

InFlow™ Lab Test

WiO/OiW Droplet Sizing Analysis

Canty Representative: Colin Dalton

1. Results

1.1 20% Water in Oil

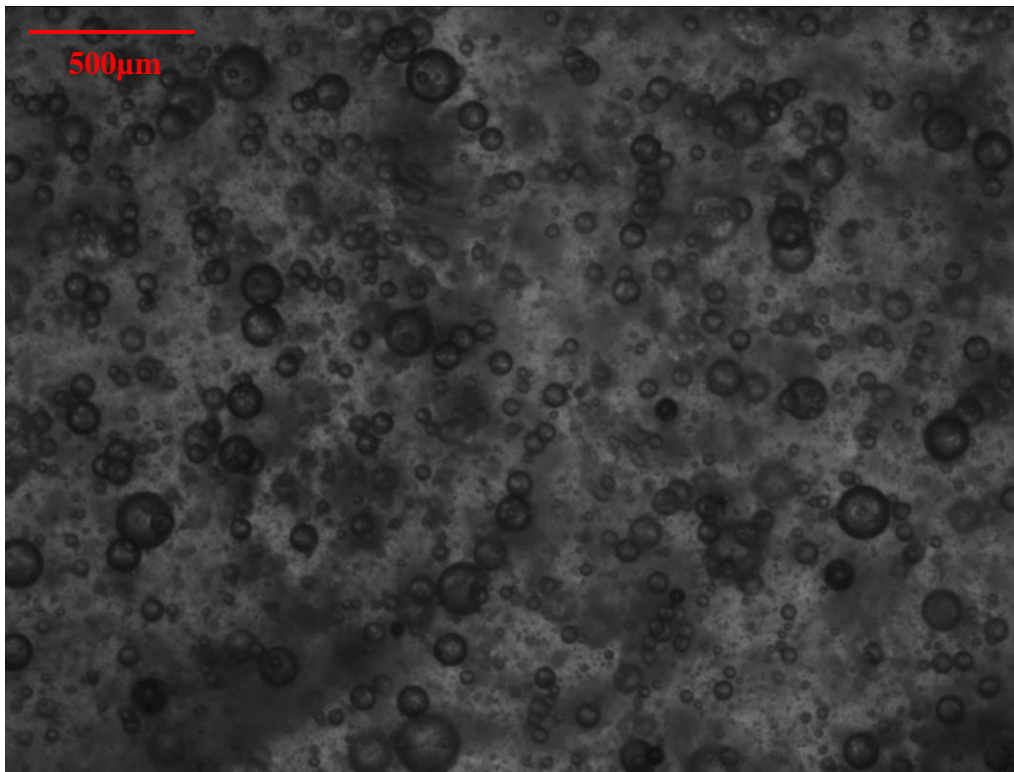


Figure 1 Live image of water droplets in oil (20% water)

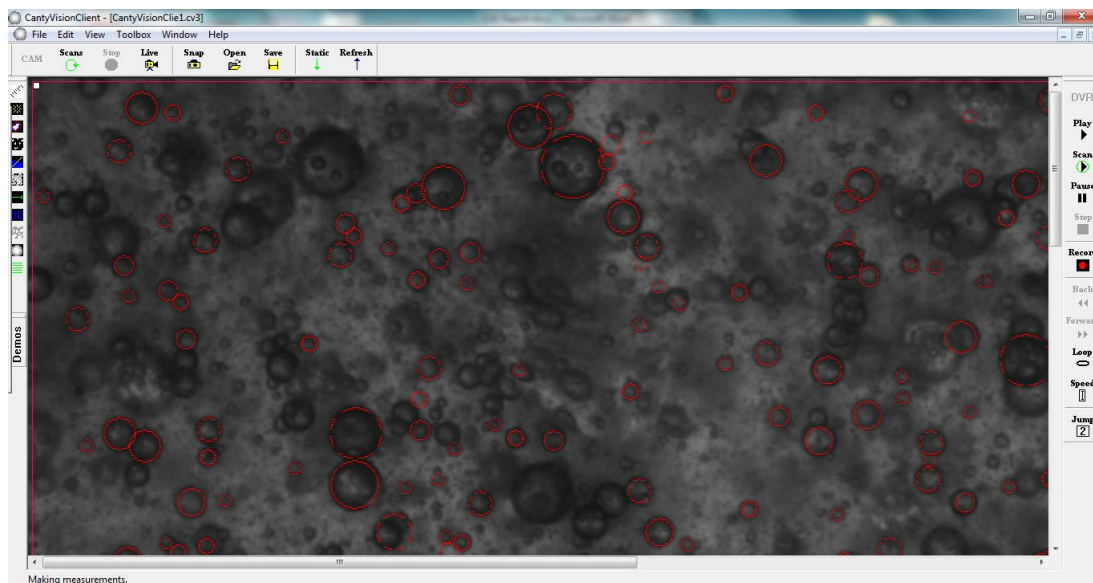


Figure 2 Snapshot of software interface analyzing droplets

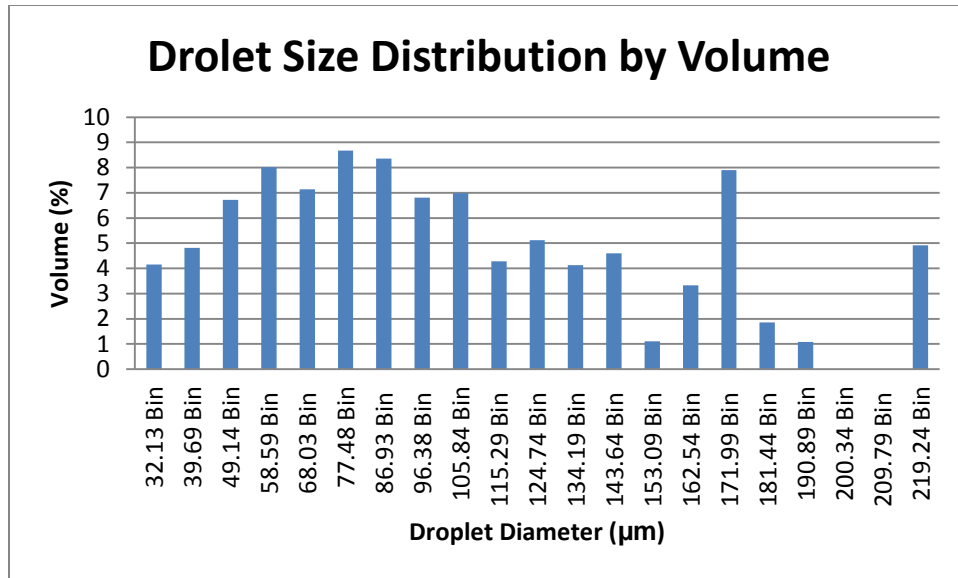


Figure 4 Droplet Size Distribution by Volume (20% Water.) Average Droplet Diameter: 105µm

1.2 40% Water in Oil

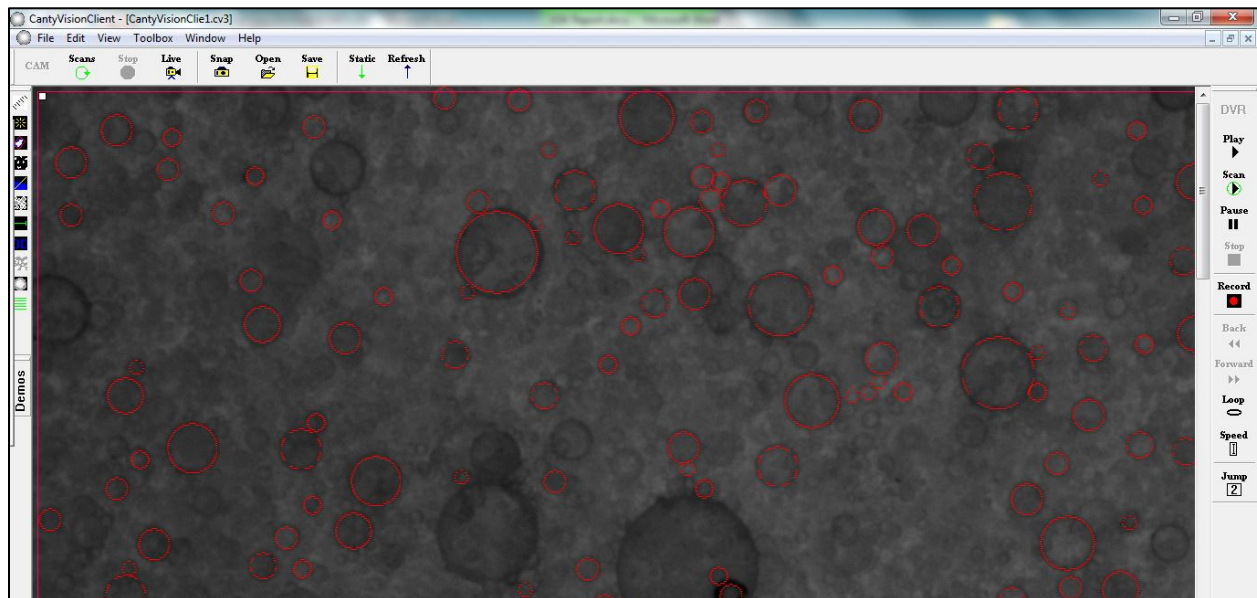


Figure 5 Snapshot of software interface analyzing droplets (40% Water in Oil)

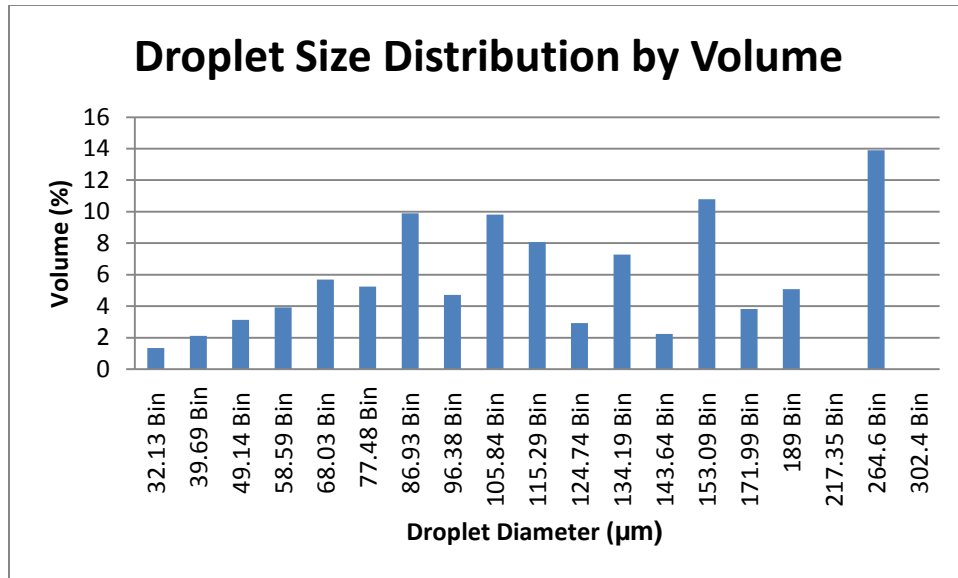


Figure 6 Droplet Size Distribution by Volume (40% Water.) Average Droplet Diameter: 135µm

1.3 40% Oil in Water

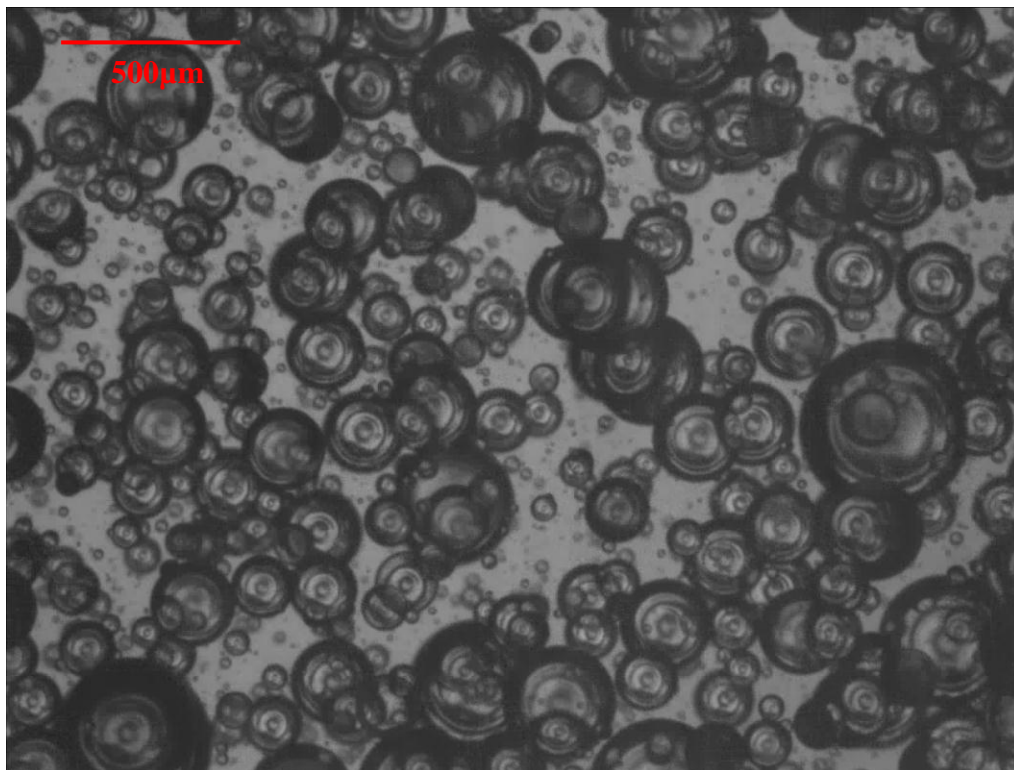


Figure 7 Live image of oil droplets in water (40% oil)

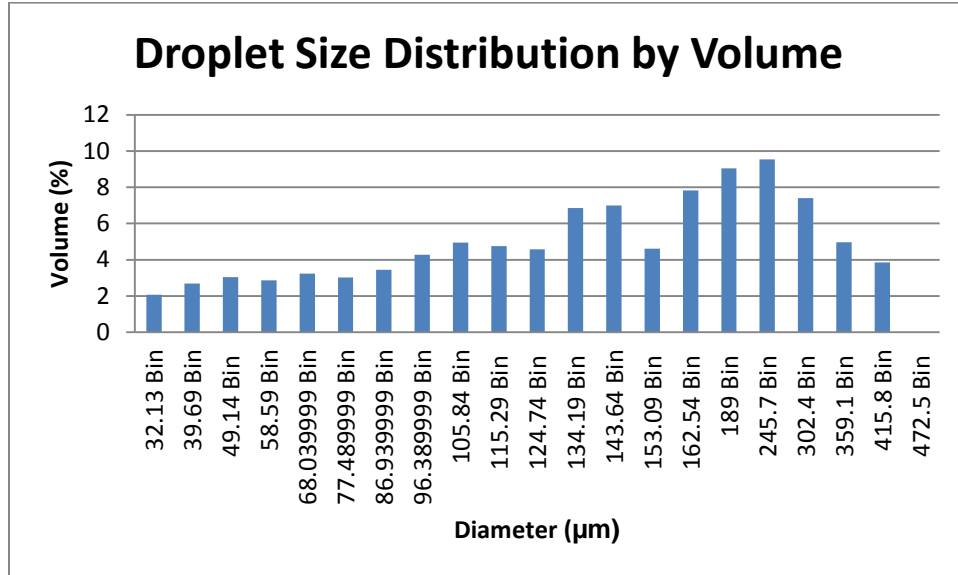


Figure 8 Droplet Size Distribution by Volume (40% Oil.) Average Droplet Diameter: 168μm

1.4 20% Oil in Water

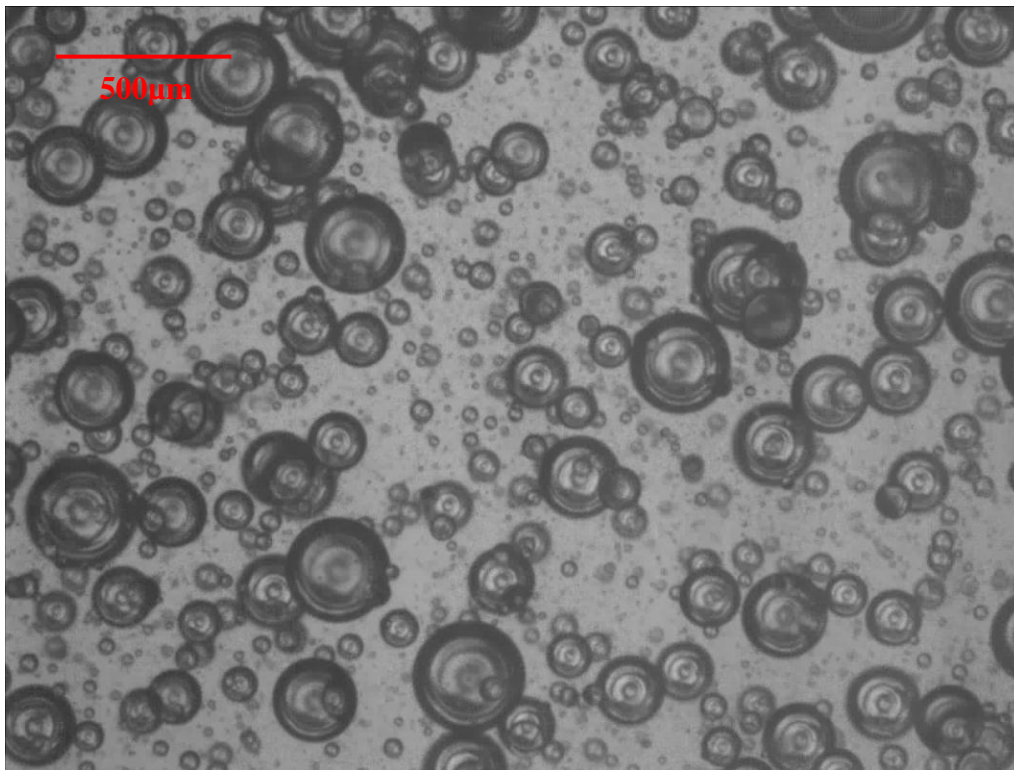


Figure 9 Live image of oil droplets in water (20% oil)

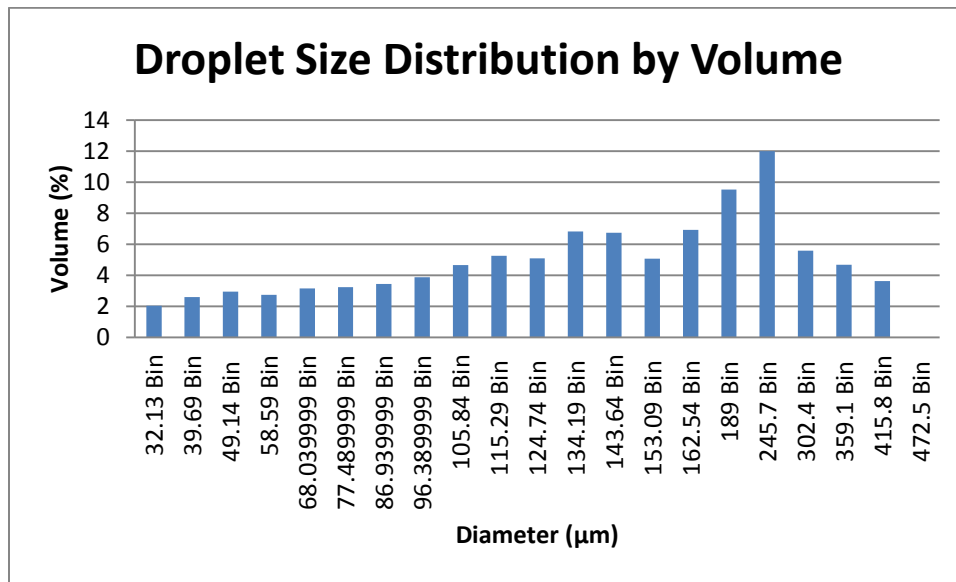


Figure 10 Droplet Size Distribution by Volume (20% Oil.) Average Droplet Diameter: 157µm

2. Discussion

The dynamic imaging based technique for particle sizing supplied high quality images of the water droplets in oil.

This vision based technique provides the operator with an unparalleled view into the process, which allows the user to better understand what is happening within their process. Both the laboratory systems and Inline systems are optically identical, allowing for consistency between results in the laboratory, at-line and on-line.