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## Study of properties of extraction-chromatographic material TBP-PAN

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This project focuses on studying properties of extraction-chromatographic material prepared by embedding of tributylphosphate (TBP) into the matrix of polyakrylonitrile (PAN). After elementary characterization of the prepared materials, the kinetics of uranium extraction from  $3 \text{ mol}\cdot\text{L}^{-1} \text{ HNO}_3$  was examined. The influence of nitrates and nitric acid concentration on the values of weight distribution coefficient  $D_g$  as well as “extraction izoterm” was specified. For determination of  $^{233}\text{U}$  in aqueous solution, liquid scintillation spectrometry was used. After evaluation of all experiments it can be concluded that TBP-PAN material behaves like TBP in liquid-liquid extraction.

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