



Institut Terre & Environnement
de Strasbourg | ITES | UMR 7063
de l'Université de Strasbourg
& CNRS & ENGEE

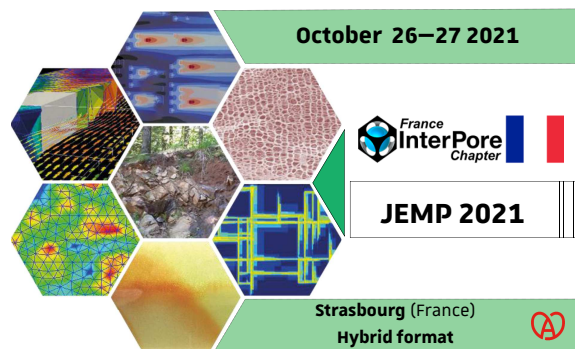
TESCAN
PERFORMANCE IN NANOSPACE

SYNERGIE⁴

Program – Tuesday, 26 October

Virtual talks in red

08:30	Welcome of in-presence participants – Palais Universitaire		
09:00	Opening of JEMP2021 by scientific committee (room PASTEUR)		
09:20	Keynote: Rainer HELMIG (room PASTEUR) <i>Numerical models for evaluating the competitive use of the subsurface: the influence of energy storage and production in groundwater</i>		
10:15	Coffee break (AULA)		
10:40	Keynote: Anne GALARNEAU (room PASTEUR) Design of silica and zeolites monoliths for process intensification in heterogeneous (bio)catalysis and in wastewater treatment		
11:35	Short break		
11:45	Room PASTEUR Djibo Soumana Aboubacar <i>Modelling of heat conduction in granular porous media</i>	Room 118 Chaguer Mouna <i>Development of the integrated hydrological model NIHM: Implementation of transport processes</i>	Room 119 Guo Juncheng <i>Mechanisms of gas separation through 2D porous graphene membranes : theory and molecular simulations</i>
12:10	Keita Seny <i>Development of quantitative detection methods for mass spectrometry of non-interfering and interfering gases such as mixtures of H₂, He, Ne, O₂, Ar, N₂, CO₂, CH₄, C₂H₆, C₃H₈, i-C₄H₁₀, n-C₄H₁₀ and C₂H₂</i>	Mallya Nithin <i>Topology Optimization of Encapsulated Macro-Porous Phase Change Materials for Thermal Energy Storage</i>	Zhang Yijun <i>Photopolymerization of zeolite/polymer based composite and corresponding application in the fields of 3D printing and gas adsorption</i>
12:30	LUNCH (« Restaurant universitaire GALLIA »)		
	Coffee Break (« Restaurant universitaire GALLIA »)		
14:00	Noetinger Benoit <i>Equivalent hydraulic conductivity, connectivity and percolation in 2D and 3D random binary media</i>	Ferhat Hamida Rabie <i>Investigation of calcium sulfate carbonation processes using geological labs on a chip: experimental and thermo-kinetic modelling approaches</i>	Blosse Sarah <i>Enzymatic degradation of plant biomass : a porous media approach</i>
14:25	Prieto Espinoza Maria <i>Dichloromethane degradation in porous media under dynamic hydrogeological conditions</i>	Mostafa Ahmad <i>Pore-scale hydro-mechanical modeling of gas transport in coal matrix</i>	Benjamin Harold <i>Nonlinear acceleration waves in soft porous media</i>
14:50	Ariskina Kristina <i>Molecular dynamics study of methane diffusion in flexible microporosity of source rock's organic matter</i>	Hajizadeh Javaran Mohammad Reza <i>Application of deep neural networks in predicting natural convection on two dimensional porous media</i>	Assemat Pauline <i>How mechanical strain might modify transport properties of a biological tissue-mimicking porous media; an experimental approach</i>
15:15	Bourel Christophe <i>Modeling of shallow aquifers in interaction with overland water</i>	Stemmelen Didier <i>Swelling of polymeric hydrogels observed by MRI</i>	Barthes Antoine <i>Study of the nanoscopic fluid film involved in the crystallization of water in a porous material by a Non-Local Density Functional Theory framework</i>
15:35	Coffee Break (AULA)		
16:00	FIC General Assembly (room PASTEUR)		
17:00	Posters session & partners' exhibition (AULA)		
18:40	Free time		
20:00	Gala DINNER (Restaurant L'Ancienne Douane – 6 rue de la douane – Strasbourg)		



Program – Wednesday, 27 October

Virtual talks in red

08:10	Welcome of in-presence participants – Palais Universitaire		
08:30	Keynote: Veerle CNUDE (virtual talk - room PASTEUR) <i>Unravelling pore-scale processes in geomaterial</i>		
09:25	Short break		
09:30	Room PASTEUR Bouvet Lisa <i>Towards a pore scale model of snow cover metamorphism under isothermal conditions</i>	Room 118 Licsandru Glad-Calin <i>Laboratory controlled NaCl salt crusts</i>	Room 119 Recalcati Chiara <i>Statistical characterization of the micro-scale spatial distribution of calcite dissolution rates</i>
09:55	Koohbor Behshad <i>Modeling coupled DNAPL migration and complex resistivity evolution in saturated porous media</i>	Mghazli Zoubida <i>Mathematical modeling and numerical approximation of the compressible two-phase flow in a landfill</i>	Stigliano Luca <i>Geostatistical description of calcite surface roughness resulting from dissolution at close-to-equilibrium conditions</i>
10:20	Mokhtari Omar <i>How high-stress elastic filaments control flows of viscoelastic fluids through porous media?</i>	Okumko Victor <i>Investigating haloclasty as a potential cause of French Basque Country Coastline erosion</i>	Noiriel Catherine <i>Evaluation of mineral precipitation into single fractures</i>
10:40	Coffee break (AULA)		
10:55	Koohbor Behshad <i>On the use of ERT data for numerical modeling of seawater intrusion in fractured coastal aquifers</i>	Maiza Safa <i>Modeling of Evaporative Soil Salinization induced By Salt Recycling In Irrigated Arid Regions (Tunisia)</i>	Lu Renchao <i>Pore-scale modeling of acid etching in a carbonate fracture</i>
11:20	Ahmed Maloum Mohamed El Moustafa <i>Characterization of Transport Properties for the Microporous Layer of PEMFC from 3D Tomographic Images</i>	Alamooti Amir <i>Analysis of the displacement behavior of DNAPL in contaminated soils by injecting densified polymer suspension</i>	Chekai Tinhinane <i>Structural, chemical and hygric characterization of antique Dutch tiles and their susceptibility to salt damage</i>
11:45	Fontaine Vincent <i>Hybridizable interior penalty discontinuous Galerkin methods for degenerate advection-Diffusion-reaction problems</i>	Mansouri-Boroujeni Mahdi <i>The link between corner flows and Haines jumps dynamics during two phase flow in subsurface reservoirs using microfluidics</i>	Ha Quoc Dat <i>Study on the poromechanical behavior of coalbed methane affected by gas mixture adsorption in nanopores of complex geometry</i>
12:10	Ahusborde Etienne <i>Numerical simulation of coupled two-phase flows and geochemical reactions in porous media: contribution to a new CO₂ benchmark</i>	Ghiringhelli Elisa <i>Experimental study of drying in the presence of fluorescent colloidal particles in model system</i>	Mannai Aroua <i>Numerical Modeling of Evaporative Salinization and Crystallization-Induced Deformations in Building Stone</i>
12:30	LUNCH (« Restaurant universitaire GALLIA »)		
	Coffee Break (« Restaurant universitaire GALLIA »)		
14:00	Perez Sarah <i>On the estimation of permeability uncertainty due to unresolved pore-scale features</i>	Etangsale Grégory <i>Primal hybridizable discontinuous Galerkin methods for modeling flow in fractured porous media</i>	Sarkis Marilyn <i>Influence of the contact properties on the behavior of biocemented sand</i>
14:25	Tinet Anne-Julie <i>Comparison of morphological and effective properties of 3D reconstructed nanoporous medium from 2D FIB-SEM slices</i>	Hoteit Hussein <i>A pressure transient analysis approach to estimate CO₂ entrapment in fractured reactive formation</i>	Fernandes Bruno <i>Microstructure of concrete made with recycled concrete aggregates after exposure to elevated temperatures</i>
14:50	Ryzhikov Andrey <i>High Pressure Intrusion of Aqueous Salt Solutions in MFI-type Zeosil: Influence of Cation Nature</i>	Mezquita Gonzalez Jesus Alberto <i>Near surface geophysics to quantify groundwater storage heterogeneity in weathered/fractured hard rock aquifers</i>	Soumane Youness <i>Clogging of a 2D model porous media by a non brownian suspension</i>
15:10	Coffee Break (AULA)		
15:30	Keynote: Jan CARMELIET (virtual talk - room PASTEUR) <i>Wetting mechanisms of fibrous materials: from yarn to textile scales</i>		
16:30	FIC PhD Prize Awarding (Best PhD poster) Closure of the conference		
17:10			