

# Particle Characterization Seminar

Theory of Laser Diffraction and Dynamic Image Analysis



Thursday, August 27, 2026

09:00 a.m.	<b>Welcome &amp; Introduction</b> <ul style="list-style-type: none"><li>▪ Who was Anton Paar?</li><li>▪ Overview of the seminar objectives</li><li>▪ Icebreaker activity: Share one interesting fact about particle sizing</li></ul>
09:30 a.m.	<b>Fundamentals of Light Scattering</b> <ul style="list-style-type: none"><li>▪ Rayleigh Scattering</li><li>▪ Mie Scattering</li><li>▪ Fraunhofer Diffraction</li></ul>
09:45 a.m.	<b>Coffee Break</b>
10:15 a.m.	<b>Particle Size Concepts</b> <ul style="list-style-type: none"><li>▪ Why size matters?</li><li>▪ Equivalent spheres</li><li>▪ Why shape matters?</li></ul>
11:00 a.m.	<b>Laser Diffraction &amp; Dynamic Image Analysis</b> <ul style="list-style-type: none"><li>▪ Size range and instrumentation</li><li>▪ Advantageous vs. disadvantageous</li><li>▪ Case studies: Examples of different applications and results</li></ul>
11:45 a.m.	<b>Best Practices</b> <ul style="list-style-type: none"><li>▪ Sampling</li><li>▪ ISO Standards overview</li></ul>
12:30 p.m.	<b>Lunch</b>
02:00 p.m.	<b>Hands-On Experiments: Litesizer DIF &amp; Litesizer DIA</b> <ul style="list-style-type: none"><li>▪ Group experiments: Analysis on one sample to evaluate the difference between the two techniques</li><li>▪ Debrief: Key observations and insights</li></ul>
04:00 p.m.	<b>Coffee Break</b>
04:15 p.m.	<b>Hands-On Experiments: Litesizer DIA &amp; Advanced Morphology Studies</b> <ul style="list-style-type: none"><li>▪ Group experiments: Focus on dry samples</li><li>▪ Debrief: Share findings</li></ul>
04:30 p.m.	<b>Closing Remarks</b> <ul style="list-style-type: none"><li>▪ Summary of key takeaways</li><li>▪ Feedback session: What did participants find most valuable?</li></ul>
05:00 p.m.	<b>End of the seminar</b>