



# InterPore2024

## Tuesday, 14 May 2024

### MS17: 2.2 (12:00 - 13:00)

time	[id] title	presenter
12:00	[351] Advanced 4D Imaging of Shales at Micro- to Nano-scale: Investigating the time-lapse evolution Under Subsurface Thermal, Hydrological, Mechanical, and Chemical Conditions	MA, Lin
12:15	[66] Lattice Boltzmann simulation of water distribution and its effect on methane adsorption in nanoporous shale	ZHANG, Tao
12:30	[89] A Coupled THMC Model for Simulating In-situ Conversion process in Low-Medium Maturity Shale Oil Reservoir	WANG, Zijie
12:45	[696] Application of Automated Mineralogy in Fluid-Solid chemical reactivity transmission on reservoirs	YAN, Shijie

# Wednesday, 15 May 2024

## MS17: 3.1 (10:55 - 11:55)

time	[id] title	presenter
10:55	[345] Domain decomposition physics-data combined neural network for parametric reduced order modelling of fluids	PAN, Xinyu
11:10	[1036] Thermo-hydro-mechanical coupled zero-thickness interface finite elements: benchmarking and application	LUO, wen
11:25	[492] Coupled Thermal-Hydraulic-Mechanical-Chemical Simulation for Underground Coal Gasification	HU, Zhuocheng
11:40	[96] The HiPerBorea project: permafrost modeling from the pore scale to the headwater catchment scale with open source, high performance computing tools	Dr ORGOGOZO, Laurent

## MS17: 3.2 (12:00 - 13:00)

time	[id] title	presenter
12:00	[922] A vectorial finite element method for the pore-scale calculation of the high temperature thermal behaviour of periodic porous 3D architectures.	ROUSSEAU, Benoit
12:15	[170] Advancements in Hydraulic Fracturing Simulation Considering Complex Natural Fracture Distributions	Prof. ZHU, Weiwei
12:30	[476] Pore-scale modelling of non-linear rock deformation under low- stress ranges	LI, Rui

## MS17: 3.3 (14:00 - 15:30)

time	[id] title	presenter
14:00	[197] The evolution of water ice reservoir in lunar polar regions	WANG, Zhenpeng
14:15	[343] Pore-scale study of CH <sub>4</sub> hydrate morphology and kinetic behavior by high-pressure microfluidics	Prof. YIN, Zhenyuan
14:30	[472] Pore-scale Simulations On The Impacts Of Hydrate Production Approaches On Gas And Water Transport In Hydrate-bearing Sediments	Dr QIN, Guan
14:45	[485] Mineral composition and concrete gradation of sandy clay on CO <sub>2</sub> hydrates formation	Dr ZHAO, Jianzhong
15:00	[549] Clathrate Hydrates in Porous Media: Application to Low-carbon Fuels in Clean Energy Transition	ZHENG, Junjie
15:15	[657] Fluid solid coupling simulation of deep carbonate gas reservoirs based on digital cores	Dr ZHANG, Ruihan

# Thursday, 16 May 2024

## MS17: 4.1 (09:05 - 10:20)

time	[id] title	presenter
09:05	[710] Effect of pH on the Competitive Adsorption Behavior of CO <sub>2</sub> /CH <sub>4</sub> in Shale Inorganic Nanopores from the Molecular Simulations	NING, Shaofeng
09:20	[1014] Simulation study on the distribution of water - gas domains and two-phase seepage characteristics of coal based on the cavity throat network model	ZHOU, Dong
09:35	[628] Investigating the effects of temperature and moisture on CH <sub>4</sub> recovery after CO <sub>2</sub> injection: flow simulation based on coal pore network model	Dr CHENG, Qiaoyun
09:50	[736] Elastic properties evolution of carbonate rocks during reaction induced by carbon dioxide injection	ZHANG, Yuxuan
10:05	[317] Study on pore-fracture morphology and mineral-induced acid-heat-flow-solid simulation of coal under supercritical CO <sub>2</sub>	Mr HUANG, Saipeng

## MS17: 4.2 (11:50 - 12:50)

time	[id] title	presenter
11:50	[854] Investigation of the Effect of Thermal Stresses on Hydraulic Fracturing in Geothermal Reservoirs	SAJJADI, Mozhdeh
12:05	[717] A three-dimensional reservoir-scale Thermal-Hydrological-Mechanical model of enhanced geothermal systems	LIU, Tingting
12:20	[665] Temperature evolution law of mining coal seam in gas desorption process	Mr ZHANG, Wenlu

## MS17: 4.3 (13:50 - 15:05)

time	[id] title	presenter
13:50	[672] Study the fluid flow interaction with fracture and matrix in the porous media.	Dr WU, Kejian
14:05	[526] A pore-scale perspective on the hydraulic fracturing of heterogeneous glutenites	CHEN, yanying
14:20	[104] Evaluating and enhancing the fracture conductivity by an optimised carrier fluid and proppant design	Prof. WANG, Duo
14:35	[355] Experimental study on pressure-increased water injection by nuclear magnetic resonance method	Prof. SUN, Renyuan