

Check of sample preparation method for PIXE analysis at NMCC

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Abstract

One of the advantages of PIXE analysis is that the sample preparation method is simple and easy. On the other hand, in order to analyze with more highly sensitive and sufficient reproducibility, the sample preparation method is important. Each preparation method corresponding to the form of each sample is being done for PIXE analysis at NMCC.

In this study, we tried to check the accuracy of the sample preparation method which is usually being used at NMCC. We did the quantitative analysis of each standard material. The liquid sample was dropped directly at a backing film using a pipette. The powder sample was mixed with palladium carbon powder as an internal standard element. The bio-solid sample was dissolved with the nitric acid using the microwave oven. As a result, the accuracy and reproducibility of the sample preparation method were proved.