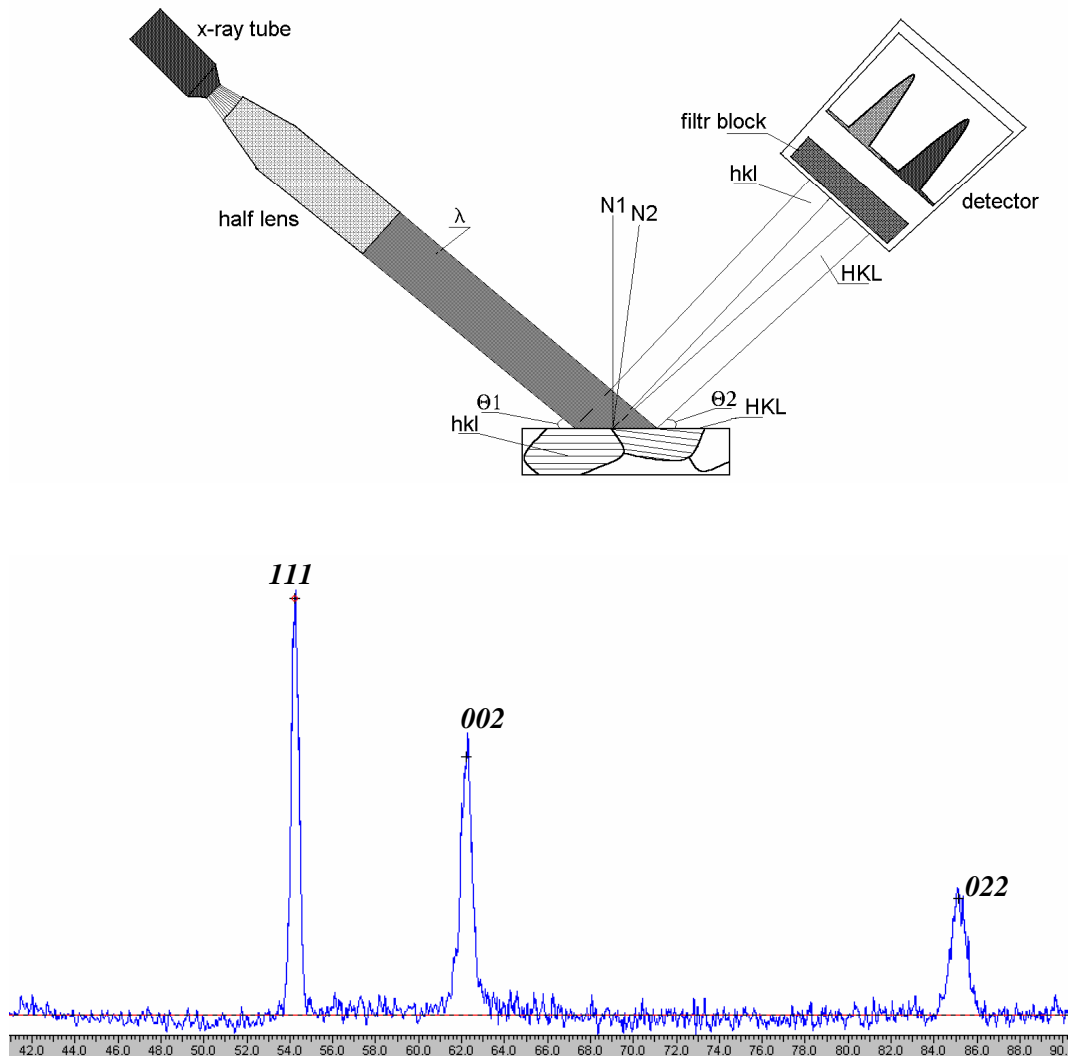
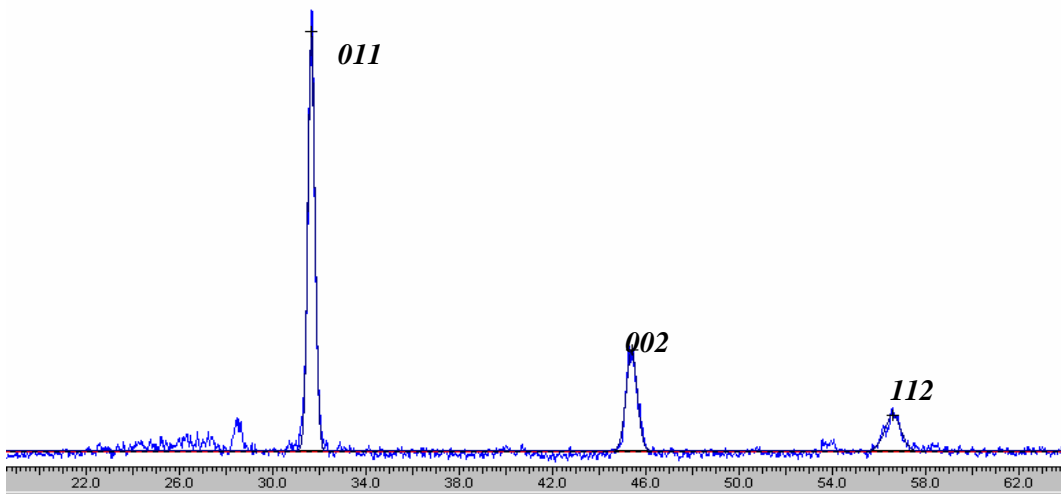


Application in the Process of Education

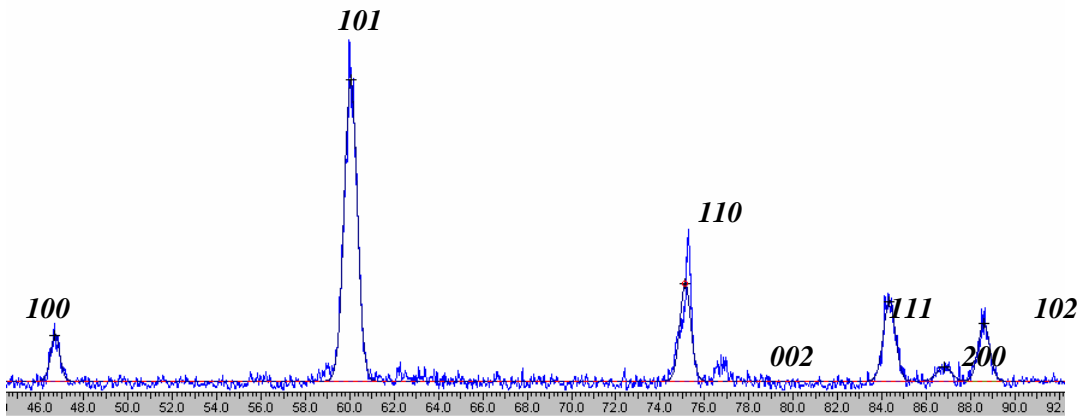
Thanks to its visual nature, express exposure, radiation safety, the instrument can be useful in support of the educational process for demonstration during lectures of basis crystallography, optics-assisted x-ray exposure schemes, for laboratory and practical training. The figure shows diffractograms from substances featuring different patterns, which were taken within 10 minutes. The x-ray diffraction scheme of the instrument is an analogue of the well-known Debye scheme for photo exposure onto a cylinder film.



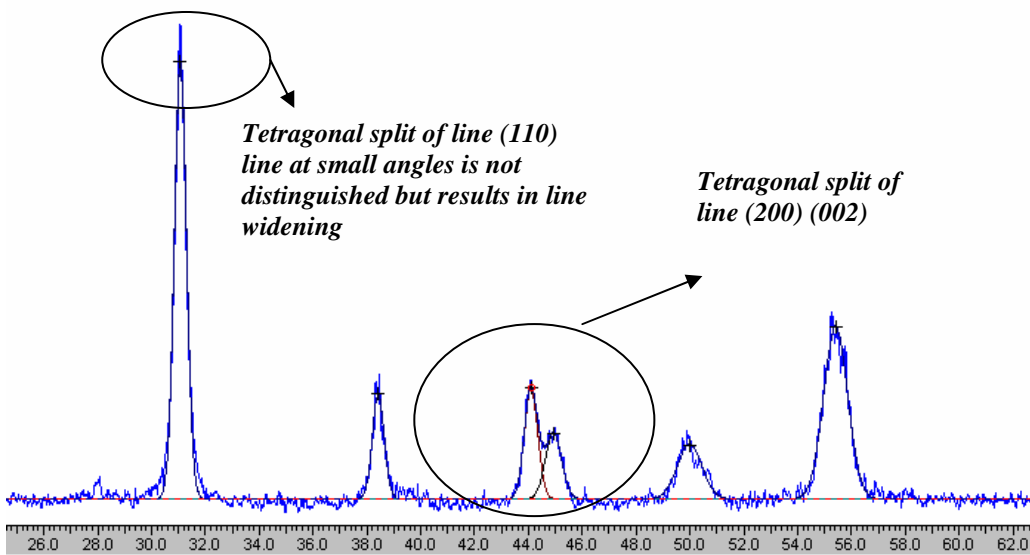
Diffractogram from Cu sample featuring face-centered structure. According to the extinction laws, hkl should have the same parity.



Diffractogram from W sample featuring volume-centered structure. According to the extinction laws, there are lines for OCK structure, for which the sum of hkl indices should be even.



Diffractogram from WC sample featuring hexagonal structure.



Diffractogram from CTS sample featuring a tetragonal structure