

THREE-DIMENSIONAL RECONSTRUCTED POROUS MEDIA.  
APPLICATION TO THE STUDY OF TRANSPORT MECHANISMS  
IN SANDSTONES

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Abstract 3-dimensional random porous structures are generated, which share the same statistical properties as the pore space of real materials observed on thin sections. It is then possible to simulate transport phenomena in these reconstructed media, and to calculate the permeability and the formation factor. The methodology is illustrated on an example: the Fontainebleau sandstone.