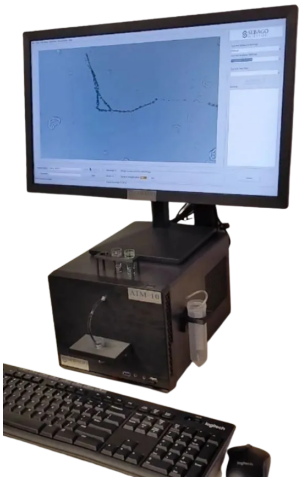
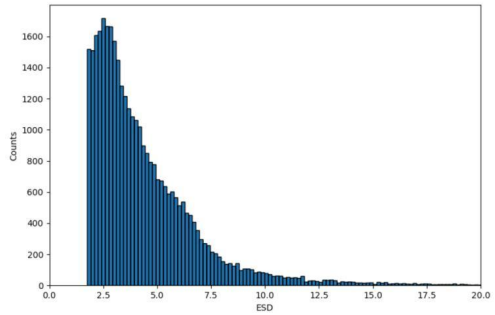
Identifying Similar Particles using Morphological Properties with Sebago Scientific's AIM™ System

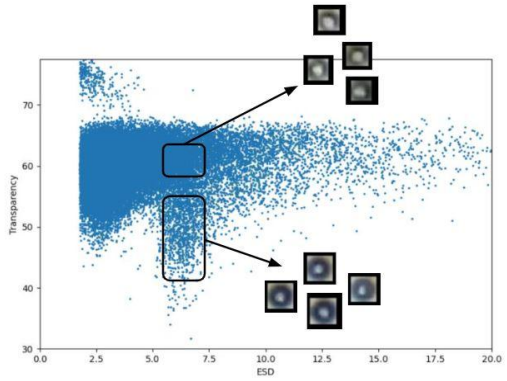


Not all samples are as they seem. Sebago Scientific's AIM™ systems give you the power to see more aspects of your sample than typical particle analyzers. With 16 individual parameters measured for every particle found, you have more flexibility with how you will analyze your sample. These additional measurements allow you to expand your understanding of what is in your sample, and give you the ability to identify different types of particles within your sample. This is achieved by choosing the optimal combination of measurements and applying them to one of the multiple graphing options on the AIM™ System.

Consider a sample with two different types of particles that are overlapping in size distribution (see below). When analyzed by reviewing the size distribution below it can be observed that the skewed histogram does not give much information other than the diameter size distribution of the sample. The truth is there are two different types of particles in this sample. One is an eukaryotic organism while the second is a micro particle. The micro particle falls within the size distribution of the single cell organism. Because of that overlap it is very difficult to differentiate the micro particles from the organisms by simply looking at the size distribution histogram.



By using the AIM system's customizable graphing software the data can be displayed as a scatter plot with two parameters plotted: diameter and transparency of each particle. These parameters allow for the micro particle to be displayed as a separate grouping located at the bottom area of the plot. The cells that are less opaque are represented at a higher transparency value on the plot. This cell grouping can also be confirmed when using the AIM™ System's interactive graphing display by simply selecting the points in the graph and each particle selected is individually displayed to the user.



This type of analysis can be repeated by using any of the 16 parameters measured by the AIM™ System.

Contact Sebago Scientific Inc today to see how we can help you find the solution you need.

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