

Length Distribution of Glass Fibers

Image Analysis Report 146

Sample Description

Glass slides containing fibers.

Purpose of Analysis

Demonstrate the ability of the image analyzer to discriminate and separate fibers and to produce a distribution of length measurements.

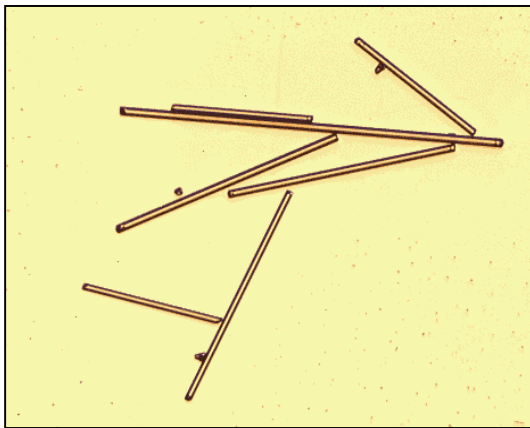


Figure 1: Original image (100X).

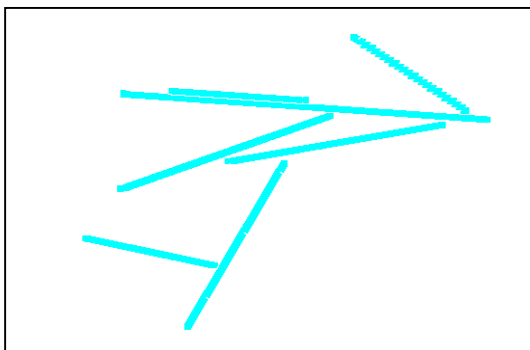


Figure 2: Fibers are detected and separated. Artifacts are removed prior to final measurement.

Results Summary

	Length (microns)
Minimum	30.7
Maximum	470.6
Average	177.2
Standard Deviation	81.5

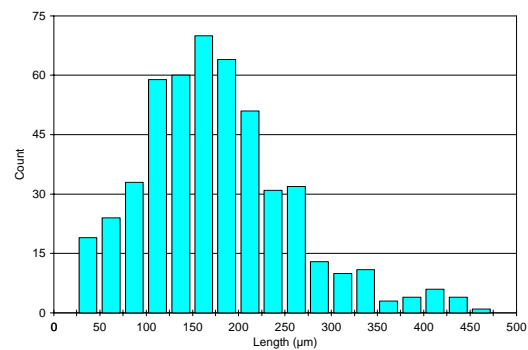


Figure 3: Length distribution of fibers.

Equipment

Image Analysis

System: Clemex Vision SE
Camera: Sony RS170 RGB High (624X480) Color
Microscope: Nikon Optiphot-2 (2, 5.0, 10, 20, 40, 100X) with transmitted light
Stage: Motorized Marzhauser EK8B-S1 (100 x 75 mm) with auto focus drive