

**COMPTON SCATTERING POLARIMETR “PENGUIN”
FOR SOLAR FLARES POLARIMETRY**

Y. Kotov (1), E. Kruglov (2), V. Khmylko (2), Y. Chichikaluk (2)

(1) Moscow State Engineering Physics Institute (Technical University),

(2) Ioffe Physical Technical Institute, St. Petersburg, RUSSIA

v.khmylko@pop.ioffe.rssi.ru, fax 812 2479111

Compton scattering polarimeter is a part of instrument for “KORONAS-Photon” experiment and will be used for linear polarization measuring in energy band from 20 keV to 150 keV. Scattering detector consists of some p-terfenil crystals with total square 120 cm² and thickness 3 cm. The scattered with angles about 90 degrees radiation is detected by means of some plate detectors from CsJ. All detectors are enclosed anticoincidental shields in order to avoid charge particles background. There are estimations that efficiency of such device is about 15 – 20%. Proposed accuracy of polarization measurements is near $10 \pm 1\%$. The stabilization system is used to keep threshold levels not worse 1%.