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A CLEAN METHOD OF URANIUM EXTRACTION – DECONTAMINATION

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Abstract

The present work is focused on an electrochemical method of uranium extraction. The basic principle of the method is the electrolytic one. Using platinum electrodes it was generated a potential dependence of the uranium concentration on the redox potential. Knowing the potential, the time dependence of uranium extraction from $\text{UO}_2(\text{NO}_3) \cdot \text{H}_2\text{O}$ salt and uranium ore solid suspension was studied with good results. Therefore, this method can be considered as clean and in consequence appropriate for uranium decontamination of some solid and/or liquid media. Moreover, the method can be used in extraction – decontamination of sand (ore or spent fuel).

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