

Minisymposium MAMERN VII (Oujda May 17–20, 2017) :

Nonstandard multiphase flows in porous media

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The aim of this minisymposium is to shed light on recent advances on multiphase flows in porous media using nonstandard constitutive laws as the Darcy-Brinkman flow, the Darcy-Forcheimer flow, reactive transport model, non-equilibrium model, non-newtonian flow, dynamic capillary model ...

Several physical phenomena can be considered : compressible/incompressible flow, miscible/immiscible flow, compositional flow, saturated/unsaturated flow, convection, capillary and permeability effects, sorption mechanism...

The minisymposium is intended to present modeling, mathematical analysis and numerical methods arising from real industrial issues : infiltration of aggressive ions in concrete structures, recovery in petroleum engineering, unsaturated zone hydrology, hydrogen displacement in a nuclear waste repository, CO₂ sequestration, swelling and shrinkage phenomena in the cement matrix ...

Papers related to the topics of this minisymposium are welcome and can be sent to: mazen.saad@ec-nantes.fr