

Nano Science, Technology and Industry Scoreboard

Principles of Dynamic Light Scattering Bring Life to This Nanoparticle Size Analyser

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The Testa Analytical NanoBrook 90Plus is a useful device designed to measure the size and zeta potential of various nanoparticles, including but not limited to proteins, polymers, liposomes, and even biological nanostructures, with diameters ranging from under 1 nm to 6 μm . Moreover, developed based on the principles of dynamic light scattering, this device is very fast, and its unique software can rectify the errors arising due to contaminating dust particles, thus obtaining more reliable data. This flexible software is also suitable for users with different levels of expertise from beginners to specialists, providing them all with a wide range of valuable data.

If you have polymers or proteins, nanodots or new adhesives, latexes or liposomes, cosmetics or colloids, the <u>Testa Analytical NanoBrook</u> 90Plus is a perfect tool to characterize your particles.

The 90Plus is designed to perform fast, routine submicron particle size measurements (<1 nm to 6 μ m) on a wide variety of samples and concentrations. Based on the principles of dynamic light scattering, most measurements only take a minute or two.

Using simple to use but powerful tools the 90Plus is able to extract the most information from your sample. A unique filter algorithm can remove the influence of a contaminating fraction of large dust particles. Such particles can ruin a light scattering measurement; with the 90Plus it is often possible to rescue the measurement and obtain reliable data. The flexible and intuitive software allows you to quickly, simply, and interactively test the effects of changing parameters and evaluation methods. Different levels of software operation both enable a novice or occasional user to obtain key data quickly while still providing access to advanced features enough for specialists to unlock valuable data from complex measurements.

Another important benefit for users of the 90Plus is its outstanding reproducibility from

sample-to-sample, operator-to-operator, and instrument-to-instrument. The high-quality optical design and strict quality control during manufacture ensures that every instrument performs the same. By automating much of the testing procedure and data analysis, effects due to different operators are dramatically reduced.

Besides particle sizing, the 90Plus is also upgradeable to perform zeta potential measurements to enable you to better understand colloidal behaviour.

Read the <u>original article</u> on Engineering Update.