

Particle Characterization Seminar

Theory of Laser Diffraction and Dynamic Image Analysis



Thursday February 27, 2025

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