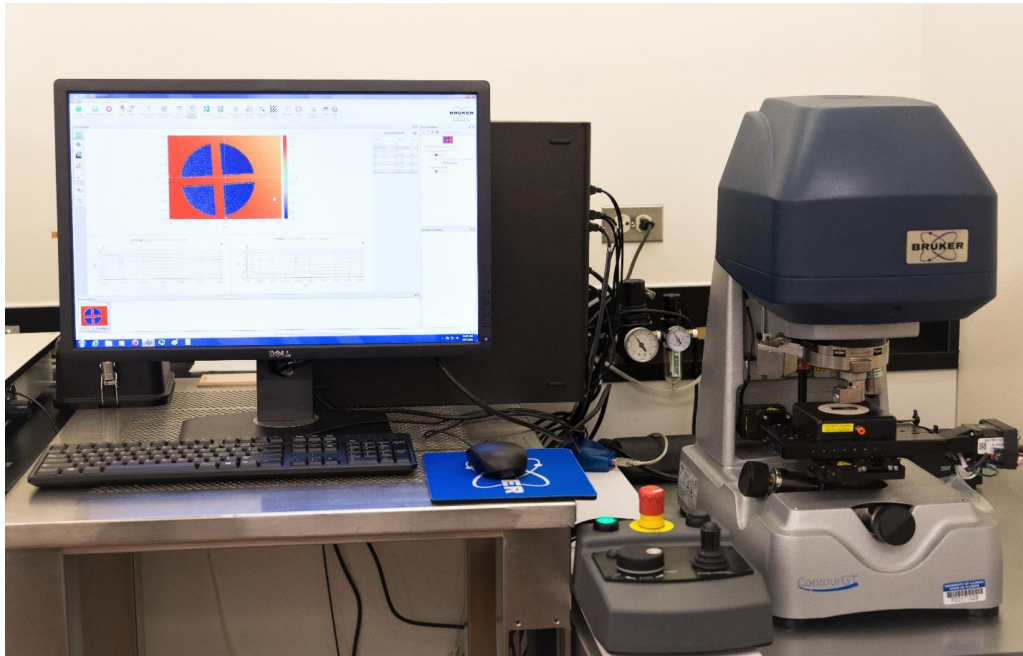


Bruker-Nano Contour GT-K Optical Profilometer



Optical profilers are interference microscopes, which use properties of light to compare the optical path difference between a test surface and a reference surface to measure height variations/roughness of the surfaces with great precision. Inside an optical interference profiler, a light beam splits, one beam (reference) reflects from a super smooth reference mirror in the objective, while the other (test) reflects from the surface of the sample and back to the objective. If the surface of the sample is in focus, the two light beams will recombine and form an interference pattern of light and dark bands called fringes. The number of fringes and their spacing depends upon the relative tilt between the sample and the reference mirror. If the sample and the reference are parallel, only one large fringe will be seen. In this case, the fringes are said to be nulled. The interference pattern is received by the CCD camera and the signal is transferred to the computer, where it is processed by Vision64. Vision64 will then produce a graphical representation of your surface.

This instrument has a wide dynamic range of measurement from 10ns of nm-10 mm.