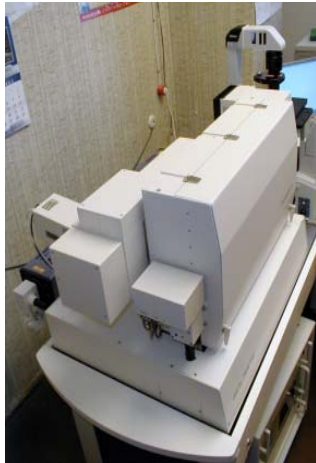
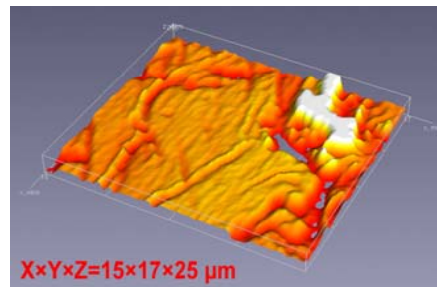


Prospective non-organic materials for opto- and micro-electronic and advanced methods for structure investigation

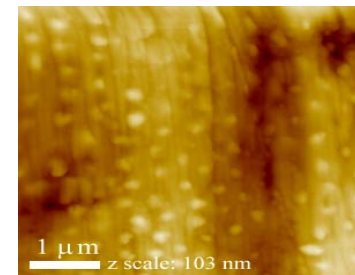
Obtaining fundamental knowledge of the local atomic and electronic structure, its relation to physical and chemical properties of the modern multifunctional materials. Discover the possibilities to use the borderlayer processes in mono- and multilayer nanostructures for the new generation of surface-active sensors and ultrahard coatings. Developments of light emitters, detectors and visualization systems on oxyfluoride nanocomposite basis with enhanced quantum efficiency.



3D scanning confocal microscope with spectrometer



3D surface of CdWO₄ single crystal



polished surface of matrix, Ge nanowires – bright spots