

Element Mapping of Painted Dishes

1. Overview

Element mapping of painted dishes was performed using the Seiko SEA5230. The SEA5230 is equipped with a large sample chamber and a micro X-ray beam for fluorescent X-ray analysis.

2. Analysis Conditions

Conditions for analysis are shown in Table 1.

Table 1 Analysis Conditions

Item	Settings
Model	SEA5230
Beam Diameter	200 μ m
X-Y Stage Travel Distance	400 mm \times 300 mm
Measurement Time	30 seconds
Number of Points	100 \times 75
Measured Area	22 mm \times 15 mm

3. Analysis Sample

Results are shown on the next page.

4. Quantitative Method

Element mapping allowed us to find the distribution of elements that corresponds to each color of, for instance, the flower petals. We also matched the color of each element with colors in the photograph and by overlaying element maps were able to show agreement with the original photograph.

