



Major Extension of Merlin FE-SEM series

In response to the extremely positive customer feedback received for its leading edge MERLIN® Field Emission Scanning Electron Microscope (FE-SEM), Carl Zeiss Microscopy has now created an entire MERLIN product line.

Initially, two new MERLIN FE-SEMs will broaden the existing platform: the Merlin Compact and the Merlin Compact VP. Both enable the customer to configure his or her system specifically to present research requirements while simultaneously permitting the ongoing expansion of the system capabilities in answer to changing needs. The already proven unique plug and play detector technology of the Merlin series enables the customer to always work with the best state-of-the-art equipment, regardless of the field of application. Needless to say, the Merlin Compact VP additionally enables high-resolution imaging of non-conductive samples without coating.

In addition, both systems are equipped with a large frame store of 24k x 32 k pixels, allowing imaging of very large areas; the new InLensDuo detector enables acquisition of topographical and materials information.

Two unique offerings broaden the application range even further: With the ability to install an ultramicrotome directly into the vacuum chamber, the automated serial blockface imaging of embedded samples (e.g. cells or tissue) with slice thickness down to 15 nanometers becomes possible. Thus large, three-dimensional biological samples can be imaged with voxel sizes in the one digit arena (x,y) and low two digit area for z-direction.

Even atomic resolution imaging becomes possible by integrating an AFM into the vacuum chamber. The unique combination of AFM / SE imaging allows for totally controlled AFM operation, offering completely new research capabilities.

Everything is possible with the new Merlin series that grows with customers' needs.