks: Prof. Shuyu Sun & Dr. Tameem Amani

Note: The conference will be held online. The zoom link will be published on the webpage at least 3 days before the start of the conference.