

3D-Polarized XRF Spectrometer with a 50kV and 4W X-Ray Tube

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Polarized XRF were reported using the 45 degree Bragg reflection [1,2] and the Barkra scattering [3,4]. Guerra et al. [5] and Pessanha et al. [6] reported a 50 W X-ray tube 3D-polarized XRF spectrometer. We have made a 3D-polarized XRF spectrometer with a 4 W X-ray tube (50 kV, tungsten, Ultra-Lite Magnum, Moxtek, Orem UT) and an SDD (RES-Lab, Osaka) as shown in Fig.1. The X-ray tube to the secondary target distance is 10 mm, and the sample to detector distance is again 10 mm. The X-ray path is air inside the thick acrylic block. The metallic disc found in Fig.1 (left) is the secondary target holder.

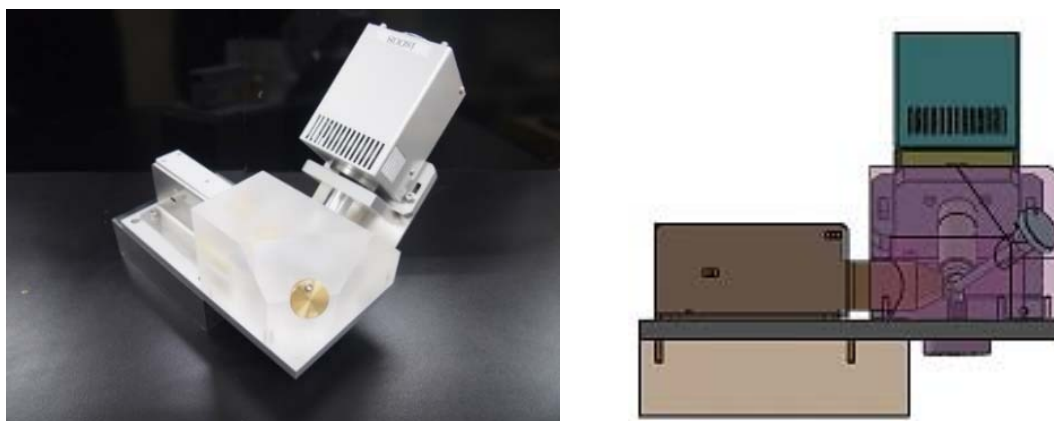


Fig.1. Photo (left) and drawing (right) of the spectrometer.

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