### THE PROJECT

The theme of small-finds and coins aims to study the huge numismatic material found during the excavations of the Forum's portico and the Foro della Statua Eroica area, in the context of "Ostia Forum Project", in particular the coins of the Late Antique period.

The circulation, the residuality and the possible hoarding of the coins make them an instrument of fundamental importance for understanding the volumes of commercial traffic, in addition to making it an objective data concerning the period of use and above all obliteration of a building or an archaeological layer. Using the stratigraphic data it will be possible, through the coins, to determine fundamental *termini post quem* for the phases of use of the Foro, putting them in relation to the lateantique phases of repaving the site and restoring part of it, probably also occurred during the VI century. The study of the last coins deposited will have to be related to the same ones coming from other areas of the city, so as to be able to hypothesize an approximate dating for its definitive collapse.

Part of the project will include a comparison with numismatic materials from Late Antique contexts found in other areas of Ostia Antica, from neighboring cities and from Rome. Furthermore, comparisons will be made with the numismatic materials found in the same areas during previous excavations. From these cross comparisons it will be possible to better define the role of Ostia in the Late Antique Mediterranean trade, in a period during which nearby Portus takes over. In this phase the comparison with the other classes of Late Antique materials, found not only in the Forum will be essential, to determine which goods circulated in the city.

For each coin a catalog sheet will be created containing the finding data, the coin measurements, its cataloging and the indications of other materials coming from the same stratigraphic unit, in addition to a description of the latter.

In order to manage this amount of data, a database will be developed, connecting the coins to their context of origin, the layer to which they belong and to the date relative to the monetary issue. A paper catalogue will be produced for the publication.

## CLEANING AND RESTORATION

In the first phase of the work the conservation status of each coin will be evaluated. Depending on the metal used to make the flan, there may be a different state of wear, incrustation or corrosion. In this phase the material will be divided according to the cleaning and restoration process that it will have to undergo. All mechanical cleaning operations will be carried out using the magnification of a stereoscopic microscope.

It will be important to separate the coins that show traces of nantokite (otherwise called "bronze cancer") from the others, to prevent this from spreading. Care should be taken not to confuse the latter with "noble" and stable incrustations such as malachite.

The coins will undergo the following path of cleaning and restoration, which may vary depending on the case:

- Prolonged immersion in demineralized water. Acetone bath. The duration of these procedures will vary depending on the tenacity of the deposits and the concretions on the surface.
- Cleaning of any residual earthy deposits by mechanical removal with a scalpel. To remove earthy or metallic concretions, we will proceed with their removal using a micro-dental drill.

- For coins that show traces of nantokite, after the mechanical removal of the same, it will be necessary to repeat the first step for a sufficiently long time to allow the metal to recreate a superficial patina at the point of removal. Particular attention will be paid to these coins, monitoring them over time, to prevent the reappearing of nantokite. If the nantokite still affects to attack the coin, it will be immersed in a 5% benzotriazole solution, in order to inhibit and remove corrosion.
- Once cleaned, the coins that have been wetted will be dried using a small oven, to prevent moisture from carrying the corrosive phenomenon forward.
- Microcrystalline wax will be distributed on the coin as final protection.
- The coins will then be placed, together with their own ticket of origin and a piece of cotton, inside a paper bag. This material is necessary for the preservation of the coin, as unlike plastic, it does not allow the accumulation of humidity inside it.

# **COIN READING**

The phase following the restoration and consolidation of the coins will include the reading of the numismatic evidences.

The inscriptions present in the legends, in the exergue, in the coin fields will be read and transcribed using the diacritical marks (convention of Leida).

### PHOTOGRAPHY AND DIGITAL PROCESSING

The photographs will be taken using a special stand, so as to have the lens of the camera in a zenithal position. The coins will be photographed using macro lens, surrounded by a ring of cold led light, in order to capture the details of the coin with a constant brightness. Subsequently the photos will be processed through digital programs to improve the color saturation and eventually correct brightness and sharpness.

### STRATIGRAPHIC COMPARISONS AND GRAPHIC PROCESSING

The coins will be cataloged using the following book series as a documentary basis, in addition to the publications on the ostian subject already mentioned, according to the belonging period and/or metal.

The coins, catalogued and dated individually, will be placed in relation to their own stratigraphic unit, in order to affix the numismatic data in relation with those deriving from the study of other materials.

The amount of information deriving from the numismatic study will be expressed in graphs, through to which it will be possible to understand all the specifications of the coins found in the center of Ostia Antica during the excavations of the "Ostia Forum Project".

The data thus elaborated will be crossed with those coming from the numismatic contexts of other areas of the city, of Rome and of the district, also in order to determine the contribution of numismatics to the knowledge of economic flows in Late Antique Ostia