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## **PS2-23: Dose Rate in One-Photon and Two-Photon X-Ray Investigations**

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Reduce the problem of dose loads on biological objects engaged for several decades, especially in the methods of X-ray computed tomography.

The problem of decreasing of dose rate for the biological objects is highly relevant for a last few decades. This is especially important in X-ray computer tomography methods. There are few approaches to solve this problem. One of the most effective of them is contrast-enhanced method [1]. The use of monochromatic X-ray allows to decrease dose rate for investigated objects as it is demonstrated in the works [2, 3]. Also it allows to improve X-ray image quality by increasing of contrast and signal-to-noise ratio in case of usage suitable energies of monochromatic X-ray.

In this work the dose rate of monochromatic X-ray beam produced by RAP 60-25 X-ray tube with power equal to 1200 W was measured. Recommendations for development and creation of visualization system based on advanced semiconductor multichannel detectors were defined.

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