

13. Tag der Mikroskopie

Workshop 6



Large Surface Areas? No Problem!

Automized analysis of large surfaces in material sciences

In conventional materials microscopy even today in most cases embedded samples are used. This needs the prior destruction of a component and leads at the end to the effect, that only a certain part of the component can be analyzed. In many cases however, the acquisition of the entire component surface is essential for the correct interpretation of the characteristics or failures. If it's required to collect measurement data in addition, then even today its necessary to perform a visual inspection and analysis, or only do a partial evaluation with subsequent extrapolation of the results to the entire surface. The reason is, that the system requirements especially in PC technology were not sufficient, to process measurement data and images of sometimes several Gigabyte.

In this workshop the important prerequisites and new developments are shown, to document and analyze large surface areas efficiently. Based on the new zoom microscope Axio Zoom.V16 with large field of view and high resolution in combination with a powerful Imaging system of Carl Zeiss, application examples for image documentation and surface analysis are shown.