



# Rigaku Virtual Workshop Series

## X-ray Computed Tomography



Click [here](#) to register for workshop

### TOOL PROFILE

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[ImageJ](#) is an open source image processing program for scientific multidimensional images. It has a large user community providing thousands of plugins and scripts for performing various tasks.

### HIGHLIGHTS

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- Open source for scientific community
- Transparency with open source code
- Large user community  
[forum.image.sc](https://forum.image.sc)  
[imagej.net/plugins](https://imagej.net/plugins)  
[imagej.net/learn](https://imagej.net/learn)

## QUICK REFERENCE

### *CT Data Analysis Using ImageJ*

#### LOAD IMAGES

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CT scans are stored either in a single file or a folder containing multiple 2D slices in TIFF, DICOM, etc. You can drag & drop a file or folder to ImageJ to load and set the voxel size from the Analysis > Set Scale menu.

#### SEGMENT

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The first step of CT data analysis is the segmentation process, which labels each voxel as a specific phase, solid and pore, for example. Thresholding is available in ImageJ. Machine learning is also available in the Weka plugin.

#### REFINE/SEPARATE

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You can eliminate small “islands” and “holes” in a segmented phase by applying morphology operations. Morphology operations are available in the Process > Binary menu.

#### ANALYZE

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After segmentation, you can analyze properties, such as phase volume fraction, particle size, etc. using [various plugins](#).