## Scanning microscopy in measuring of nanoscale objects

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The article is devoted to the analysis of nanotechnology devices and those of physical phenomena, which underpin them. A scanning tunneling microscope, atomic force microscope are considered in detail. These devices are specified in the atomic level-development of atomic design, spintronics, etc. The basis of operation of the devices nanotechnology lie quantum phenomena that imposes higher than before, the requirements to the level of training of engineering personnel and, accordingly, to the level of mastering by students of technical universities of modern quantum physics. Emphasizes the importance of fundamental training of students of technical universities for the successful development of nanotechnology in our country.

*Keywords:* nanotechnology, scanning tunneling microscope, atomic force microscope, magnetic force microscope, atomic design, spintronics.

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