



# InterPore2018 New Orleans

## Wednesday 16 May 2018

### **Poster 3: Poster 3-D (17:15-18:45)**

time	[id] title	presenter
17:15	[643] Microfluidic Evaluation of the Effects of Wettability on Two-Fluid Flow in Porous Media	BRUNING, Kelsey
17:15	[354] Flow field measurements of trapped and mobilised non-wetting phase in a microfluidic porous medium	ZARIKOS, Ioannis
17:15	[640] Visualizing and studying Multiphase flow in ITO coated microcapillary.	EZEH, Chike
17:15	[888] Forced wetting transition and bubble pinch-off in a capillary tube	PAHLAVAN, Amir
17:30	[559] Nuclear Magnetic Resonance Relaxation and Diffusion Measurements to Monitor Phase Changes in Hydrates	W. THRANE, Linn
18:00	[907] Application of MRI T1 mapping on root soil interactions	POHLMEIER, Andreas
18:15	[22] Researches on residual oil saturation and micro displacement mechanism after different oil displacement modes in tight oil reservoir	Mr CHEN, Ting

### **Poster 3: Poster 3-A (17:15-18:45)**

time	[id] title	presenter
17:15	[402] Coulombic effects during conservative and reactive transport of charged solutes in homogeneous and heterogeneous porous media: Experiments and modeling	Dr MUNIRUZZAMAN, Muhammad
17:15	[991] Experimental Study on Microbial Infiltration Stabilization of Degraded Sandstone in Yungang Grottoes	Dr CHENG, Xiaohui
17:15	[773] The Impact of Precipitation Scenarios on the Characteristics of Porous Media: Numerical Simulation vs Experiments	Dr MAHABADI, Nariman
17:15	[81] A tri-phase phase-field model for precipitation and dissolution in partially saturated porous media	POP, Iuliu Sorin
17:30	[985] Chelation for filter regeneration: wave structures and process optimization	HESSE, Marc
17:45	[279] A novel pore structure reconstruction procedure facilitating simulative analysis of multiphase displacement processes in porous media	DU, Dongxing
18:30	[992] Experiments of Microbially Induced Carbonate Precipitation in Calcareous Sand by Mixing Method	GUO, Hongxian
18:30	[770] Impact of wellbore treatment fluids on calcium carbonate attachment in MICP grouted sands	Mr STEINACHER, Fabian
18:30	[941] Visualizing and Quantifying Biomineralization in a Wellbore Analog Reactor	PHILLIPS, Adrienne
18:30	[262] Modelling approach and benchmark experiments for Nernst-Planck based transport, Coulombic interactions and geochemical reactions in saturated porous media	ROLLE, Massimo

18:30	[464] Surface complexation modeling of arsenic mobilization from goethite: Interpretation of in-situ experiments in a sedimentary basin of Inner Mongolia, China	STOLZE, Lucien
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**Poster 3: Poster 3-C (17:15-18:45)**

time	[id] title	presenter
17:15	[615] Cement placement in damaged shale rocks: effect of shale properties	Dr TORSÆTER, Malin
17:15	[824] MODELING OF LOW SALINITY WATERFLOODING THROUGH FRACTURED CORES	ROMANO-PÉREZ, Carlos A.
17:30	[930] Cementing pores and fractures using mineral silicate carbonation in situ	CLARENS, Andres
17:45	[603] Influence of micro-fabric heterogeneity on fracture alterations during shear	Dr CRANDALL, Dustin
18:00	[744] Coupled Fluid Flow and Geomechanics with Continuum Damage Mechanics in Dual-Porosity Modeling of Fractured Reservoirs	Mr CAI, Xin
18:15	[484] Physical simulation experimental study on water invasion rules of fractured carbonate gas reservoirs	Mr FANG, Feifei
18:30	[161] Lattice Boltzmann simulation of gas flow and permeability prediction in coal fracture networks	Dr ZHAO, Yanlong
18:30	[664] Predicting fracture permeability through pore-scale simulations	KANG, Qinjun
18:30	[359] A Linear Domain Decomposition Method for Unsaturated Flow in Porous Media	MITRA, Koondanibha

**Poster 3: Poster 3-B (17:15-18:45)**

time	[id] title	presenter
17:15	[789] Porous media deformation and self-structuring under capillary bulldozing	Dr DUMAZER, Guillaume
17:15	[928] Marangoni induced fracturing in two-dimensional frictional flows	Dr MOURA, Marcel
17:15	[694] Surface roughness and deformation effects on the thermal characterization of granular porous media	Prof. SAHIMI, Muhammad
17:15	[1106] Multiscale model reduction of artificial ground freezing	STEPANOV, Sergei
17:15	[1100] Hybrid Mixture Theory Based Modeling of Ice-Recrystallization in Frozen Biopolymers Subjected to Freeze-Thaw Cycles	TAKHAR, Pawan Singh
17:15	[894] Swelling and fracture of ionized, highly deformable hydrogels.	HUYGHE, Jacques
17:30	[850] Diffusive processes across frictional patterns	Dr DUMAZER, Guillaume
17:45	[186] Mixed-dimensional modeling of the brain's waterscape	DAVERSIN-CATTY, Cécile
18:00	[526] Mixed methods for coupled 1D-3D flow models in porous media	GJERDE, Ingeborg Gåseby
18:30	[661] How to sink: impact of fluids in soil liquefaction during earthquakes, computation of critical acceleration.	Prof. TOUSSAINT, Renaud

**Poster 3: Poster 3-H (17:15-18:45)**

time	[id] title	presenter
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17:15	[318] Direct sampling versus a new multiphase-multiresolution simulated annealing approach: Which porous media reconstruction algorithm performs best?	LEMMENS, Laurent
17:15	[113] Benchmarking of the Density Functional Theory Methods for Accurate Description of Structural Properties in Metal-Organic Frameworks	FORMALIK, Filip
17:15	[235] Non-Destructive Pore-Scale Approach to Evaluate Elastic Properties of Shale Samples by Imaging, Modeling and Simulation	Mr LYU, Weifeng
17:15	[271] Markov chain Monte Carlo Methods for Seismic Inversion	PEREIRA, Felipe
17:30	[858] Numerical simulation of electrical properties of digital borehole based on multi-scale digital rock physics	Mr LIKAI, Cui
17:45	[267] Parallel implementation of a multiscale mixed finite method for waterflood displacement in five-spot patterns	ABREU, Eduardo
18:00	[812] Discriminative Random Field Models for Subsurface Source Zone Characterization and Uncertainty Quantification	ARSHADI, Masoud
18:15	[827] Porous Structure Reconstruction Using Convolutional Neural Networks	WANG, Yuzhu

**Poster 3: Poster 3-G (17:15-18:45)**

time	[id] title	presenter
17:15	[853] Similarity of water movement in porous media under the conditions of microgravity and hydrophobicity	Dr NOBORIO, Kosuke
17:15	[999] SH-TE acoustoelectric waves in double-cylindrical porous formation	Prof. CUI, Zhiwen
17:30	[813] Investigation of Radial Capillary Penetration Kinetics in Virtual 3-D Porous Media Using Direct Numerical Simulations with Volume-Of-Fluid Method	Mr FU, An
17:45	[1003] Determination of moisture mass diffusion coefficient for desiccant materials	NAWAZ, Kashif
18:15	[601] Capillary hysteresis and pore-scale heterogeneity limiting the migration of buoyant immiscible fluid in a porous medium	CIHAN, Abdullah
18:30	[624] Dynamic properties of nano-pore water in 2:1 clay minerals: Effects of interlayer cations and isomorphic substitutions	Dr ABBASI, Babak
18:30	[1001] Pressure drop through regular vs. Irregular porous media	Dr NAWAZ, Kashif
18:30	[846] Transport of polymer particles in an oil-water flow in porous medium: enhancing oil recovery	ENDO KOKUBUN, Max
18:30	[1006] Turbulent boundary layer modifications caused by surface-subsurface flow interactions across a porous interface	Prof. CHRISTENSEN, Kenneth
18:30	[1007] Experimental study of turbulent flow over and within cubically packed walls of spheres: effects of permeability and wall thickness	LI, Yaofa
18:30	[826] A Semi-Analytical Model for Characterizing the Transient Flow Behavior of Reoriented Refractures Considering the Interference from the Initial Fractures	Mr TENG, Bailu

**Poster 3: Poster 3-F (17:15-18:45)**

time	[id] title	presenter
17:15	[840] Contact Angle Measurement and Molecular Dynamics Simulation of Wettability Alteration on Calcite Surface	DING, Hongna

**Poster 3: Poster 3-E (17:15-18:45)**

time	[id] title	presenter
17:15	[963] Universal Scaling Relation for Kinkenberg Flows in Nanoporous Media	Prof. YIN, Xiaolong
17:15	[810] Connectivity-enhancing fracture segmentation from X-ray Tomography (XRT) images of reservoir core samples by machine learning-based method	MA, Jingsheng
17:15	[1101] A new dynamic permeability model of coal considering pore compressibility, matrix shrinkage and pulverized coal output and blockage	Prof. SHI, Juntai
17:30	[211] Characteristics and mechanism analysis of gas-water two-phase flow in ultra-low permeability sandstone	Ms YUAN, Cuiping
17:45	[785] Storage space and gas content of Changning Longmaxi shale gas in Sichuan basin, China	SHEN, Rui
18:00	[775] Numerical simulation of proppants transport and placement in fracture	SUN, Hai
18:30	[754] Experimental and modeling study of multi-scale gas flow in shale Micro-Nano pores	Dr DUAN, Xianggang
18:30	[296] A systematic study flow on microscopic pore structure and fluid flow mechanism of tight gas reservoir	Mr ZHANG, wenjie Mr YANG, yongfei
18:30	[60] Pore-scale Simulation Coupling Boundary Layer Effect And Media Deformation In Tight Formation	CHEN, Mingqiang
18:30	[278] The influence of interfacial tension on spontaneous imbibition of low-permeability water-wet reservoir	Ms HE, Bingqing
18:30	[207] Experimental Study on the Effect of Moisture on Adsorption and Diffusion of Coalbed Methane	Mr HAN, Wencheng
18:30	[201] Experimental and simulation research on the influence of temperature on the porous and thermal properties of sandstone	Ms YANG, Haiyuan
18:30	[731] Physical simulation experiment and numerical inversion of the full lifecycle development of shale gas well	Dr YE, Liyou
18:30	[880] Theoretical Estimation of Intracrystalline Diffusivities of Olefins in MTO Catalysts	Mr HAYAT, Khizar
18:30	[494] Molecular Dynamics Simulation on the Adsorption and Transport of Oil-Water Two-Phase in the Nanochannel	Mr RUKUAN, CHAI Prof. YUETIAN, LIU Mr JUNQIANG, WANG Ms JING, XIN
18:30	[993] The wettability of organic rich shales and its effect on transport properties in fractures as realized with the Lattice Boltzmann method	GUILTINAN, Eric
18:30	[292] Research on stress sensitivity of fractured carbonate reservoir by CT Technology and pore-scale simulation	Mr LIU, Zhihui Mr YANG, Yongfei
18:30	[91] A reconstruction method for 3D porous media based on a 3D training image using multiple-point statistics and multiple-grid templates	Dr WU, Yuqi