CALCULATION OF FLUORESCENT X-RAY INTENSITY FOR CONFOCAL MICRO-XRF ANALYSIS OF INHOMOGENIOUS SAMPLES

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Confocal micro-XRF (CMXRF) is a method which has advantages in depth analysis, elemental imaging at a specific depth and therefore, three dimensional elemental map analysis. It has been applied to various analysis.

In recent years, works on quantitative analysis of CMXRF considering secondary excitation are reported [1, 2]. Actual samples in general are three dimensionally inhomogeneous, which is not discussed in those previous works.

One proposal for quantitative analysis of arbitral inhomogeneous sample was done by Tsuji et al. as a “mosaic model” [3] and an evaluation is performed for a sample of a vertical border [4].

In this presentation, we will show a calculation study on inhomogeneous samples and its experimental evaluation.

References