

## **A Scintillation Method for Determination of Actinide Alpha-Activity in Samples**

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This report describes an efficient, easy to use, and inexpensive method for detection of alpha-activity in biological samples, the alpha radiometer. The actinide elements are coprecipitated from acid-dissolved, ashed samples with bismuth phosphate and the precipitate is then mixed with ZnS(Ag) scintillation powder. The mixture is dried, in a thin layer, on the surface of a polystyrene cuvet and scintillations from the layer are detected with a photomultiplier tube. An optimal counting efficiency is obtained with a scintillation powder thickness between 25 and 40 mg.cm<sup>-2</sup>.

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