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> provides 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

IMAGE SEGMENTATION

The first step of CT data analysis is segmentation, which labels each voxel as a specific phase, solid and pore, for example. Thresholding and machine or deep learning are commonly used segmentation techniques.

DEEP LEARNING

Deep learning is a type of machine learning that utilizes artificial neural networks to perform image segmentation, image denoising and improved image resolution.

OBJECT SEPARATION

The watershed transformation is an algorithm for separating different objects within a segmented volume or ROI.

ANALYZING SEPARATED OBJECTS

Once you have clean segmented data and separated objects, you can study the object properties as well as distributions of object properties, including volume and size distributions.



