

International Workshop 'Modelling Reactive Transport in Porous Media'
Januray 21-24, 2008

PROGRAM

	Monday, January 21th, 2008	Tuesday, January 22th, 2008	Wednesday, January 23th, 2008	Thursday, January 24th, 2008
9h	Registration	Field Applications	Benchmark results	Numerical Methods II
		Essential concepts and missing features of reactive transport models for use in industrial application domains. J. Van der Lee (Invited)	Introduction. M. Kern. INRIA.	C. Steefel (invited)
9h30		Reactive transport at the interface between porous and non porous media on the alliances platform. Application to iron/argillite interactions. <i>L. Trotignon, O. Bildstein, E. Piault E. Deville.</i>	Solving the benchmark on reactive transport of GdR MoMaS using HYTEC. <i>V. Lagneau.</i>	High-resolution finite volume methods for problems of reactive transport in porous media. <i>P. Frolkovic</i>
10h30		Reactive Transport Modeling of Dissolved Oxygen transport and attenuation in fractured crystalline rock: glacial melt water scenario. <i>K.T.B. MacQuarrie, K.U. Mayer, S.M. Spiessl.</i>	A parallel solver for reactive transport problems in porous media and its application to the MoMaS benchmark problem. <i>J. Hoffmann.</i>	A modified Lagrangian-volumes method to simulate nonlinearly and kinetically sorbing solute transport in heterogeneous porous media. <i>J-R. de Dreuzy, K. Besnard, P. Davy.</i>
11h	Introduction A. Ern	Coffee break	Coffee break	Coffee break
11h30	Concepts and Modelling I Laboratory Experiments: Some Thoughts and Challenges for Modelling Precipitation and Dissolution B. Berkowitz (Invited)	CO2 Impact on clay-rich sealing cap-rocks experimental results interpretation and numerical simulations. <i>A. Michel, T. Parra, J. Moutte, E. Kohler.</i>	DSA schemes applied to the Reactive Transport Benchmark of GdR MoMaS. <i>M. Fahs</i>	Efficiency of the Eulerian Lagrangian Localized Adjoint Method for kinetic reactive transport problems. <i>A. Younés.</i>
12h	Numerical modeling of heterogeneous electrocatalysis in porous media. <i>J.Fuhrmann, K.Gärtner, E.Holzbecher, H. Langmach, A. Linke, H. Zhao</i>	Reactive transport modeling of cement-based waste and MSWI bottom ash evolution subjected to dynamic leaching tests <i>L. De Windt, D. Dabo and R. Badreddine</i>	A global approach for coupling chemistry and transport. <i>C.deDieuleveult, J.Erthel.</i>	Direct and inverse contaminant transport problems with adsorption in a dual well setting. <i>M. Remesikova.</i>
12h30	Multispecies reactive transport under equilibrium and kinetic geochemical conditions <i>L.D. Donado, A. Guadagnini, X. Sanchez-Vila, J. Carrera.</i>	Chemistry and transport in idealized glass cracks : from experiments to the modelling for understanding fractured glass block leaching. <i>F. Bouyer, L. Chomat, S. Gin.</i>	J. Samper	General discussion
13h00	LUNCH	LUNCH	LUNCH	LUNCH
14h30	Numerical Methods I E. Sonnenthal (Invited) , K. Pruess, N. Spycher, T. Xu Modeling Coupled Thermal, Hydrological, and Chemical Processes Associated with the Site Analysis and Emplacement of High-Level Nuclear Waste into a Geologic Repository.	Concepts and Modelling II Modeling Reactive Flows from Pore to Continuum Scales P. Lichtner (invited)	Benchmark results Benchmark Calculations USING alternative geochemical modules implemented within reactive transport codes. <i>W. Pfingsten, H. Shao.</i>	
15h	Size reduction of transport-reaction problems in porous media and handling of mineral precipitation/dissolution as complementarity problems. <i>S.Kräutle.</i>	Reactive transport modeling of multicomponent gas and solute transport in porous media. <i>S. Molins, K.U. Mayer.</i>	Newton-Krylov methods for coupling transport with chemistry in porous media. <i>L. Amir, M. Kern.</i>	
15h30	Numerical modeling of coupled fluid flow and thermal and reactive biogeochemical transport in porous and fractured media. <i>G-T. Yeh, C-W. Chen, Y. Fang, F. Zhang.</i>	Modeling at different length scales of the wormholing phenomenon. <i>C. E. Cohen, M. Quintard, D. Ding, B. Bazin.</i>	P. Frolkovic	
16h	Coffee break	Coffee break	Coffee break	
16h30	J. Carrera (Invited)	Modelling of steel slag environmental behaviour <i>A. Benard.</i>	SNIA scheme with operator-specific methods applied to the Reactive Transport Benchmark of GdR MoMaS. <i>J. Carayrou.</i>	
17h	Numerical evaluation of multicomponet cation exchange reactive transport in physically and geochemically heterogeneous porous media. <i>C. Yang, J. Samper.</i>	CORE2D V4: A Code for water flow, heat and solute transport and geochemical reactions: Simulations of chemical interactions of clays and concrete <i>C. Yang, J. Samper, L. Montenegro.</i>	General discussion on the MoMaS benchmark	