Investigation of Radiation Effects in Water Solutions During Exposure with Laser or LEDs Light

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The installation for gamma-, X-ray and neutron registration in water solutions (600 ml LiOH, or NaOH, or Na_2CO_3) during exposure with red light (λ=645+/-20 nm) of laser or light-emission devises (LEDs) was created. The laser light power was 5 mW and the LEDs – from 600 mW up to 10 W.

Neutrons were measured with help of tow ^{3}He counters, placed in paraphine barrel. Small neutron emission (up to 100 neutrons) has been registered in the form of series of short (ms) bursts during some minutes. Tritium production has also been detected in water solution probes. The gamma-ray and X-ray radiation measured by NaI scintillation detector & Geiger counters was not detected.

Received results are discussed.