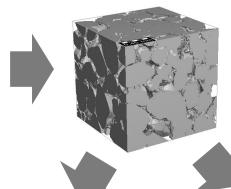
Digital Rock Physics Routine Core Analysis at a Glance

CT scan

Segmentation





Segmentation methods

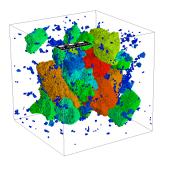
- · Histogram thresholding
- · Machine learning
- Deep learning

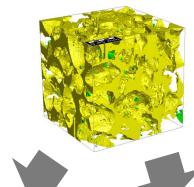
Pore space

Grain size

Size analysis methods

- Sphere fitting
- Distance transform
 - + Watershed



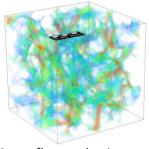


Open vs closed

Absolute permeability

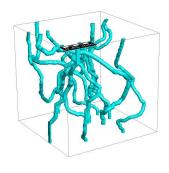
From Darcy's law and Stokes conservation of momentum

- conservation of momentumMean flow velocity map
- Pressure drop map can be calculated.



Mean flow velocity map

Percolation path





TOOLS & RESOURCES

- Deep Dive Workshop Series Digital Rock Analysis
- GeoDict The digital material laboratory by Math2Market
- <u>Digital Rock Physics by Dr. Jens-Oliver Schwartz</u>
 (GeoDict User Meeting 2020 presentation recording)
- Workshop: Digital Core Analysis (parts 1-3) using GeoDict 2022
- Webinar: Computed Tomography for Materials and Life Science – Data Analysis
- Image Processing Workshop: Processing Images
 Using ImageJ

CONTACT US imaging@rigaku.com

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