Rigaku Virtual Workshop Series

X-ray Computed Tomography Click <u>here</u> to register for <u>workshop</u>

PRODUCT PROFILE

ly 2021.

Dragonfly <u>(Object Research</u> <u>Systems)</u> provide advanced solutions for scientific and industrial data, including X-ray CT images.

HIGHLIGHTS

- Unparalleled selections of segmentation tools
- Unparalleled rendering and video production
- Unparalleled custom function extensibility
- Flexible licensing options



QUICK REFERENCE

CT Data Analysis Using Dragonfly

LOAD IMAGES

CT scans are stored either in a single file or a folder containing multiple 2D slices in TIFF, DICOM, or other image file format. When loading a CT scan, you usually need to know its file format and voxel size.

SEGMENT

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 and machine or deep learning are commonly used segmentation techniques.

REFINE/SEPARATE

You can eliminate small "islands" and "holes" in a segmented phase by applying morphology operations. You can also separate one phase into multiple particles, grains, pores, etc.

ANALYZE

Once you have clean and separated segmentation results, you can study their properties, such as vol%, thickness, particle size, etc.

