of cryogenic treatment of rubber and plastics wastes with liquid nitrogen for several days in a Dewar vessel, that rubber (tires) had external changes, which is possibly due to structural transformations in its organic part. After processing of rubber with liquid nitrogen, mechanical separation of rubbers and polymer fibers from metal cord and other components took place. After drying in a vacuum drying cabinet, the rubber mixture was separated from the visible fibers and subjected to mechanical grinding in a ball mill.

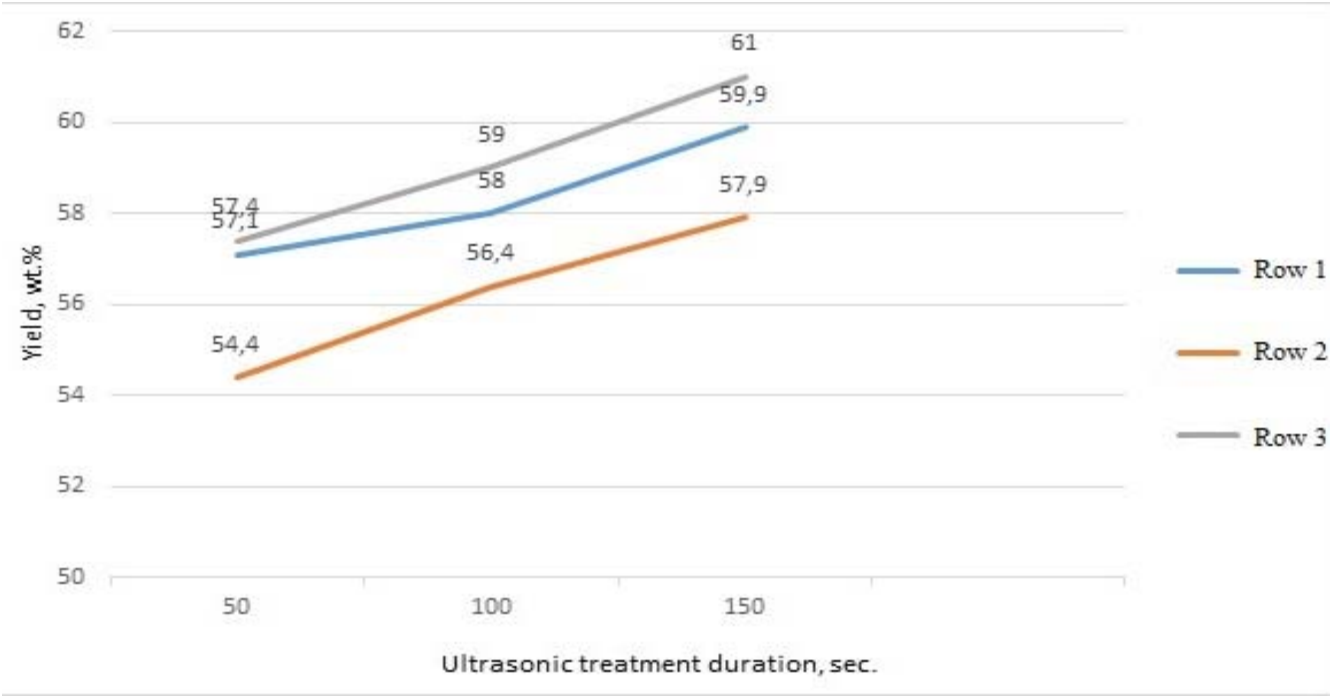

Fig. 6 – Dependence of the yield of the liquid fraction (LF) on the intensity of ultrasound (I) and the processing time (t), rows: 1- I = 3; 2- I = 1; 3-I = 5 (W/cm^2); *T* = 50, 100, 150 (s).

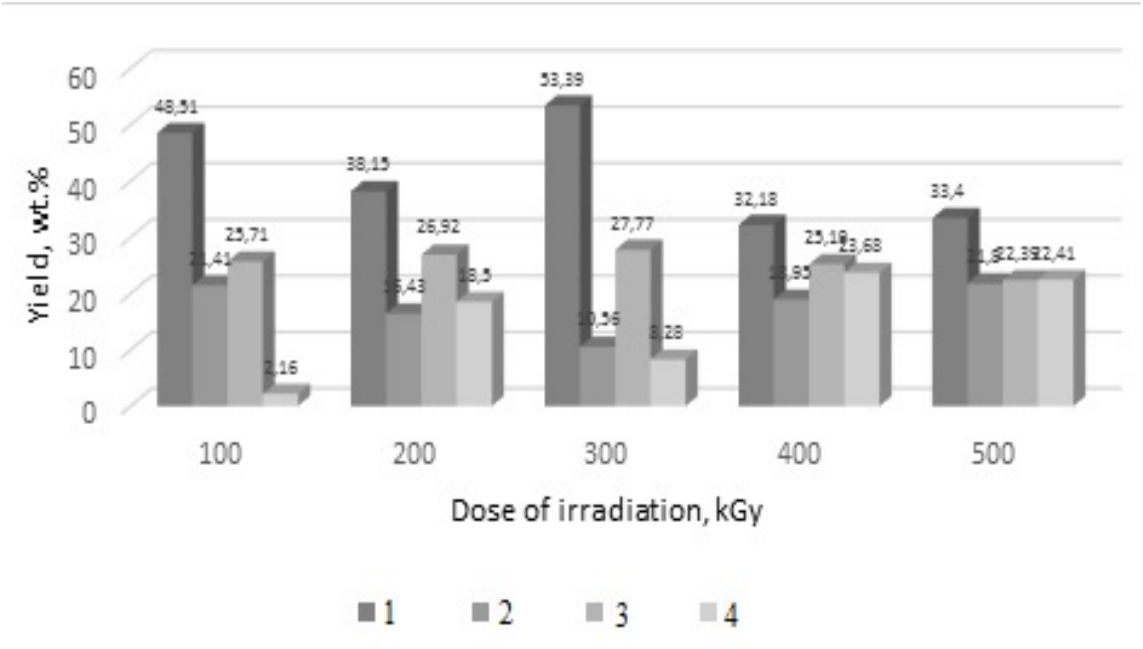

Fig. 7 – Dependence of the yield of the products of processing of radiation irradiated waste of polymers on the WFP: zeolite catalyst t = 40: 60 at T = 400°C; P = 5-7 MPa; t = 15 min.; PF: waste = 1: 1; rubber: plastic = 1: 1 from a radiation dose. Rows: 1-total liquid product; 2 gas; 3-dry residue; 4 – losses.