

WITec ParticleScout™ Enhanced with New Features

The cutting edge of Raman-based microparticle characterization gets even sharper

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WITec GmbH, the pace-setting leader in Raman microscope technology, has enhanced its ParticleScout automated particle analysis tool to offer even greater speed and versatility for finding, classifying and identifying microparticles.

ParticleScout now includes integration time optimization that uses the signal to noise ratio to determine how long each particle is measured for identification. This not only greatly reduces overall measurement time, but also minimizes the effects of fluorescence.

“The first release of ParticleScout was a response to the general demand for a microparticle analysis system built around Raman spectroscopy,” says Harald Fischer, Marketing Director at WITec. “This version is driven by direct feedback from researchers and their specific requirements in laboratories focused on environmental research, food science, pharmaceuticals and many other applications.”

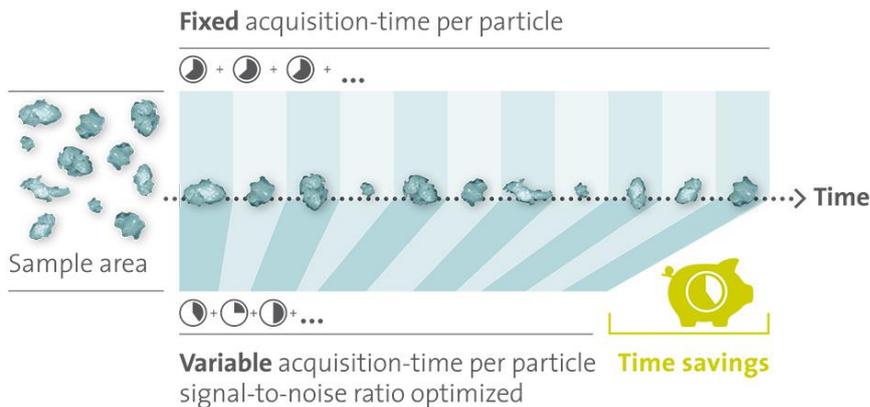
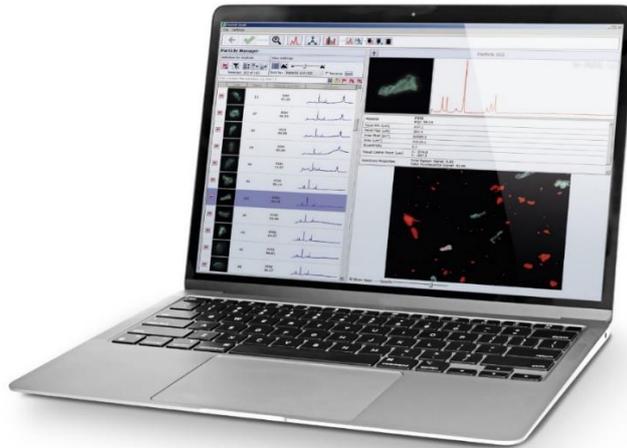
The enhanced ParticleScout has added image processing features such as vignetting correction, smart zoom that displays particle information dynamically depending on viewed area, and multiple sample area targeting. These conveniences are complemented by the integration and possible combination of dark-field, bright-field, epifluorescence and transmission sample illumination.

A software routine has been introduced to accelerate measurements of round samples such as filters that contain homogeneously distributed particles. It allows a wedge section to be selected for analysis and the results can then be extrapolated to represent the whole. Another innovation is the smart separation of closely adjacent or touching particles. This is especially useful for densely packed, heterogeneous samples.

Data post-processing with WITec’s TrueMatch™ Raman database management software is updated as well, including the ability to identify individual components in mixed spectra. Hit quality index (HQI) calculation is also optimized with automatic noise reduction and substrate spectra removal. Together these advances enable a new degree of precision in sample characterization.

Finally, the quantitative report that summarizes the results of a ParticleScout investigation can now be formatted with pre-configured templates such as tables, bar graph histograms or pie charts for clear and effective data presentation.

For more on the very latest in automated particle analysis technology, please visit our product page: www.witec.de/particlescout/



About WITec

WITec GmbH pioneered 3D Raman imaging and correlative microscopy and continues to lead the industry with a product portfolio that offers speed, sensitivity and resolution without compromise. Raman, AFM and SNOM microscopes, combinations thereof, and WITec-developed Raman-SEM (RISE) systems can be configured for specific challenges in chemical and structural characterization through a modular hardware and software architecture with built-in capacity for expansion. Research, development and production are located at WITec headquarters in Ulm, Germany, and the WITec sales and support network has an established presence in every global region.

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