PIXE analysis of bromine in serum and liver of 2-bromoethanol-injected rats

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Abstract

A simple method for determining bromine in biological materials by PIXE was developed.

A 10%(w/v) ammonia water is added by 1ml to the sample in a Teflon tube, and the mixture is then homogenized with mixer. Sample is decomposed and dissolved in the form of liquid.

The results of the experiment have shown that the amount and concentration of chemical-bound bromine in materials such as the 2-bromoetanol and biological tissue can be determined accurately enough using the PIXE. PIXE should be chosen for the analysis of blood or the urgent analysis of small amount of wet tissue.