InterPore2023

Tuesday, 23 May 2023

Poster: Poster Session I (10:30 - 12:00)

time	[id] title	presenter
10:30	[1084] CAN SINGLE POROSITY MODELS ADEQUATELY REPRESENT HEAT FLOW IN FRACTURED POROUS MEDIA?	EGYA, David
10:30	[1076] DeepAngle: Deep-learning-based estimation of the contact angle distribution in tomography images of porous media	Dr RABBANI, Arash
10:30	[315] Effects of microplastics on temperature profiles inside porous media during evaporation	SHOKRI, Nima
10:30	[1070] PTFE-based pore-filled ion exchange membranes for electrodialysis and energy conversion processes	Dr KIM, Jeong-Hoon
10:30	[1043] Study on the Law of CO2 Miscible Displacement Under Different Injection Methods in Heterogeneous Reservoir	Dr CHEN, Xinliang
10:30	[1068] Transport in heterogeneously reactive media	Dr MAGGIOLO, Dario
10:30	[6] Quantitative characterization of pore structure and analysis of seepage characteristics of tight reservoir based on digital core and NMR	DU, Meng
10:30	[1051] Sound and x-ray vision of a porous rock: micromechanics of shear failure under different loading protocols and implications for managing induced seismicity during subsurface operations	CARTWRIGHT-TAYLOR, Alexis
10:30	[1046] Experimental Study on Stress Sensitivity Considering Different Fractures and Water Content in Shale Reservoir	Dr CHANG, Jin
10:30	[1045] A visualization study of stress evolution in CBM horizontal well cavity completion	Ms QIN, Xiaozhou
10:30	[659] Deep Learning-based inverse modeling of a tank model of a channelized aquifer	Dr A. GODOY, Vanessa
10:30	[169] A Correlation for Dispersion Coefficient in Pipe Flows	Dr LIU, Yang
10:30	[120] Particle methods for the dynamics of porous biofilms with heterogeneous rheology and its interaction with human lung epithelium	Prof. PONCET, Philippe
10:30	[317] NMR Study of water transfer from bio-based materials to the living plant	SIDI-BOULENOUAR, Rahima
10:30	[448] NMR relaxometry characterization of water adsorption in corn stover anatomical fractions	YOUNG, Matthew C.
10:30	[342] Influence of phototrophic biofilms on nutrient availability in soil	KOLLMEN, Jonas
10:30	[539] Simulation Study on Heat Flow Coupled Heat Transfer in Porous Media	Ms CHENG, minhua
10:30	[503] Modeling Structural Changes in a Fixed Bed Reactor for Thermochemical Heat Storage During Continuous Cycling	PRILL, Torben
10:30	[282] Enhancing backfill thermal properties by combining granular phase change materials, graphite and glass	CHEN, Tairu
10:30	[96] A Fourier-transform approach for fringe pattern analysis for a Mach-Zehnder interferometry measurement on surface evaporation of saturated porous media	HÄRTER, Julian

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10:30	[418] Flow of a fluid with pressure-dependent viscosity through aging porous media	SRINIVASAN, Shriram
10:30	[567] Mechanistic studies on the adsorption of Iodinated Contrast Media agents on Activated Carbon	KHAN, Ashfeen Ubaid
10:30	[199] Expression of Eshelby tensor from fabric tensor	YOON, Young June
10:30	[177] Investigating mass transfer relationships in stereolithography 3D printed electrodes for redox flow batteries	Ms VAN DER HEIJDEN, Maxime
10:30	[575] Understanding the Reactive Transport and Retention Behavior of Engineered Virus-mimicking Nanostructures	Mr RAJAK, Jai Kishan
10:30	[284] Stability assessment of foam enhanced by surfactant, polymer and nanoparticles in the presence of petroleum hydrocarbons	Mr BAIGADILOV, Adil
10:30	[397] Inhibiting transport of radionuclides in porous media by combining in situ electrokinetics with colloidal silica grout	LUNN, Rebecca
10:30	[136] ASSESSMENT OF THE ACCURACY OF THE SOIL GAS RADON DEFICIT TECHNIQUE FOR MONITORING AND QUANTIFYING RESIDUAL LNAPL CONTAMINATION	CECCONI, Alessandra
10:30	[167] Semantic segmentation of rock images from multiple imaging methods using deep learning methods	YOON, Hongkyu
10:30	[140] Enhancing a high-fidelity nonlinear solver with reduced order model for induced seismicity	KADEETHUM, Teeratorn
10:30	[90] Adaptive node adjustment for real-time subsurface flow modeling	Dr CHEN, Shang-Ying
10:30	[273] Acceleration of Optimal Bayesian Experimental Design via Decision Trees Methods with Orthgonality Constraint	Mr BUKLEI, Grigorii
10:30	[263] DoE-based history matching for probabilistic integrity analysis a case study of the FE-experiment at Mt. Terri	Dr BUCHWALD, Jörg
10:30	[359] Reactive transport modeling in aqueous environments using the Nernst–Planck formulation	HUANG, Po-Wei
	[184] Wetting and Drying Dynamics in Hierarchically Porous Silicon: An In-Situ X-Ray Microscopy Study	Mrs GRIES, Stella
10:30	[15] Atomistic Insight into Trapped Oil Displacement by Nanofluids	CHANG, YUANHAO
10:30	[543] Electrokinetic in situ recovery of copper: The influence of mineral occurrence, zeta potential, and electric potential	Mr TANG, Kunning
10:30	[494] Inelastic deformation of porous sandstones and its influence on rock properties under cyclic triaxial loading conditions	Mr WEN, Ming
10:30	[39] Numerical simulation of hydraulic stimulation on geothermal reservoirs: injection optimization to manage induced seismicity and thermal decline	ANDRÉS MARTÍNEZ, Sandro
10:30	[2] Permeability evolution of fractured sorptive porous materials	Prof. ZHANG, Yida
	[158] Enhanced fluid-fluid chemical reaction kinetics under dynamic multiphase flow	ZHANG, Xueyi
10:30	[77] Spatial moment analysis of single-species transport in unidirectional laboratory tracer tests using rock cores	Mr BHULLAR, Amarjot Singh
10:30	[197] Colloid transport inside slow sand filters: A multi scale study	SAMARI-KERMANI, Mandana
10:30	[161] Novel laboratory apparatus for understanding microbiology in hydrogen storage in porous media	Dr GREGORY, Simon
10.30	[29] An innovative method for the utilization of quarry sand	STRIETH, Dorina

[7] Investigation of reaction rates during microbiologically induced calcium carbonate precipitation	Mr ERDMANN, Niklas
[437] Further Analysis of the Flow through Porous Bodies with Application to Stormwater Management	Ms BARCOT, Ana

Poster: Poster Session II (16:10 - 17:40)

time	[id] title	presenter
16:10	[1086] Characterisation of porous biochar using X-ray micro-CT and FTIR techniques	KAZAKOVTSEV, Pavel
16:10	[1077] The Nature of Multiphase Flow in Microfluidic Devices	ROSSEN, William
16:10	[1073] PE-based pore-filled ion exchange membranes for electrodialysis and energy conversion processes	Dr KIM, Jeong-Hoon
16:10	[1055] Predicting the heat depletion characteristics of hydrothermal doublet systems under varying reservoir and operational conditions	EZEKIEL, C. Justin
16:10	[1065] Relationship between groundwater microtemperature and electrical potential of the vegetation	Ms PINHEIRO, Maria
16:10	[1059] A combined experimental and modeling study to evaluate the soil-gas monitoring for early detection of contaminants leakage into groundwater	Dr DAVARZANI, Dorian
16:10	[425] Mixed-dimensional models for simulation of reactive transport in fractured porous media	BANSHOYA, Shin
16:10	[372] Advanced characterization of novel multilayer cellulose based material for food packaging	PADILLA BELLO, NELLY
16:10	[1049] Understanding Pore Connectivity in Hard-Templated Carbon Materials	Mr SERAPHIM, Nicola Michel
16:10	[1006] Remediation of multilayer soils contaminated by heavy chlorinated solvents using biopolymer-surfactant mixtures	Mr Alamooti, Amir
16:10	[960] Polymer Thermal Degradation: Numerical Simulation and Upscaling for Field Scale Reservoir Applications	Mr ALSALEH, Abdulaziz
16:10	[878] Freezing and Thawing Process in Porous Media: A Study Using Magnetic Resonance Imaging and Modeling	SNEHOTA, Michal
16:10	[821] Heat transfer through pore space in packed beds of non-spherical particles	Mr RODRIGUES, Simson Julian
16:10	[573] The negative and positive effects of hot water injection into coal seam on CBM production	ZHOU, Dong
16:10	[903] Non-Newtonian fluids based method for characterizing the pore structure of spherical glass bead particles	SAFARI ANARKOULI, Soheil
16:10	[900] Pore-scale imaging of nonlinear multiphase flow in porous media	ZHANG, Yihuai
16:10	[968] Flow, heat, and transport at the scale of grains and pores in porous building materials	MENKE, Hannah
16:10	[811] Synthesis of granular activated carbon from biomass and correlation of its sorption properties with the pore space characteristics	Ms STAVRINOU, Anastasia
16:10	[790] Functional design of porous systems by systematic patterning of flat knits	Mr PAULY, Leon
16:10	[306] Digital concrete physics: Prediction of the effective elastic material properties of concrete by pressure-dependent high-resolution X-ray Computed Tomography	Dr BALCEWICZ, Martin

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16:10	[829] Laboratory scale demonstration of asbestos mobility in sandy aquifer systems	Dr MAGHERINI, Leonardo
16:10	[674] Delineating external stressor signals as time-variant conditions affecting DNAPL source zone formation	Dr ENGELMANN, Christian
16:10	[217] Modeling Solute Transport in Heterogeneous Media with Uncertain Architecture via Physics Informed Neural Networks	Mr PANAHI, Milad
16:10	[471] The Uncertainty of Unsteady-State Relative Permeability Measurement Protocols	BERG, Steffen
16:10	[461] Hybrid Mathematical Modelling and Uncertainty Quantification of Underground Hydrogen Storage	Mr CASTELLUCCI, Peter
16:10	[444] Simultaneous Interpretation Of Multiphase Fluid Flow Characteristics In Porous Media from Steady State SCAL Experiments Performed in a Microfluidic Approach	Dr JENEI, Bettina
16:10	[377] Development of a micromodel design algorithm for heterogeneous reservoir rocks	Mr HOGEWEG, Sebastian
16:10	[362] Water-Oil Relative Permeability determination in 2D micromodels of vugular porous media	AVENDAÑO, Jorge
16:10	[764] Gas trapping mechanism and the potential impact on productivity of geothermal reservoirs	Dr NEHLER, Mathias
16:10	[710] Investigation of species transport in fractured porous media using 3D-printed micromodels	MAES, Julien
16:10	[551] Fracture matrix pore network model (FM-PNM): an efficient pore scale modelling method of fluid flow in fractured porous media	Dr WANG, Chenhui
16:10	[599] Laboratory measurements of fluid pressure diffusion in a fractured carbonate sample	Dr CHAPMAN, Samuel
16:10	[440] Mechanisms of Solute Mixing in Darcy's scale Heterogeneous Formations	Prof. DENTZ, Marco
16:10	[439] Impact of Relative Permeability Hysteresis in Numerical Simulations of Underground Hydrogen Storage in Porous Formations	GIACOMI, Guillermo
16:10	[254] An Upscaled Modeling Framework for Reactive Transport: A Case Study - Dry Creek, Idaho	Mr SHERMAN, Zachary
16:10	[202] Rayleigh-Bénard instability in heterogeneous porous media	Ms BENHAMMADI, Rima
16:10	[192] Quantifying the Partial Reversibility of Dispersion in Push-Pull Experiments by Means of Second Central Spatial Moments	Ms STETTLER, Marie-Madeleine
16:10	[309] Bacteria and surfactants for bio-cemented foams	CECCALDI, Margaux
16:10	[276] Wind erosion suppression using biological methods revisited: The use of microbial/enzymatic-induced carbonate precipitation and biopolymers	Dr QAJAR, Jafar
16:10	[266] Microfluidic study of hydrogen conversion by Archea in porous media. A pore-scale investigation of gas conversion and controlling parameters under dynamic conditions.	JASEK, Patrick
16:10	[215] Microbially Induced Calcite Precipitation Treatment of Naturally Fractured Concrete: From Micro-Scale Characteristics to Macro-Scale Behaviour.	Dr CASTRO, Gloria
16:10	[943] Pore Scale Modeling of roots and soil interaction	RAY, Nadja
16:10	[767] Soil texture linking saltwater intrusion in coastal regions to surface soil salinity	Prof. SHOKRI, Nima
16:10	[601] Pore-scale simulation of mucilage drainage using phase field method.	ESMAEELIPOOR JAHROMI Omid

16:10 [588] Influence of Pyrolysis Residence Time on The Physicochemical Properties Ms ODIKI, Esther of Algal Biochar for Water Treatment

Wednesday, 24 May 2023

Poster: Poster Session III (10:30 - 12:00)

time	[id] title	presenter
10:30	[65] Performance characterization of oil-based drilling-mud contaminated cement as a barrier material	Dr NGOUAMBA, Elie
10:30	[153] Quick Clay: A novel alternative for well decommissioning	HAND, Lucas
10:30	[265] Numerical design of nano-porous carbon binder domain (CBD) phase in lithium-ion battery electrodes	Dr GE, Ruihuan
10:30	[139] A Macroscopic Model for Unsaturated Flow in Deformable Evolving Porous Media	ICARDI, Matteo
10:30	[319] Quantifying shrinkage of natural clay samples with an automated high-frequency measurement set-up	Ms LEXMOND, Bente
10:30	[429] Gradient hydrogel based on self-filtration	Mr BODIGUEL, Hugues
10:30	[522] A method to measure adsorptive-poroelastic properties for nanoporous adsorbents	Prof. ESPINOZA, D. Nicolas
10:30	[322] Bacterial chemotaxis in heterogeneous porous media in the presence of nutrient hot spots and flow	Mr STOLL, Maximilian F.
10:30	[355] Biomineralisation of Calcium Carbonate via Ureolytically Active Fungi	ERIKSEN, Jason
10:30	[404] Characterising the development of fungal networks in complex porous media	Dr ZHANG, Qi
10:30	[513] Quantifying the Influence of Groundwater Flow on Bacterial Chemotaxis near a NAPL Contaminant Source at the Pore Scale	Prof. FORD, Roseanne
10:30	[47] A hybrid MPM-CFD model for simulating multiphase flow in deformable porous media.	Dr TRAN, Quoc Anh
10:30	[122] Interfacial instability on dewetting in a capillary tube: from gradient to complex geometry	SUO, Si
10:30	[186] Aging of liquid foam confined in porous media	Mr SALAMÉ, Ali
10:30	[227] Experiment and simulation of quasistatic fluid invasion resulting in pressure-saturation (p-s) hysteresis	Mr NEPAL, Animesh
10:30	[335] Diagenetic Quantification in Relation to Pore Size Population Using Digital Rock Technology	MS BINTI JAPPERI, NUR SHUHADAH
10:30	[436] Effect of CO2 dissolution on elastic instabilities of the polymer through porous media	Dr MIRZAIE YEGANE, Mohsen
10:30	[286] GPSFLOW: A Novel Simulator for Modelling Underground Hydrogen and Gas Mixture Storage in Rough Reservoir	Dr CAI, Zuansi
10:30	[422] Modeling Two Phase Flow in Fractured Rocks Considering Hydromechanical Behaviour and Fluid Leakage	ZHANG, Zhen
10:30	[507] Solute transport in partially saturated porous media with spatially correlated disorder	Mr SAEIBEHROUZI, Ali
10:30	[555] An experimentally validated conceptual model for numerical simulation of accelerated dissolution trapping of CO2 in low-permeable fractured reservoirs	EFTEKHARI, Ali Akbar
10:30	[586] Hydraulic attributes of heterogeneous pore spaces	JIAO, Wenqiao

	[623] Effects of time-dependent velocity fields on the dynamics of chemical transport in porous media	ELHANATI, Dan
	[635] Hallmarks of chaotic mixing in two dimensional unsteady porous media flow	PIERCE, Kevin
10:30	[106] Characterization shale's pore structure of shale: Multi-experimental imaging technique with machine learning	SUN, Hai
10:30	[530] Controlling colloid transport through porous media via local gradients of solute concentration	Dr JOTKAR, Mamta
10:30	[606] Evaluation of phase and inter-phase fractal dimensions during two-phase primary drainage in a microfluidic cell	Dr KARADIMITRIOU, Nikolaos
10:30	[490] Fast workflow to estimate petrophysical properties: From Digital Rock Physics Scale to Laboratory Scale	Mr MIARELLI, Marco
10:30	[648] Effect of Phase Change in Gas Diffusion Layer on Performance of a PEM Fuel Cell – a modelling study	AQUAH, Grace
10:30	[733] Predictions for the porosity dependence of elastic properties and ultrasound wave velocities in isotropic porous media	PABST, Willi
10:30	[740] Montoring the reversible low-to-high-quartz transition and irreversible elastic property changes in sandstone via temperature-dependent impulse excitation	GREGOROVÁ, Eva
10:30	[717] Intracellular "in silico microscopes" - fully 3D spatial Hepatitis C virus replication model simulations	Dr KNODEL, Markus
10:30	[840] Towards a clinically relevant porous media model for vertebroplasty	TRIVEDI, Zubin
10:30	[83] Thermoregulation and Ventilation in Termite Nests: Towards Bio-Inspired Solutions to Design Energy Efficient Buildings	Ms KARIBI-BOTOYE, Nengi Fiona
10:30	[204] The effects of a variable interface permeability on a one-domain VANS model	Dr DIAS, Bruno
10:30	[334] GeoChemFoam, the open-source pore-scale modelling toolbox	MAES, Julien
10:30	[354] Predictive Digital Rock Physics simulation applied on a Sandstone Reservoir	Dr REGAIEG, Mohamed
10:30	[569] A color-gradient lattice Boltzmann model for fluid flow with high density and viscosity ratios	Mrs HAGHANI-HASSAN-ABADI, Reza
	[142] Investigation of supercritical CO2 mass transfer in porous media using X-ray micro-computed tomography	HERRING, Anna
10:30	[196] Impact of Relative Permeability Hysteresis on Underground Hydrogen Storage	Ms KUMBHAT, Diya Sunil
10:30	[16] Perturbation Theory and Green's Function to Solve the Non-Linear Dispersion Saturation Equation arising in Cyclic Injection-Production Well Tests	Dr GONCALVES MACHADO, Cintia
10:30	[187] The impact of multi-scale geological heterogeneities on geothermal reservoir performance	GEIGER, Sebastian
10:30	[1030] Sparsified coarse-scale operators for multiscale methods	CHAABI, Omar
10:30	[1028] Pore-scale Modelling of Salt and Hydrate Formation During CO2 Injection	MOHAMMADREZAEI, Saleh
10:30	[1052] Drag Reducing Agents for Geothermal Applications	JONES, Sian
10:30	[40] Microscopic production characteristics and influencing factors of micro-nano pores in shale oil enhanced oil recovery by air injection	DU, Meng

	[329] Modeling Subsurface Hydrogen Storage With Transport Properties From Entropy Scaling Using the PC-SAFT Equations of State	Prof. HELMIG, Rainer
	[564] Applying Thermodynamic Framework to Analyze Transport Self-Organization Due to Dissolution/Precipitation Reaction in Porous Medium at Varying Peclet Number: Entropy, Enthalpy, Heterogeneity	EDERY, yaniv
10:30	[1071] Waste Rock and Bentonite Mixtures for Gas Management within Low Heat Generating Waste Geological Disposal Facilities	Ms MOUAT, Elise
10:30	[1082] Simulation of CO2 Injection and Development of Proxy Models for Svelvik CO2 Field Lab	Dr JAHANBANI GHAHFAROKHI, Ashkan

Poster: Poster Session IV (16:10 - 17:40)

time	[id] title	presenter
16:10	[1091] Model for the simulation of reaction-mixing processes at boundary layers	SOPPITT, Alisdair
16:10	[1088] Alquimia: A generic interface to biogeochemical codes	MOLINS, Sergi
16:10	[1074] Swelling of oak wood in water-ethanol mixtures : impact of the liquid composition on the material deformation.	Mr DUSSAUT, Cédric
16:10	[730] Water transport in n-alkane phases through diffusion and emulsion: insights into oil remobilization from a pore-scale perspective	YAN, LIFEI
16:10	[127] Discontinuous Phase Flow in Porous Media: A Pore-scale Approach	ZHANG, Lei
16:10	[750] Structural controls on the development of karst environments: A multi-scale experimental investigation	Mr BRIOLET, Théo
16:10	[1056] Comparing 2D micromodel patterns for pore-scale Underground Storage studies	MASSIMIANI, Alice
16:10	[351] Dynamic pore network modeling of imbibition in porous media with corner film flow	CARMELIET, Jan
16:10	[1031] Design of Functionalized Molecules and Polymers (FMP) for Improving the Containment of Subsurface CO2	Mr OMRANI, Sina
16:10	[924] Effect of Water on the Methane Adsorption on the Na-Montmorillonite Surface: Molecular Dynamics Study	Dr PISAREV, Vasily
16:10	[1021] Asymptotic Homogenization - Modeling the charging behavior of Li-ion batteries	Mr LOMBARDO, Giuliano
16:10	[424] Rock thermal properties prediction based on acoustic wave velocity in geothermal reservoirs	KOLAH KAJ, Parvin
16:10	[577] Multiscale network modeling of flow in carbonate rocks with microporosity	GUNDOGAR, Asli S.
16:10	[570] Symmetrizing multiphase flow equations for improved accuracy	HAGHANI-HASSAN-ABADI, Reza
16:10	[456] Equivalent permeability estimation of vugular porous media micromodels	DALI, Monique
16:10	[449] Potential Applications of Quantum Computing in Pore Scale Modeling	RATHMAIER, Daniel
16:10	[434] Semi-Analytical Model to Predict Dynamic Capillary Pressure - Water Saturation Relationships for Multiphase Flows in Porous-Media	RABBANI, Harris
16:10	[390] Novel multi-scale pore network modeling approach that combines high-resolution pore volume reconstruction and super-resolution segmentation	Ms LIU, Xin
16:10	[245] Permeability Contribution Estimation of Different Pore Structures in the Heterogeneous Porous Media Using Image-Based Rock Typing	Dr WANG, Yuzhu

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16:10	[862] Geometric Characterizations for the Prediction of Electrical Properties in Porous Media	CHANG, Bernard
16:10	[673] Forward and Inverse Modeling of Nonisothermal Multiphase Poromechanics using Physics-informed Neural Networks (PINNs)	JUANES, Ruben
16:10	[652] Micro-Scale Simulation and Characterization of Adsorption-Diffusion Behaviors of Nanoparticles onto Mobile Oil/Water Interface	KE, Can
16:10	[619] Evaluation of nanoparticle-based fluids with regard to the enhanced oil recovery (EOR) efficiency and energy cost of their synthesis	Ms STREKLA, Anastasia
16:10	[944] High-resolution Darcy-Brinkman simulation of wormhole growth based on X-CT data.	Dr DZIKOWSKI, Michał
16:10	[812] Underground hydrogen storage in deep aquifers with CO2 as a cushion gas	BEN RHOUMA, Sabrine
16:10	[760] Numerical investigation of chaotic advection in porous media at the Pore and Darcy scales	ASCIONE, Stefano
16:10	[706] Is mixing chaotic in laminar flows through rocks?	PUYGUIRAUD, Alexandre
16:10	[479] RepoTREND – A Program Package for Safety Analysis of a Final Repository for Radioactive Waste	REICHE, Tatiana
16:10	[574] Wettability alteration of microfluidic devices using plasma and its influence on trapping mechanisms in geological reservoirs	GREDIČAK, Viktor
16:10	[546] Enhancing Oil Recovery from Carbonate Reservoirs with Nanoparticle-Assisted Foams	BELLO, Ayomikun
16:10	[538] Multi-Scale Assessment of Surfactant-Assisted Spontaneous Imbibition	ALAAMRI, Jamal
16:10	[465] Experimental Investigation of Wettability Alteration by Modified Salinity Water in Chalk Reservoirs	Dr MOKHTARI, Rasoul
	[312] Impact of structural heterogeneity on fluid phase patterns in two-phase flow through two-dimensional porous micromodels	BORGMAN, Oshri
16:10	[214] Carbon sequestration in porous materials: Uniform CO2 flooding and reaction front	Dr RODED, Roi
16:10	[754] Experimental study of microbial effects on anhydrite and cement during hydrogen storage in salt caverns.	SCHMATZ, Joyce
16:10	[653] Exploiting induced carbonate precipitation to improve reservoir storage integrity and geothermal system efficiency	SALTER, Philip
16:10	[933] The impact of heterogeneity in the pore structure of a laboratory sedimented clay sample when measuring swelling anisotropy	ROCCHI, Irene
16:10	[897] Molecular Mechanisms Underlying The Treatment of Archaeological Wood Cell Wall Composite with Polyethylene Glycol: A Hybrid Monte Carlo and Molecular Dynamics Study	SHOMALI, Ali
16:10	[807] Discrete fluid model for drying of capillary porous media with evolving microstructure	Mr CHEN, jing
16:10	[421] Assessment of hydrogen uptake ability of clay-rich caprocks	Dr MASOUDI, Mohammad
16:10	[414] Water permeability reduction associated with injection of oil-water emulsions and microcapsule suspensions in Bentheimer sandstone	Dr HOYER, Paulo
16:10	[387] Improving Colloidal Silica Grout's Performance as an Injectable Sub-surface Barrier and Soil Stabiliser for Nuclear Decommissioning	Mr MORRISON, David

Thursday, 25 May 2023

Poster: Poster Session V (10:45 - 12:15)

time	[id] title	presenter
10:45	[1060] On the use of tortuosity for modelling Li-ion battery separators	Mr PATEN, Isaac
10:45	[93] Geometric confinement stabilizes fluid invasion during imbibition in microfluidic porous media	Dr LEI, Wenhai
10:45	[562] Viscous coupling effect on hydraulic conductance in dynamic pore network model	GONG, Wenbo
10:45	[1047] A process-based approach to study the effect of microporosity on flow properties in carbonate rock	Mr SHAHI , Anup
10:45	[649] Near well bore formation damage by produced water reinjection	Mr KURBASOV, Maksim
10:45	[502] Micromodel porous network with heterogeneous wettability	Dr PANNACCI, Nicolas
10:45	[386] Multiscale Integration of Discrete Fracture Network and Pore Network Modes Focused on the Pore-Fracture Interface	PANAITESCU, Ciprian
10:45	[348] Simulation of transition flows and phase changes in porous media using modified equations of state to obtain the correct surface tension	Dr FERNÁNDEZ-FIDALGO, Javier
10:45	[771] Colloidosome-Transported Chemical Carbonate Precipitation (CTCCP): A Novel, Low-Emission Grouting Strategy for Cracks and Porous Media	Mr RODEN, Jack
10:45	[765] Pore-scale imaging and analysis of surfactant flooding	Mr ALZAHRANI, Hussain
10:45	[702] Pore-scale hysteresis and Relative Permeabilities in Edwards Brown Dolomite	Ms DARRAJ, Nihal
10:45	[684] Experimental study on effect of cyclic loading on deformation and AE characteristics of sandstone: Relevant for energy storage	NADERLOO, Milad
10:45	[545] Investigating calcite dissolution and relative effects on Underground Hydrogen Storage (UHS) through pore-scale reactive transport model and reservoir simulation	Mr BO, ZhenKai
10:45	[541] Distributed sensing for monitoring greenhouse gas loading to the atmosphere through disturbed soil: Intermediate-scale testing	ILLANGASEKARE, Tissa
10:45	[469] Nano-scale imaging and modelling of gas transport in clay-rich mudstones	Ms ZHONG, Xin
10:45	[799] Numerical investigation of impacts of surface wettability on gas hydrate formation in porous media	Dr ZHANG, Qian
10:45	[737] Predicting Representative Elementary Volume by determining the evolution law of the cone of convergence	ZWARTS, Sijmen
10:45	[736] Inertial effects in porous media flow with OpenFOAM	ŚNIEŻEK, Damian
10:45	[680] A mixed-wet pore network model for electrolyte imbibition in gas diffusion electrodes	MAGER, Thorben
10:45	[655] Dissolution-precipitation processes: patterns and product separation	SZAWEŁŁO, Tomasz
10:45	[630] Modeling and simulation of reactive two mineral systems	RAY, Nadja
10:45	[373] Numerical analysis of axial compression impact on the hydrodynamics of open-cell foams	ENNAZII, Alaa-eddine
10:45	[20] Transient deformation and swelling of paper by aqueous co-solvent solutions	Mr KARIMNEJAD, Sajjad

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10:45	[19] Transport and evaporation of aqueous co-solvent solutions in thin porous media	Mr WANG, Shuo
10:45	[332] Controlling hygrothermics of biobased construction material	Mrs YAN, Luoyi
10:45	[515] Employing GPUs to compute effective properties of porous media from μCT scans in desktop computers	Mr CORTEZ LOPES, Pedro
10:45	[394] Visualization of pore formation during polymerization-induced phase separation	BROSCH, Sebastian
10:45	[350] Electrode Design Booster Using a Statistical Digital Twin	Dr BUCHHEIT, Roman
10:45	[340] Assessing formation damage in-situ using X-ray computed tomography	Mr BRITTAIN, Rory
10:45	[330] Spatial microporosity mapping in meso-scale rock samples by X-Ray Computed Tomography	Mr ROA P., Juan C.
10:45	[773] An energy stable SPH method for fluid-solid coupling in geological porous medium	ZHU, XINGYU
10:45	[735] A Quick Approach to Model Fault Leakage during CO2 Storage	Dr RAMACHANDRAN, Hariharan
10:45	[613] Error estimates for the scalar auxiliary variable (SAV) scheme to the Cahn-Hilliard equation	Prof. QIU, Weifeng
10:45	[695] Incorporating Bubble Evolution and Transport in Constitutive Relationships for Quasi- and non-Equilibrium two-Phase Flo	WILDENSCHILD, Dorthe
10:45	[683] Post-breakthrough finger evolution in unstable growth processes	ŻUKOWSKI, Stanisław
10:45	[675] Pore size distribution and permeability improvement estimation of porous rocks: a comparison of image-based methods and experimental NMR measurements	LEIDERMAN, Ricardo
10:45	[534] Atomistic Insights into the Droplet Size Evolution during Self-Microemulsification	FU, Yuequn
10:45	[453] Evaluation of foam stability in bulk and core-scale with CO2-rich gas mixture and zwitterionic surfactants	Dr FREITAS LOPES, Leandro
10:45	[676] Modelling Long-Term Thermal Energy Storage in Water-Gravel-Filled Artificial Basin Systems	Mr BOTT, Christoph
10:45	[629] Low cost 3D printing of electrically conductive porous media for gas diffusion layers	DUMAY, Yann
10:45	[563] Towards the prediction of caprock porosity and permeability for CO2 storage seal integrity assessment	SAZALI, Wan Muhammad Luqman
10:45	[491] Water-H2-Quartz and Water-H2-Calcite Wettability Measurements: An Experimental and Theoretical Investigation	Dr AL-YASERI, Ahmed

Poster: Poster Session VI (15:30 - 18:30)

time	[id] title	presenter
15:30	[1097] Characterization Of Capillary Driven Flow In Layered Porous Reservoirs	Mr AGARWAL, Akshit
	[1096] Exploring the Impact of Ice Formation on Soil Temperature for Ground Source Heat Pumps	Ms LGOTINA, Ekaterina
	[1094] Numerical Modeling of Two-Phase Flow in the Porous Pavement Drainage Structure	JOHANSSON, Barbara
	[1092] Anisotropic stochastic Pore Network generation algorithm with application to shale gas flow	BUSCH, Andreas

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15:30	[1075] Effect of fluids on micro-crack evolution in organic-rich shale by molecular dynamics simulations and nanomechanical experiments: A microscopic perspective from the fluid effect on fracturing	Prof. WU, Tianhao
15:30	[776] Combining Molecular Dynamics and Machine Learning to determine CO2 adsorption features on amorphous nanosurfaces	Dr LUNATI, Ivan
15:30	[501] Investigating interfacial instability snap-off in a uniform capillary with a sharp wettability contrast	QAISER, Yemna
15:30	[409] Pore-scale investigation into dynamics of salt crystal nucleation, precipitation and growth in porous media during CO2 sequestration in saline aquifers	Dr NOORAIEPOUR, Mohammad
15:30	[1062] CO2 Fluid Properties Parametrization for Accurate Heat, Solubility and Transport Model	Mr YALCIN, Bora
15:30	[1041] Deliquescence of salt nanocrystals	Mrs TALREJA-MUTHREJA, Tanya
15:30	[1012] Mono-energetic Micro-computed tomography(μ CT) A reliable potential alternative to mineral Investigation of formation rock	Mr NASIRI, Arash
15:30	[992] Investigation on the heat change during the disintegration process of pharmaceutical tablets	LEE, Jongmin
15:30	[1016] Nanoscale interface dynamics: Self-assembly and stability of interface film of multi-phase flow in porous media	FU, Yuequn
15:30	[772] Experimental studies of slow drainage in porous media: Effect of the randomness of the porous medium on the fluid flow	Dr KHOBAIB, Khobaib
15:30	[935] Hydrochemically detrimental factors in ATES applications – An analysis of clogging and scaling processes based on column and batch experiments	GABLER, Leonie
15:30	[906] Reservoir-scale simulation of CO2 solutal convection: approaches and limitations	BOGDANOV, Igor
15:30	[882] Effect of CO2 injection on porosity and texture of reservoir chalk assessed by 1H low-field gradient NMR measurements	Dr MEIRELES, Leonardo Teixeira Pinto
15:30	[857] Comparative study of hydrogen and CO2 performance in subsurface using sharp-interface modelling	VAHABZADEH ASBAGHI, Ehsan
15:30	[252] Entropy generation analysis in a quasi-3D PEM fuel cell model with architectured electrocatalyst layer	Mr ALIZADEH, Mehrzad
15:30	[485] Stress concentration in the local load sharing fiber bundle model	LUNDHEIM, Elias
15:30	[978] Multiscale Direct Numerical Simulation of Pore Scale Fluid Flow Through Porous Media	STEWART, Gospel Ezekiel
15:30	[923] The effects of sand bridge structures on gas and water relative permeability evolution during the continuous sand migration process in hydrate-bearing porous media	Ms ZHOU, Shanshan
15:30	[815] Direct Numerical Simulation of weak-inertia single-phase flow in porous materials using SPH	Mr KRACH, David
15:30	[969] Advanced mesoporous thin film characterisation by ellipsometric porosimetry	FUREDI, Mate
15:30	[658] Compositional and Structural characterization of complex fluids via Electrical Impedance Spectroscopy and Electron Microscopy	Dr TOMOZEIU, Nicolae
15:30	[481] Modelling surface-washing of porous media: dye-attenuation of a passive tracer	Dr CONTO', Francesco Paolo
15:30	[891] Structural and transport properties of hydrocarbons in clay nanopores	Dr PISAREV, Vasily

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