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光谱分析法测定废液中~(235)U

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摘要 <正> 一、前言 光谱法测定U_3O_8中的~(235)U浓度,已作过报道。本文介绍含铀废液、废水中~(235)U的光谱分析法。此法用于“回收工艺”,可防止同位素混料,提高经济效益。 实验中,用柱萃取色层法除去共存组份,并快速分离出纯铀试样。浓缩后直接滴在浅杯型电极中,盖上铜粉,以电弧光源激发,得到的谱线具有适中的强度。电弧光源发射光

关键词 光谱分析 ~(235)U 直接滴电极 无标准试样法

分类号

SPECTROGRAPHIC ANALYSIS OF ~(235)U IN THE WASTE-LIQUID AND WASTE-WATER CONTAINING URANIUM

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Abstract The spectrographic method is studied for determinating ~(235)U in the waste--liquidand waste--water containing uranium. Uranium is quickly separated froma sample with extractive chromatography technique. The uranium solution is dro-pped into a special shallow--cup graphitic electrode, and covered by a layer ofcopper powder, then it is excited by the arc light. The precision of this method is±0. 9%～±5. 6% for 3. 1%～50. 0% of ~(235)U, respectively, under the selected experi-mental conditions. The samples with ~(235)U abundance ranging from 7.0% to 50.0%can be determined using a non--standard sample method and the precision is ±0.3%to ±4. 9%.

Key words Spectrographic analysis ~(235)U Direct dropping electrode Nonstandard sample method

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