

Bulk Emulsion Analysis

Image Analysis Report 209

Sample Description

Slide containing bulk emulsion.

Purpose of Analysis

Demonstrate the ability of the Clemex image analyzer to discriminate and measure all spheres in the field of view.

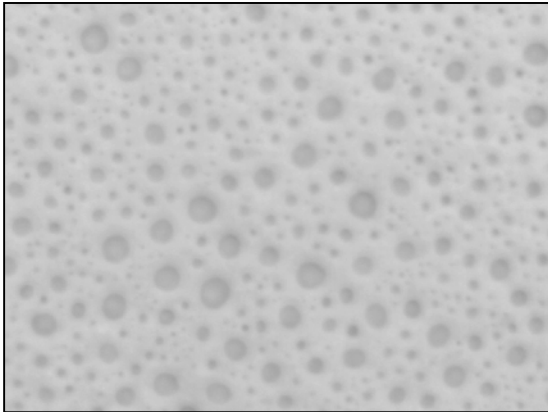


Figure 1: Original image.

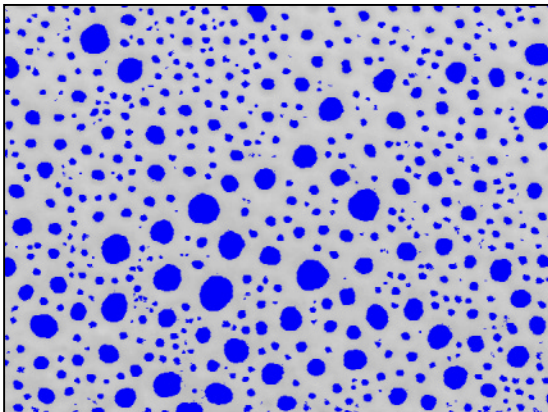


Figure 2: Blue binarization (Thresholding) of the original image. The smaller spheres were detected using a gray filter (Top Hat on Black).

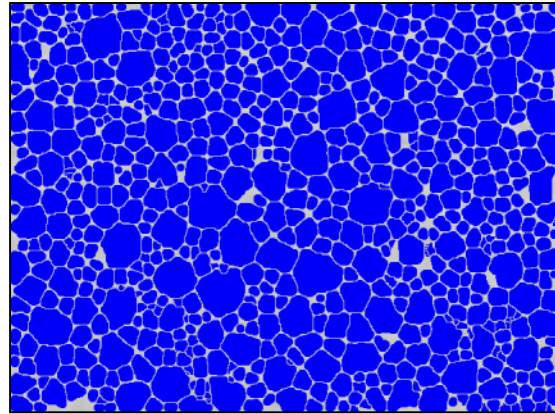


Figure 3: The blue objects were spread (zone) to obtain a more realistic size of the touching spheres.

Results Summary

	Area (μm^2)	Diam. (μm)	Volume (μm^3)
Minimum	0.2	0.5	0.1
Maximum	121.6	12.4	1927.6
Mean	19.3	4.5	156.6
Standard Deviation	18.3	2	246.6

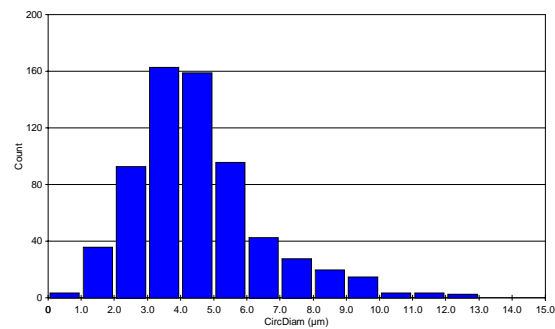


Figure 4: Circular Diameter distribution of the spheres.

Equipment

Image Analysis

System: Clemex Vision SE
Camera: Sony XC-003, reflected light
Microscope: Nikon Optiphot-2, 50x
Stage: Motorized Marzhauser