## Amheida 2008 - Object conservation work

Mohammed Ahmed Sayed Mustafa

## Coins

The coins were covered with thick layers of green corrosion, in which were included particles of soil and sand. The aim of treatment was removing the layers of corrosion and making the images and text of the coins visible.

The treatment was undertaken using two methods:

(1) Chemical cleaning by immersion or coating the coin by means of cotton soaked in a solution of citric acid, formic acid, or ADTA (5-15%). Sometimes the point of corrosion was covered by gel of the solution (combining the solution with carboxymethyl cellulose), especially in cases of thin layers of corrosion, where cuprites are directly present on the inscription.

(2) Mechanical cleaning by scalpel and metallic tools, to remove the soft corrosion under the microscope.





Two coins after conservation

## **Bronze statuettes**

These statuettes, some complete but most fragmentary, were covered with a heavy green layer with sand; some were spherical in shape, others formless.

The treatment was in three parts:

(1) Immersion in formic acid 15%, with heating to remove malachite (copper carbonate), the green layer,' and by scalpel and metal tools to remove the softer green layers completely.

(2) Immersion in citric acid 15%, to remove cuprite copper oxides, the reddish brown incrustation, and by metal tools and the scalpel under the microscope, especially with the fine details.

The dremel was also used where necessary.

Fragments were connected and joined with araldite, supplemented with ground oxide; after drying completely, the excess of araldite was removed by dremel.



Left, Osiris statuette in bronze after conservation (cleaning and joining between the head and the body; the drawing represents the lost part, rebuilt using araldite in a similar color to the original). Right, Osiris head after treatment.

## **Clay statuette**

This was broken into two pieces, was missing the legs, and was covered with sand and an adhesive soil.

Consolidation was undertaken with 3% of paraloid B72. The statuette was then treated with a wooden tool under the microscope to remove the sand and the other adhesive substances; the fragments were joined by UHU heart resin.



Osiris statuette in clay, after cleaning and joining of the broken parts using UHU.