Performance Testing of the System for Analysis of PADC Track Detectors for Neutron Dosimetry

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Abstract. The new solid state track detector analysis system for neutron dosimetry and radon measurement TASLImageTM was installed at the Slovak University of Technology, Bratislava. This paper describes the test of its performance in the measurement of neutron doses. The linearity of the response of poly allyl diglycol carbonate (PADC) detectors was tested for two regions of obtained doses, 27-378 μ Sv and 0.5 - 3 mSv. Results were compared to H*(10) ambient dose equivalent measured by the NuDET-ENE neutron detector.