

## K 104 – Gold Sword Hilt Collar or Mount with Cloisonné Garnets

### Condition Report

**Conservation Started:** 6.6.11

**Conservation Finished:** 9.6.11

**Conservator:** Ellen Promise

**Time Taken:** 5 hours

Including digital photography, report, and conservation.

**Dimensions:** (L) 33mm (H) 18mm (W) 17.5mm (Th) 2mm

**Weight before:** 8.57g

**Weight after:** 8.55g

**Weight with K324:** 10.53g

**X-ray:** L25

**Catalogue number:** 162

#### **Digital photography:**

Taken with a Nikon D60 digital camera, under daylight bulbs and Meiji Techno RZ Stereo microscope with an Infinity 1 camera (with analyses capture software) and fibre optic lights, 7-75x magnification. Taken before, during and after.

**Annotation on any of the storage bags or boxes:** K 104, 21 inside triangle, and 24/7/09 written on box; PN 1971, SSH '09, 21 inside triangle, and 24/7/09 written on fragment of bag contained in box.

**Description:** Visual and microscopic examination using Meiji stereo microscope 7-75x magnification. Please see K 104 – condition report for Paris from 28/9/10.

Relative to the condition report from 28/9/10, the object description remains virtually the same. The only notable difference relates to the number of garnets. In the initial report, it was noted that 8 garnet cells, some partial, are present in the vertical panel at the break edge on the 'front' of the piece. In the previous condition report, no garnets were described as missing from this panel, but it appears that there are actually 9 complete and partial cells in this panel. Up to 5 garnets are missing from these cells. This reduces the number of garnets on the 'front' of the object to 63 and the total number of garnets to 93. A more accurate count of the garnets will be able to be made after analysis and further cleaning.

**Associated Objects:** K324

**Pre-Conservation Condition:** Visual and microscopic examination using Meiji stereo microscope 7-75x magnification. Please see K 104 – condition report for Paris from 28/9/10.

The present condition of the object closely matches that described in the previous condition report. As noted, it is difficult to see the details of the decoration in untreated areas. It appears that some further cleaning is possible of the garnet cells in the two panels adjacent to the partial panel on the 'front' of the object.

**Treatment:** Carried out using a Meiji stereo microscope with fibre optic lights and 7-45 X magnification.

**Purpose:** The purpose of this conservation treatment was to further reduce soil deposits on the surface of the garnet decoration prior to analysis of the various components.

**Aim:** Partial cleaning

**Materials:** Soft natural/synthetic brushes, cotton swab, cocktail stick, thorn in pin vice/holder, water on garnets, water/IMS on metals

The granular soil on the surface of three garnets was mechanically removed where possible using a fine thorn tip secured in a pin vice and a small pure bristle brush. Water was used to soften the soil to facilitate removal. Loose particles of soil were then removed with a small swab of water. IMS on cotton swabs was used for the surrounding gold areas.

**Analysis undertaken**

XRF analysis of the object was performed. See document 'K104 XRF Report'.

**Post-Conservation Condition/Findings:**

It is apparent that there is significant damage to many of the garnets in untreated areas. Although some additional cleaning could likely be undertaken without consolidation, it would be advisable to resume treatment after analysis when unstable components can be consolidated as necessary.

**Samples:**

1. Soil (added to existing vial 1. K104 soil)