

Multichannel clinic dosimeter for the multiparameter direct control system of absorbed dose in areas of medical interest.

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Literature research shows, that plastic scintillator detectors, including their compact modifications, provide most optimal characteristics for the purpose of radiotherapy. These detectors can be used not only for in-vivo on-line dosimetry, but also in phantom tests during dosimetric planning systems and brachytherapy apparatus testing. Multichannel clinic dosimeter MKD-04 and several detectors using 1mm BSF-10 scintillator fiber have been designed. The detectors have 3.2 mm and 4 mm sensitive area diameters. MKD-04 dosimeter provides dose rate measurement from 10 up to 5000 mGy/min. Some successful tests for the certification on the type of measuring instruments have been conducted. Clinical trials have been carried out on human phantoms using brachytherapy devices Agat-VT (Co-60), ROCUS-AM and Selectron (Ir-192).

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