



Development of the approach for determining the porosity of a full-size core sample based on the results of its investigation using microfocus computed tomography.

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Nowadays the main problem in determining the porosity with microfocus computed tomography is a significant discrepancy between the calculation results of this parameter for different sizes of stone samples. Only small sizes of core sample can provide reliable data. However, in this case general statistics are lost and it's impossible to talk about the accuracy of the results for the whole investigated material. In this regard, the approach of obtaining information about the porosity of the full size sample needs significant improvement in processing techniques. This article examines the way of determining the statistical boundary separating the superposition of the matrix and pores in a voxel model of the full size core sample obtained with the microfocus tomography. Mathematical algorithms of the wavelet analysis were used in order to achieve the results.